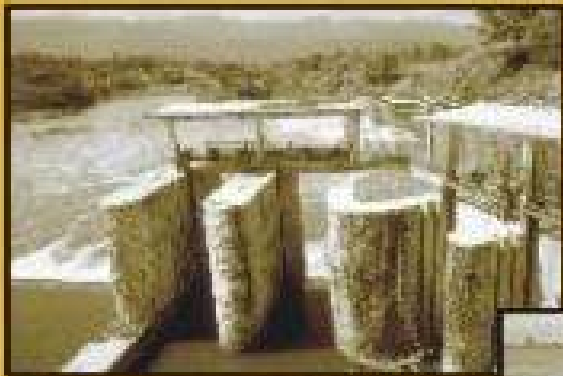


Ambition, Regulation and Reality

Complex use of land and water resources
in Luwu, South Sulawesi, Indonesia

Dik Roth



AMBITION, REGULATION AND REALITY

Promotor:

Prof. Dr Franz von Benda-Beckmann

Hoogleraar recht, meer in het bijzonder van het agrarisch recht van de niet-westerse gebieden, Wageningen
Universiteit

Promotiecommissie:

Prof. Dr Frans Hüsken, Katholieke Universiteit Nijmegen

Dr Peter Mollinga, Wageningen Universiteit

Dr Philip Quarles van Ufford, Vrije Universiteit van Amsterdam

Prof. Dr Leontine Visser, Wageningen Universiteit

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Ambition, Regulation and Reality. Complex Use of Land and Water Resources in Luwu, South Sulawesi, Indonesia

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Preface and acknowledgements

The subject matter of this book covers an engagement with Luwu District in South Sulawesi that started early in 1989. In that year I moved to Sulawesi to take up a position as adviser for the land reform and settlement programme of the Pompengan Integrated Area Development Project (PIADP), a bilateral Indonesian-Dutch rural development project. Since then, returning to Luwu, smelling the peculiar mix of flavours of sago, fish, drying cocoa and cloves characteristic of the area, and meeting again with friends and acquaintances feels like coming home. Writing these final words is like closing a door behind me, with the hope of returning once in the future to reopen it.

My research was part of the research project ‘Legal Complexity, Ecological Sustainability and Social Security in the Management of Land and Water Resources in Indonesia’, financed by KNAW (Royal Dutch Academy of Sciences). An additional short visit to Indonesia was funded by NWO (Netherlands Organization for Scientific Research), for which I am grateful. Special thanks are due to the other researchers in the programme, Renske Biezeveld, Arie Brouwer, and Juliette Koning, as well as to Keebet von Benda-Beckmann. Our discussions have substantially contributed to the shaping of this book. I also wish to thank all former and current members of the Law and Governance Group of Wageningen University for their comments on parts of this book. I am grateful to Bernd van der Meulen for allowing me some writing time to finish this job.

Articles on the themes of this book have been published earlier, and discussed as workshop or conference papers in the initial stages of writing. A paper on the regional history of Luwu and Tana Toraja, with a focus on ethnic identity, was presented at the 1999 conference ‘Hinduism in modern Indonesia’ convened by Martin Ramstedt. Other material on regional history and the impact of the Indonesian crisis on the region was presented at the 2000 conference on the crisis in Indonesia, organized by Coen Holtzappel. Work on local irrigation management in a Balinese settlement in Luwu was initially presented in the seminar series ‘Water and Politics’ organized by Peter Mollinga at the Irrigation and Water Engineering Group of Wageningen University in 1997. I presented papers on the same theme at the CERES conference ‘Acts of Man and Nature’ in 1998, on the conference ‘Legal Complexity, Social Security and Ecological Sustainability in the Use and Management of Natural Resources’ in Padang in 1999, and on the conference of the Commission on Folk Law and Legal Pluralism in Chiang Mai in 2002. I would like to thank all convenors and participants of these seminars and conferences for their critical reading and comments on draft versions.

Special thanks go to my supervisor Franz von Benda-Beckmann, whose long-standing experience with research on legal complexity and engagement with Indonesia were major sources of inspiration for me. Our discussions and his critical comments on the draft version of the text have been of great help. Responsibility for combining three different research themes into one book is mine, but I thank Franz for stimulating me to explore these themes once it had become clear that I would never drop the idea anyway. Unfortunately, Joep Spiertz, whose earlier research in Bali had inspired the ‘Balinese’ part of my research project, suddenly died during the project. On the way, we also lost Dr. Ohorella, our sympathetic, experienced and enthusiastic research counterpart at Hasanuddin University in Makassar, South Sulawesi. Chatting and exchanging stories about Luwu with Dr. Ohorella was an unforgettable experience. I remember with great respect his last visit to the Netherlands, shortly before his death, as a member of a mission deeply engaged in attempts to stop the violent conflict in the Moluccas.

In the Pompengan project years, my predecessor Aard Hartveld has been a rich source of information. Not only on the tricky and slippery path of the PIADP land reform programme, but also on its history and the wider regional processes of social and historical change in Luwu and

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This book could never have been written without field research assistance by Haryanto Boenoto in the Pompengan area, and I Made Sana and I Made Genting in Kertoraharjo. For the chapter on political change, identity and migration from Tana Toraja to Luwu I am greatly indebted to, among others, Laso' Sombolinggi, whose admirable ability to reflect on regional history it was a joy to share. The same goes for Andi Antong Pangerang in Luwu. Nor could the book have been written without a huge but largely anonymous group of people who were willing to give information, share views and opinions, comment on ideas, assumptions and conclusions, and provide me with their inputs and advise. Be they farmers, officials, administrators, traders, priests or former politicians, their willingness to sacrifice time for me and my many questions is the ultimate foundation of this book.

I thank Frans Hüsken for introducing me to the field of social anthropology long ago in Amsterdam, for attracting me to Indonesia as a field of social anthropological study, and for stimulating research on transmigration and socio-economic change in that country. These experiences were to become the basis for my work and later research in Sulawesi. The socio-historical focus of his work on Indonesia has always remained a source of inspiration. I also thank Leontine Visser for her extensive and critical comments on the text. I feel that, as a result, the book has greatly improved.

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My work on local irrigation management among Balinese in Sulawesi brought me into closer contact with the Irrigation and Water Engineering (IWE) group of Wageningen University. Its sociotechnical approach and interdisciplinary orientation are a rich source of inspiration. Pleasant and warm-hearted relationships with Rutgerd Boelens, Peter Mollinga, Linden Vincent, Jeroen Warner and Margreet Zwarteveen have been a great support and enriching experience to me, the more so in a long period of reorganization, amputation and loss of direction of our own group. I hope that the future structure and orientation of our group will make further cooperation with IWE possible.

Last but not least, I wish to thank Jaap Bijkerk for realizing the electronic versions of the maps, drawings and cover.

By academic tradition I should now apologize for not being in communication with my wife and children during the period of writing. Goof, Tom and Lisa: thanks for giving me the power *not* to sit behind my desk during the weekends. Thanks to your presence, the computer could never become more than an *isteri kedua* ('second wife'), as they say in Indonesia.

Glossary

Adat	Tradition, customary law
Afdeling	Dutch colonial administrative division
Anak daerah	Lit. ‘children of the region’; people from the (same) region
Arisan	Rotating savings and credit funds
Awig-awig	Law, regulations
Bagi hasil	Sharecropping
Banjar	Customary hamlet
Bedugul	Small shrine for offerings in the rice fields
Beli ayah	System of compensation payment for collective labour in subak or banjar
Beras	hulled rice
Bupati	District head
Camat	Head of the <i>kecamatan</i> ; subdistrict head
Caplak	Agricultural implement for marking the transplanting distance in the mud of a field about to be planted with rice, to guarantee straight planting
Datu	King / queen of the Luwu kingdom
Derep	Harvest labour, paid with a share of the harvest
Desa	Village
Desa adat	Customary village
Desa, Kala, Patra	Lit. ‘place, time, circumstances’; It conveys the idea that customary law is flexible and adaptive, its form depending on the local context of its existence
Dosan	Fine
Dusun	Hamlet
Gabah	Unhulled rice
Gadai	Pawning (of land)
Galungan	Religious celebration, featuring offerings to the deceased ancestors. Galungan is celebrated every six Balinese months, that is: 210 days
Giliran	Rotational water allocation
Gouvernement	(Du.) Government, administration
Ikat	Bundle (of rice stalks)
Kabupaten	District
Kampung	Hamlet (see also dusun)
Kapolsek	Local police commander
Kebun	Garden (usually for the cultivation of perennials like cocoa, coffee etc.)
Kecamatan	Subdistrict
Kelompok tani	Farmers’ group
Klian	Leader (e.g. klian subak, klian banjar)
Kolonisasi	(Du.: kolonisatie); colonization; Dutch colonial programme for the resettlement of farmers from the densely populated islands of Java and Bali on less densely populated islands in the archipelago
Koramil	Local military commander
Krama subak	Subak members
Krismon	Monetary crisis
Ladang	Forest clearing on which shifting cultivation is practiced; also: rain-fed land
Lawar	Food served on the occasion of Balinese ceremonies, festive days etc.
Lebensraum	(Ger.) lit. ‘living space’ (a term associated in a European historical context with the expansionist drives of Nazi Germany)
Lumbung	Rice storehouse
Macaru	Balinese cleansing ritual
Mantenin	Balinese thanksgiving offering after the rice harvest

IV

Mapag toya	Ceremony for welcoming the first irrigation water of the rice season
Munduk	Physical / organizational subdivision of subak
Nyorog	System of staggered planting
Onderafdeling	Dutch colonial administrative subdivision
Orde Lama	'Old Order' (pre-Suharto Indonesia)
Orde Baru	'New Order' (the Suharto regime)
Otonomi Daerah	Regional autonomy
Pak (Bapak)	Mister
Padi	Rice (on the field)
Palawija	Non-rice seasonal food crops (maize, soybeans etc.)
Panitia Irigasi	Irrigation Committee
Parang	Machete
Pejuang	Revolutionary fighter in the struggle for independence
Pekaseh	Organizational level above the subak; leader at this level
Pelaba	Customary land, on part of which small offering places are located and rice ritual is performed
Pemaksan	Temple group
Pemangku	Balinese Hindu priest
Pembangunan	Development
Pemuda	Revolutionary fighter
Pengairan	Irrigation service
Pengawitan	Balinese rice transplanting ritual
Penyor	Decorated bamboo pole placed in front of Balinese houses on festive days
Pertanian	Agricultural service
Petani berdasar	'Farmers wearing a tie' (absentee landowners; officials owning land)
Prajuru	Subak board of administration
Prani	Collective labour group based on membership
Prasasti	(Bal.): old customary rules incised on metal plates
Propinsi, Provinsi	Province
Pura	Temple
Pusaka	Hereditary land
Ranting	Administrative-operational section of the main system of a Public Works irrigation system
Reformasi	Reformation: term for the socio-political changes in Indonesia starting in 1997 and culminating in the downfall of the Suharto regime in May 1998
Rupiah (Rp.)	Indonesian currency unit. Between 1990 and 1997 the Rupiah rate to the US Dollar moved from 1,843 (1990) to 2,909 (1997). In the crisis year 1998 it moved to 10,013. Until now the rate remained between 8,000 Rp. and 10,000 Rp. to the US Dollar.
Sajen	Offerings
Sanggah	House temple
Sari	Essence of rice
Sarin tahun	subak seasonal tax
Sawah	Irrigated rice field
Sedahan (agung)	Intermediary between subak and higher administrative levels
Seka	(Voluntary) collective labour group
Sewa	Renting of land
Subak (sekaha subak)	Balinese irrigators' community
Subakgede	Area / organizational unit above the subak level
Suka-duka	Lit. 'in joy and sorrow' (used in: banjar suka duka)
Sutri	Specialist in religious offerings
Taman Mini	(Taman Mini Indah) ; Miniature Garden; exhibition of Indonesian cultures
Tanah Negara (Bebas)	(Free) state land

Tempek	Physical / organizational subdivision of subak
Temuku	Balinese structure made out of wood, stone-cement, or concrete for proportional, continuous flow water division
Toraja Raya	Greater Toraja (Du. 'Grooter Toradja')
Transmigrasi	Transmigration
Tudang sipulung	(Bug.) 'Sit and discuss together'; meeting in preparation of the new rice cropping season, esp. to determine the date for transplanting
Tukang banten	Specialist in religious offerings
Ulayat / hak ulayat	Right of avail
Ulu suwi	Subak temple
Ulu-ulu	Tertiary unit water master
Urunan	Tax payment, seasonal contribution
Wantilan	Covered section of a Balinese temple
Warung	Small food shop
Yadnya	Ritual

Abbreviations and acronyms

AGRARIA	Directorate-General of Land Affairs; Land Registry Agency of the Department of Home Affairs (before 1988; after that year: BPN)
ABRI	Armed Forces of the Republic of Indonesia
BAL	Basic Agrarian Law
BANGDA	Directorate for Regional Development
BANGDES	Directorate of rural Development
BAPPEDA	Regional Planning Board
BIMAS	Rice Intensification Programme
BPN	National Land Registry Agency
DGIS	Directorate-General of International Cooperation
DGWRD	Directorate General for Water Resources Development
DIPERTA	Agricultural Service
DI/TII	Darul Islam / Tentara Islam Indonesia
DMDA	Customary Village Consultative Council
DPRD	District People's Representative Council
GOLKAR	Golongan Karya (Functional Groups)
GPST	Gerakan Pemuda Sulawesi Tengah
GZB	Dutch Reformed Mission
HYV	High Yielding Variety
IK	Indische Kerk; Indies Church
IPEDA	Regional Development Charges
IPEP	Irrigation Service Fee
IPP	Ikatan Petani Pancasila (Pancasila Farmers' Union)
KAD	Regional Administrative Coordinator
KUD	Village Cooperative
KUT	Kredit Usaha Tani (Farmer Enterprise Credit)
LUTAT	Luwu Tator (Luwu and Tana Toraja)
PARKINDO	Partai Kristen Indonesia; Christian Party of Indonesia
PBB	Land and Building Tax
PERMESTA	Perjuangan Semesta Alam; regionalist movement in Sulawesi
PERTANIAN	Agricultural Service
PHDI	Indonesian Council for the Hindu Religion

PIADP	Pompengan Integrated Area Development Project (chapters 4-6) / Provincial Irrigated Agriculture Development Programme (see chapters 7-10)
PIL	Luwu Irrigation Project
PIMPRO	Project leader
PIP	Pompengan Implementation Project
PKI	Indonesian Communist Party
P3A	Water Users' Association
PPA	Gatekeeper
PPS	Canal Maintenance Personnel
PPW	Regional Development Project
PRONA	National Project for Land Registration and Titling
PTC	Perserikatan Toraja Christen; Toraja Christians' Association
PU	Public Works
REPELITA	Five Years' Development Plan
SARA	(Suku Agama Ras Antargolongan; ethnic group; religion; race; political association): four taboos of New Order politics
SIM	Land working permit
SK	Letter of Decision
SK Bupati	Decision of the District Head
Sulsel	Sulawesi Selatan; South Sulawesi
Tator	Tana Toraja
TU	Tertiary Unit in an irrigation system
WUA	Water Users' Association



Introduction

1. Presidents come and go...

During a visit to Indonesia in 1999, just before the first national elections of the post-Suharto era, I discussed the political changes of the Indonesian crisis with a hamlet leader in a Sulawesi village. Sitting in his small wooden house, we had tea and exchanged views on Indonesian politics. Hung on the wall behind him were the portraits of Soekarno, the first president of Indonesia, and president Habibie, who took over when Suharto stepped down in May 1998. Between the portraits of Indonesia's first and third presidents, a spike and a clean piece of wall the size of a portrait list testified to the fact that this used to be Suharto's place. 'Where is *pak* Harto?', I asked. After some hesitation my host replied: 'I stored him away for the time being. He is involved in too many cases'. While Habibie was already hanging on the wall, Suharto's portrait had still remained in place until his regime had definitively become history. More presidents (and portraits) were to follow soon after, a confusing experience for local leaders.

Four presidents have ruled Indonesia since this research project started. This is indicative of the rapidity of political changes that swept Indonesia since 1997. In that year, Indonesia was hit by a crisis initially interpreted only in economic terms: it was *Krismon*, a monetary crisis. Soon, it turned out to be a social, political and moral crisis as well, boosted by the doom scenario of ecological disaster of the 1997 forest fires that hit the country. This broadening of the crisis was expressed in the term *Reformasi*. From 1997, events succeeded one another at high pace. Several decades of strictly guided political rule and development under Suharto's oppressive and authoritarian 'New Order' regime (1965-1998; see chapter 2) were followed by a short interim rule by Habibie (1998-1999), who soon proved too closely affiliated to the Suharto regime to be acceptable to the Indonesians. After the 1999 general elections, he was followed up by the Wahid administration (1999-2000), which had a broad basis of support. However, tormented by accusations of corruption, resistance by powerful pro-Suharto groups, and a lack of decisiveness on the part of his administration, Wahid made way for the current Megawati Soekarnoputri administration in 2001 (van Dijk, 2001; Hill, 1994; Holtzappel et al., 2002; Lloyd and Smith, 2001; Schwarz, 1999).

The changes set in motion during Reformasi are, no doubt, of crucial importance for Indonesia. We need only think of the greater political freedom, the spread of mass violence, the revaluation of the role of *adat* (customary law; see chapter 2) in social and political life, the intricate process of decentralization and administrative reform, and the greater room for manoeuvre for independence movements. After many years of Indonesian occupation, East Timor became independent. Armed struggle between the Indonesian army and regional independence movements is still going on in Aceh and West Papoea (former Irian Jaya). Contrary to these extreme cases, most regional demands aim at the attainment of a higher degree of autonomy and a higher administrative status. Such demands were fuelled by the debates on *Otonomi Daerah* (regional autonomy), a major political

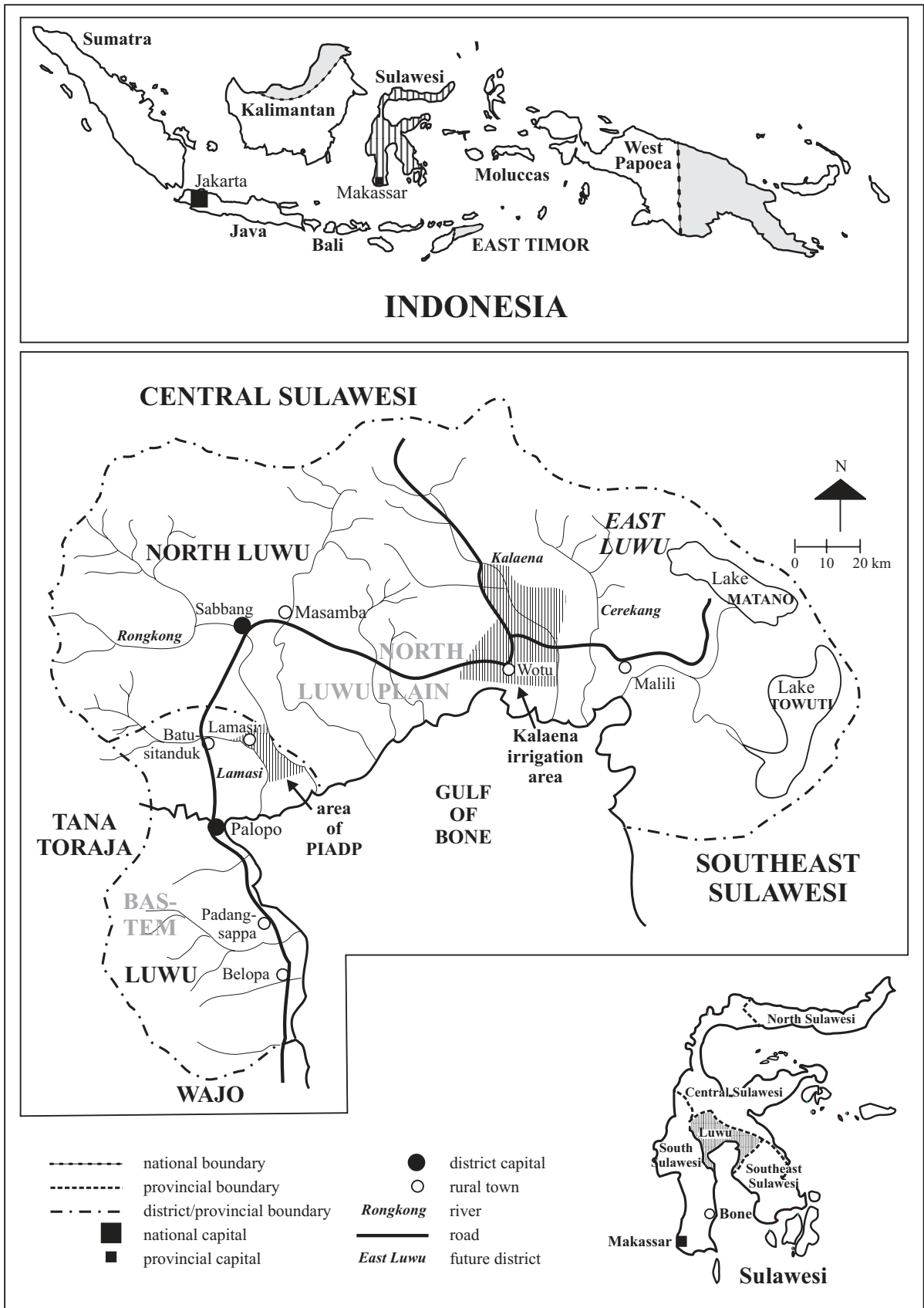
issue that had been frozen during the New Order regime but became hotly debated after its demise. This led to the enactment of a law on regional government in 1999.¹ The post-Suharto period will create its own mix of continuity and change, with political, legal and governance reforms high on the agenda. Notwithstanding the sweeping statements, new policy directives, laws, and development programmes, in rural areas there will probably also be much continuity dictated by established practices, vested interests, frozen administrative routines and transformations of policy intentions from the centre in local contexts of implementation.

This book deals with the socio-legal aspects of the use and management of land and water resources in (former) Luwu District (*Kabupaten Luwu*) in the Province of South Sulawesi (*Propinsi Sulawesi Selatan*; see map 1).² These aspects of resource use in Luwu are analyzed in the context of the socio-economic, political and development policy environment that has a great impact on the ways rights to natural resources are defined and regulation takes place. Problems of governance and management of land and water resources in Indonesia show a remarkable continuity from colonial times onwards, and are characterized by a high degree of 'messiness' rather than linear progress and increasing control. State attempts to control land through registration and titling, the existence of different conceptions and definitions of land rights by various state and non-state actors, and the difficulties in coping with customary definitions of land rights are characteristic of the history of land policy from colonial times, and a continuing source of social tension (F. and K.von Benda-Beckmann, 1999; Slaats, 1999, 2000). Similarly, state programmes for irrigation development and attempts to devolve irrigation management in state-built irrigation systems to groups of local water users show a high degree of continuity from colonial times onwards (see Ravesteijn, 1997).

The approaches to development intervention discussed here are characteristic of a specific period in Indonesian history, and as such belong to the past. Yet, now as in the future, any form of planned intervention will become 'relocalized' into a specific resource use context, leading to the transformation of both (Long, 1996). In that sense, the cases are illustrative of the more timeless dimensions of resource use and state attempts at regulation and expansion of its control through development programmes. One focal point of this book is the, often hidden, normative-legal dimension and instrumental bias of much development thinking, planning and 'doing'. Another is the limited degree to which legal and other forms of regulation can determine the behaviour of people in real-life resource use settings. It is the aim of this book to move beyond 'deconstructing' such interventions by pointing at the gap between planning assumptions and objectives on the one hand, and real-life situations of intervention on the other. It is important to go one step further: to explain resource use practices and their ambiguous relationship to forms of state regulation by analyzing them in the specific use and management histories and contexts from which they ultimately derive their social relevance and meaning. Legal and normative frameworks are important dimensions of such contexts.

¹ Law No. 22, 1999. In 2000 alone, the Department of Home Affairs and Regional Autonomy received requests for the formation of 13 provinces and 44 districts (Tempo Interaktif 28-4-2001).

² This research was part of the programme 'legal complexity, ecological sustainability and social insecurity in the management and exploitation of land and water resources in Indonesia: comparative perspectives and policy implications'. One objective was to gain a better understanding of problems of legal complexity and insecurity pertaining to resource exploitation and management. Another was to analyze the ways in which rights to control, exploit and manage natural resources are differently constructed in different agro-ecological, economic, socio-political and institutional settings. The project focused on South Sulawesi, West Sumatra, Ambon and Java. It was funded by the Royal Dutch Academy of Sciences (KNAW), and involved cooperation between the Department of Agrarian Law of Wageningen University, the Sanders Institute, Faculty of Law of the Erasmus University Rotterdam, Hasanuddin University in Makassar, Andalas University in Padang, and Universitas Pattimura in Ambon.



Map 1: Indonesia, Sulawesi, Luwu and the research locations

2. The regional setting: Luwu

Luwu is a largely mountain-covered area located in the northeast part of South Sulawesi (map 1).³ One exception is a narrow coastal plain in southern Luwu, hemmed in between the steep mountains and the Gulf of Bone. Another exception is the North Luwu Plain, a 2,500 square kilometres' alluvial coastal plain bordering on the northwest part of the Gulf of Bone. This plain, the floodplain of several rivers running mainly from the West to the East and discharging into the Gulf of Bone, used to be covered with tropical forests in the upper parts, and sago and mangrove forests in the coastal parts. In the course of the twentieth century North Luwu became one of the major centres of large-scale resource exploitation, in particular of its abundant forest, land and water resources.

Until well into the twentieth century Luwu was sparsely populated. However, from colonial times onwards its natural resources made it increasingly popular as a destination for state-sponsored and spontaneous migrants. From the thirties of last century, North Luwu became a destination for the Dutch 'colonization' programme (Du. *kolonisatie*; Ind. *kolonisasi*) and, after the colony had gained independence, the Indonesian transmigration programme (Ind. *transmigrasi*).⁴ Main objectives of Dutch colonization, started in 1905 with resettlement experiments in southern Sumatra, were poverty alleviation and reduction of population density on the islands of Java and Bali, and economic development of the so-called 'Outer Regions' (Du. *Buitengewesten*) of the colony. The creation of rural settlements based on irrigated rice cultivation, making use of the experience of Javanese and Balinese rice farmers, was a core element of the programme. The rivers flowing down into the North Luwu Plain make the area very suitable for irrigation development. From the late thirties, experiments started with resettlement of Javanese in Luwu. After many years of political turmoil, the transmigration programme took over: from the late sixties until the late nineties tens of thousands of farmer families from Java, Bali and Lombok were resettled in Luwu.

Luwu also attracted large numbers of 'spontaneous' migrants from other parts of (South) Sulawesi, especially Bugis from Bone and surrounding districts and Toraja from Tana Toraja District and its surroundings (see map 1). Characterized by a relatively low population density and high economic and developmental potential, especially during the last decades Luwu experienced a high rate of population growth.⁵ Main destination of transmigration and spontaneous migration in Luwu was the North Luwu Plain. Luwu had a 1997 population of about 800,000 (Kantor Statistik Kabupaten Luwu, 1998). Because of the presence of a large number of population groups of different origins, ethnic and religious backgrounds within its boundaries, Luwu is often called a *Taman Mini* (Miniature Garden).⁶ Apart from transmigrants from Java, Bali and Lombok, the district harbours population groups from Sulawesi with a Luwu, Toraja, Pamona, Bugis-Makassarese or other identity.

³ Administratively, the changes that swept Indonesia during the crisis years did not leave Sulawesi and Luwu unaffected; see chapter 2.

⁴ Note that 'colonization' means pioneer land settlement here, and not colonial rule. After independence, Dutch colonization policy was continued in the Indonesian state-sponsored transmigration programme for resettlement of inhabitants from the most densely populated islands (Java, Bali and Lombok) on islands with a lower population density (mainly Sumatra, Kalimantan, Sulawesi, and Irian Jaya).

⁵ In the 1971-1980 period, Luwu had a mean annual population growth of 4.9%, mainly due to transmigration and regional migration to northern and eastern Luwu. In the 1980-1990 period, population increase dropped to 3.1% (Kristanto et al., 1989; Kantor Statistik Kabupaten Luwu, 1990). However, state-organized transmigration and regional spontaneous migration continued to play an important role.

⁶ After 'Taman Mini Indonesia Indah', the large open-air exhibition of Indonesian cultures established near Jakarta by the Suharto family (see Acciaioli, 1997; Lindsey, 1999a).

3. Legal complexity in the exploitation and management of natural resources

Luwu is particularly interesting for legal anthropological research on the use of natural resources. First, the combination of a heterogeneous population and increasingly intensive resource use pose specific exploitation and management problems. Second, there is a crucial developmental dimension involved: the area has a long history of state-organized irrigation development and farmer settlement. Redefining and allocating rights to resources, changing existing practices of use and management, increasing state control over resources and people, and propagating 'efficient' property regimes for resources are important objectives of such state development programmes. These have a normative dimension or downright legal character in their classification of resource-dependent people into 'beneficiaries' and 'non-beneficiaries', in the ways they define or redefine rights to resources, or in their design of operational and managerial structures and regulations.

However, the ways in which natural resources are conceptualized as property are normatively and cognitively constructed in different ways in different socio-cultural, economic and political settings of exploitation and management. The existence of different conceptualizations of rights and related forms of legal regulation in areas undergoing rapid transformation or with an ethnically heterogeneous population like Luwu makes such settings legally complex. The concept of legal complexity or legal pluralism is used here to refer to the existence of more than one form or source of legal regulation in the same socio-political space.⁷ Only quite recently more attention came to be paid to law and legal complexity in academic and policy-related development studies. An important consequence of the existence of legal complexity in heterogeneous arenas of resource exploitation like Luwu is a, possibly, high degree of legal, livelihood, and social insecurity. Legal complexity is an important characteristic of post-colonial Indonesia (F. and K. von Benda-Beckmann, 1999; Lindsey, 1999a). It also plays a prominent role in problems of resource exploitation in Luwu.

In developing the research focus, choices had to be made in terms of agro-ecological settings, resources, livelihoods, and population groups involved. One of the factors that have, to a large extent, determined the path of rural transformation in Luwu is the policy of irrigation development and state-sponsored (trans)migration. This combination gained its momentum under the New Order regime, which received large amounts of foreign and multilateral donor support from the late sixties onwards. Irrigation and irrigation-based transmigration in Luwu have emerged as important social forces in planned rural change from the thirties onwards, but especially during the last three decades.⁸ Therefore, I decided to focus on land- and water resources development in North Luwu.⁹

4. The main themes of this book

Though with an overall thematic focus on the complexities of use and regulation of land and water resources, this book is the product of several periods of working and research in Luwu. Especially during my first three-years' stay in Luwu I developed several interests that found their way into this

⁷ For a further elaboration, see chapter 1.

⁸ For irrigation as a social force, see Eggink and Ubels, 1984; Vincent, 1997, 2001.

⁹ Studies on Luwu are relatively few. The primary focus is historical (Andaya, 1981; Caldwell, 1998; van Fraassen, 1991; Koolhof, 1999; Pelras, 1996). Few anthropological studies exist (e.g. Charras, 1982; Errington, 1989; Robinson, 1986; attention to Luwu is also paid in Bigalke, 1981; Schrauwers, 1995; Volkman, 1985). Further, studies on agricultural change by a Japanese-Indonesian team of researchers should be mentioned (Maeda and Mattulada, 1984; Mattulada and Maeda, 1982, 1986; Tanaka, 1997).

research project. Between 1989 and 1992 I had worked as an adviser for land reform and settlement in the Pompengan Integrated Area Development Project (PIADP), a rural development project in North Luwu. PIADP was a bilateral Indonesian-Dutch project. Suddenly, in 1992, a political conflict about East Timor arose between the two governments. The conflict, caused by the Dili massacre and the Dutch reaction of making development aid conditional upon improvement of the human rights situation, escalated in March 1992: Indonesia terminated development cooperation with the Netherlands. As a consequence, all Dutch expatriate development workers had to leave the country.¹⁰ Four years later, I had the opportunity to return to Luwu for the ‘legal complexity’ programme, which was to focus on Balinese transmigrant settlements in North Luwu. Balinese are a population group well represented in Luwu.¹¹ Research in Luwu was expected to contribute to the analysis of processes of construction of property rights to land and water among Balinese in a non-Balinese, multi-ethnic development setting. It took place in the Kalaena irrigation area (see map 1). When the opportunity was there to engage in research in Luwu, I decided to combine this thematic field of the programme with research along the lines of my earlier experiences in Luwu. What follows is a short account of the three case studies developed in this book around the general thematic focus of ‘land and water’.

Migration from Tana Toraja to Luwu: emergent identity, regional migration and access to land in lowland Luwu

I am the guest of an old man who lives in a village located in the area of PIADP (see above), some thirty kilometres North of the district capital Palopo. Sitting on the balcony of his wooden house, we discuss the massive migration of farmers from highland Luwu and neighbouring Tana Toraja District into lowland Luwu (see map 1). Actually, he is one of those migrants himself. He did not only settle in lowland Luwu as a refugee from the highlands in the early fifties, but was one of the organizers and leaders of refugee settlement in those days. The refugees had massively fled their upland villages as a consequence of instability and violence in Luwu associated with the Darul Islam rebellion (see chapter 2). In the sixties, when peace and order had been restored, increasingly large numbers of farmers, especially from Tana Toraja, migrated in search of agricultural land. This was easy to find in lowland Luwu but scarce and expensive in Tana Toraja and the surrounding highlands. My host, Dutch-educated and a leading person in the highland Luwu community in lowland Luwu, gives his account of this migration from the Luwu highlands and Tana Toraja and how it related to general socio-political changes in the wider region:

‘Highland societies were strongly hierarchical. Low-status people had little or no access to land and were often dependent on their feudal masters. As there were many social and cultural ties between the lowland and the highland areas, people from the highlands had always come down to lowland Luwu. Islamic lowland people tended to look down on highland people, who were still animists, and often treated them in a discriminating way. Usually, highland people assimilated completely into Islamic lowland culture once they had moved there. Though aware of their highland roots, they would no longer openly refer to it. After the coming of Dutch colonial rule and the Protestant church in the early twentieth century, the self-esteem of highland people grew, gradually developing into a strong sense of identity, of belonging to the Toraja people.

¹⁰ On 12 November 1991 a large number of people were killed and wounded in Dili, capital of the (then) Province of East Timor, when Indonesian army troops opened fire on a large crowd. See Vatikiotis, 1993.

¹¹ The ‘legal complexity’ research programme was a continuation of earlier Wageningen University research on the role of law in management and exploitation of land and water resources among Balinese in Bali itself. See Spiertz, 1989, 1991, 1992, 2000.

The waves of migrants that came to Luwu from the fifties onwards were in search of land, of *Lebensraum*. There was an important difference with earlier migration: they came with a Toraja identity that was mainly a Christian one. But it had also become an ethnic and political identity. The new Toraja sense of identity had led to the emergence of a political movement for separation of the highlands from Luwu. At the same time it had spawned a movement that was bent on exerting greater political influence in lowland Luwu, on having access to its land resources and, in the end, incorporating it into a larger administrative unit under Toraja leadership. This is what we called 'Toraja Raya' (Greater Toraja; D.R.). Rather than remaining tied to the lowland, the Toraja people were striving for self-determination. But at the same time, Toraja farmers moved to lowland Luwu to obtain agricultural land. Migration of Toraja farmers to lowland Luwu in search of land is still considered a politically very sensitive issue, because of its close association with the emergence and expansion of party politics along ethnic and religious lines in the fifties and sixties, and with the struggle for Toraja Raya. In a way, it was indeed part of it.'

After two introductory chapters, chapter 3 presents a short regional history of migration from highland South Sulawesi to lowland Luwu. This massive regional migration in the second half of the twentieth century had a great impact on land tenure in lowland Luwu. The abundant land resources in Luwu were a major pull factor in this large-scale migration, which was not planned by the state but not wholly spontaneous either. It preceded the national transmigration programme and, because of its uncontrollable character, often competed with the patterns of land allocation planned for the latter. Regional migration seems to have been at least as sensitive and controversial as transmigration. An analysis of this regional migration as one dimension of wider processes of socio-political, cultural and administrative change will shed more light on this issue.

Was there a relationship between the emergence of Toraja identity in colonial times and the increasingly massive migration of farmers from the highlands to lowland Luwu in search of agricultural land? This seems indeed to have been the case. Starting from the origins of Toraja identity in the Dutch colonial period, I discuss its manifestations in post-colonial regional politics, especially migration to lowland Luwu and attempts at establishing a separate administrative division called Toraja Raya at the provincial level. Toraja identity fed an ambitious expansionism, the roots of which can be traced back to the colonial missionary and administrative ideal of creating a Greater Toraja uniting all Christianized highland peoples in a buffer against lowland Islam. After independence, the ideal did not disappear. In the socio-political context of the early post-colonial period, Toraja Raya became the ideological foundation of an expansive Toraja 'Lebensraum' movement, as several elderly Toraja formerly engaged in regional politics referred to it in a queer combination of German and Bahasa Indonesia.¹²

This case study of regional migration clearly shows how issues of access to natural resources can be intricately related to normative conceptions of local livelihoods (in lowland Luwu), to forms of 'development planning' of various origins with the objective of filling up 'empty' land, to regional politics and struggles for the change of political-administrative relationships and boundaries, and to emergent ethno-religious identities and their accompanying political agendas and strategies. For all its ambiguities and contradictions, the case shows the role of Toraja identity in generating processes of migration to, and settlement in Luwu. Preceding the chapters on land reform in PIADP (chapters 4, 5 and 6), this part of the research provides both a one-chapter regional historical case study of the complex socio-political aspects of access to natural resources, as well as a general social and historical context for the chapters on PIADP.

¹² Using the German term in combination with the Indonesian term for 'movement', *gerakan Lebensraum*; or also *gerakan ruang hidup*, its translation into Bahasa Indonesia.

Irrigation development, land redistribution and titling in the Pompengan Integrated Area Development Project (PIADP)

PIADP had been widely propagated as a model project for integrated rural development. It was known for its complex combination of irrigation development with intervention in land tenure and farmer settlement, with agricultural and institutional development, and for its attention to participation and the role of women. More than three years after the sudden termination of PIADP, I pay a visit to the former project area. Former settlers have left the majority of home yards created by PIADP for settlement. They lifted their wooden houses on stilts, never to return again. What remains, overgrown by shrubs or hidden between the maize plants or other crops, are the sanitary facilities and wells once provided by PIADP to the settlers. Pither, one of the former settlers, tells his story:

‘The programme for land redistribution and settlement has only created large-scale conflict. We settled five years ago in a house that had been provided by the project. The land had been previously owned and cultivated by another farmer, but then redistributed by the project as part of the planned settlement area. The other farmer had been promised land in compensation elsewhere in the project, but had never been allowed to work that land by the farmer who used it. Once we had built our house, the farmer who still claimed rights to the location of our new home yard started reminding us that he continued to consider himself the owner of the land. He regularly warned us that he did not recognize our new government-issued title. Every now and then he would pass by and utter threats, stressing that we would have to leave and that no compromise was possible. Gradually, he started harassing us. To assert his claim, he planted part of the yard with seasonal crops and warned us not to destroy them. After almost four years, we were fed up with the tense situation and offered payment of financial compensation, but he refused to accept it. He said he wanted his land, because he did not have much other land to cultivate. Neither the village administration nor the responsible government agency did anything to solve the conflict and guarantee our safe and undisturbed use of the land. After new harassments and increasingly serious threats we finally decided to move our house and leave, as many other settlers had already done before us. We found a place on the land of my father-in-law, so now we are safe. We still hold the land title document issued by the Land Registry Agency, but what is it worth? Even if you hold a title, you can lose the land!’

PIADP was implemented in an area where, until the seventies of last century, state programmes for registration and titling had been absent. PIADP was the continuation of the Pompengan Implementation Project (PIP), an irrigation project, implementation of which had started in 1980. PIP had a strong construction bias, paying little attention to the social aspects of irrigation development. However, during construction of the system many problems had emerged that seemed to require another approach: the lack of clarity about land tenure, the lack of a clearly defined and distinguishable ‘target group’ for irrigation development, the threat of increasing land speculation, illegal and uncontrolled settlement as expectations of project benefits rose, and expected problems in the field of organizing future water users for operation and maintenance of the lower sections of the new irrigation system. In the development world at large, the tide was turning as well: new donor definitions of development emerged, with new priorities like ‘participation’, ‘reaching the poorest’, and ‘institutional development’. Hence, the project shifted towards ‘integrated area development’ for the next period of implementation, and became known as the Pompengan Integrated Area Development Project (PIADP).

In PIADP, a central role was accorded to active intervention in land tenure through land redistribution and farmer settlement. The combined implementation of land reform and settlement was expected to redress the main weaknesses of the project. However, like in its predecessor PIP, in PIADP the problems mentioned above continued to be seen primarily from a rather narrow irrigation-focused perspective. Unclear land tenure and low population density were seen as threats

to future operation and maintenance of the irrigation system; land reform and settlement as solutions to these problems. However, continuation of PIP into PIADP also meant a shift from a purely *technical* intervention (implementation of a construction programme) towards a rather radical and complex *legal* type of intervention in land tenure. A style of intervention that created, in its turn, completely new social objectives, like more egalitarian land tenure and security of tenure, as ‘add-ons’ to the construction programme. The basis of PIADP was a ‘project law’ for land reform and settlement, incorporating normative donor conceptions of development and sections on land reform of the Indonesian 1960 Basic Agrarian Law (BAL; see chapter 2).

This shift in project orientation also meant a greater say for, and input from, social-scientific expertise, which had played only a marginal role during implementation of PIP. The social engineers made use of this greater room for manoeuvre by imposing their own priorities, preoccupations and objectives upon the programme, and creating their own legitimacy for continued involvement. Ever more ambitious general objectives were created, and detailed regulations for implementation formulated; all within the same blueprinted schemes for implementation of a project that, in the last resort, was destined to remain an appendix to a construction programme. PIADP was based on a form of socio-legal engineering that, notwithstanding its high ambitions and moral claims of higher sensitivity to the social aspects of irrigation development, made it the perfect counterpart of the initial engineering programme.

Implementation of land reform was problematic, controversial and conflictive from the onset. In early 1992 tensions had risen high, and the project was in permanent crisis. The gap between administrative routines and formal accounts of ‘progress’ on the one hand, and the ever more complex field reality on the other had become disquietingly wide. Then, early 1992, suddenly there was the termination of PIADP as a consequence of the political conflict between Indonesia and the Netherlands. In view of the state of affairs in PIADP, to the consultancy firms involved in the project, its sudden termination came as ‘a blessing in disguise’, as expressed by one of the Dutch implementing consultants. The project, once pushed forward as a ‘model’ for integrated rural development to be replicated in other regions of eastern Indonesia, was silently terminated. Indonesia was no longer an issue in Dutch development policy, and nobody in the policy world was interested in any ‘lessons learned’ from the PIADP experiences. If any lesson was learned at all, it was that sometimes it is better to forget.

What remained for the former ‘beneficiaries’ were conflicts about land and the facilities of the settlement programme implemented on the quicksand of land reform, and the many social, economic and legal insecurities involved. The research programme provided an excellent opportunity for a socio-legal analysis of the long-term effects of PIADP. The combination of my earlier look behind the scenes of a land reform and titling programme with post-project research on the long-term impact of this programme on security of tenure made it relevant to the general theme of the research programme. The outcome is a rather dazzling account of a case of Dutch development policy at work in ‘real life’. In the end, some of the main objectives of the ‘non-technical’ part of the project got completely lost in the chaos created by the land reform and settlement programme. Development objectives for PIADP turned into their opposites: control into chaos, security of tenure into greater insecurity and more land conflicts, and better land registration into the creation of a new layer of more fragmented, unregistered and untitled land. Thus, the PIADP case provides a deeper insight into the socio-legal engineering aspects of development in an administrative and socio-political context conducive to policy transformations at the local level under the influence of a variety of actors. The PIADP case covers chapters 4 to 6.

Complex use and management of land and water resources in a Balinese transmigrant settlement

As a result of transmigration, migration and irrigation development, the state-constructed irrigation systems in Luwu are populated by water users of various origins and ethnic backgrounds, including Balinese transmigrants. The Balinese village of Kertoraharjo is situated in the command area of the Kalaena irrigation system in North Luwu (see map 1). The specific combination of farmer settlement through the transmigration programme and large-scale irrigation development in the Luwu Irrigation Project by the Department of Public Works¹³ made research on organizational, institutional and socio-legal dimensions of local irrigation management among Balinese irrigators in a Public Works irrigation system based on engineering technology possible. Research focused on the development of irrigation management arrangements and practices in a setting characterized by the co-existence of norms, rules and arrangements associated with the engineering system on one hand, and those deriving from the Balinese irrigation institution of *subak* on the other.¹⁴ I chose Kertoraharjo as a relatively ‘old’ transmigration and irrigation development setting. In a functioning irrigation system with more or less stabilized local irrigation management practices and institutions, such interaction processes will, to some extent, have become manifest.

For officials and engineers it is all very simple: apart from the physical infrastructure, all you need is a hierarchical command structure, a top-down decision-making structure to determine opening and closure dates of the irrigation system, and water users’ associations (WUAs) for the so-called ‘tertiary units’ (TUs) of the irrigation system to take over management responsibilities and enforce rule-conform behaviour upon their members. The following impression of a Balinese village-level meeting to determine the day on which transplanting of the rice is allowed to start may put into perspective that image of simplicity:

On 27 June 1999, a so-called *tudang sipulung* meeting is held in the village temple of Kertoraharjo, to determine the Balinese starting date for transplanting the rice.¹⁵ Balinese Hinduism requires that smaller or larger rituals and offerings accompany all stages of the cycle of irrigated rice cultivation. One of these is the *pengawitan* transplanting ritual. Transplanting rice before the ritual has been held is considered polluting and punishable with a fine imposed by the subak. Every season, opening and closure dates of the irrigation systems in Luwu are determined by the Irrigation Committee (*Panitia Irigasi*), consisting of representatives of the district-level administration and agencies involved like Public Works (PU) and the Agricultural Service (PERTANIAN). The decisions of this meeting are passed downwards through the subdistrict administrations to the villages. In Kertoraharjo, the foregoing (rainy season) cropping season had started rather late. Due to urgent repairs of the main system, land development was one month late. When land preparation could finally start, the Kertoraharjo population was busy preparing for a mass cremation ceremony for all Balinese villages in North Luwu, to be held in their village. This had led to further delay of the wet cropping season. Farmers are to make up for that delay in the coming (dry) cropping season. Those present at the meeting are the recently elected *pekaseh*, leader of all subaks, his staff, the subak chairmen (*klian subak*) and their staff, as well as the chairmen of some of the WUAs of TUs with a Balinese farmer population. First of all, the decisions of the district-level meeting as passed down to the subdistrict meeting are read out to those present. The most important data are opening of the weir (26 June) and closure of the system (20 November). Then the *pekaseh*, son-in-law of the former *pekaseh*, starts presenting his proposal for the coming cropping season. Recently chosen out of four candidates by acclamation, he chairs this meeting for the first time. There was general agreement that choosing him would make it possible for him to learn from his father-in-law. Before the meeting, the former *pekaseh* has written down his advice on the most

¹³ Proyek Irigasi Luwu (PIL); see chapter 2.

¹⁴ (Bal.) *sekaha subak*; subak association; irrigators’ community (see chapters 2, 9 and 10).

¹⁵ *Tudang sipulung* is a Bugis (South Sulawesi language; see chapter 2) term meaning something like ‘sit and discuss together’; see Acciaoli, 1997. See also chapter 9.

suitable date for starting transplanting: 13 August. It is based on predictions about the weather and the occurrence of plagues, as well as on the propitious days on the Balinese calendar. After the proposal has been presented, discussions about a final decision start. The many factors that play a role - water, pests, rice varieties and growing periods, and the Balinese calendar - are weighed. One WUA representative proposes to shift the date to 1 August, in view of the government policy of stimulating early transplanting and harvesting. However, the pekaseh argues that the rather late date proposed is based on the observation that in surrounding villages harvesting is still going on. Therefore it would be better not to start too early: 'let us not continue to shift forward our transplanting compared to other villages. We take the risk that all plagues will come to our fields. We don't grow rice for the birds, do we?' Further, in the experience of the former pekaseh, planting in July increases the risk of crop damage. In the end, general agreement is reached on 13 August, the date proposed by the pekaseh. The latter expresses his hope that farmers will transplant in a concerted manner. He also warns that farmers should decide themselves upon the rice variety used, but that they will be fined if they transplant before the transplanting ritual. He also warns for the possible shortage of ploughs and planting groups. Later, the former pekaseh tells me there was another reason for not agreeing with the earlier date: it was unfavourable for the one who works the customary village land on which the ritual is to be held, the pekaseh himself. As it was the day on which he was born, he should not plant on that very day: 'don't plant your *sawah* (irrigated rice field; D.R.) on that day. If you do that, one of the two will be sick: if the rice is healthy, you will be sick; if you are in good shape, the crop will be sick'.

The section on Kertoraharjo focuses on the role of land and water in a Balinese transmigrant settlement. I pay attention to the history of settlement, on the competing 'development projects' around this settlement and their impact on access to land for various settler groups, and on the internal development of Kertoraharjo as a Balinese village in Luwu. The latter involves a crucial process of cultural construction of orientations, spaces and boundaries, and of specifically Balinese institutions in a non-Balinese environment. I also trace the role of land resources and processes of diversification in agriculture. From the eighties, many Balinese farmers diversified into cocoa cultivation on land bought outside, often even quite far away from, their village. Cocoa became an important component of Balinese livelihood. The rapid socio-economic changes also set in motion processes of differentiation among the, initially relatively egalitarian, Balinese settler population.

For most Balinese, irrigated agriculture remained a crucial source of livelihood. Irrigation management is a collective affair: the efficient and effective execution of irrigation management tasks requires regular and intensive cooperation between water users. Located in the command area of the Kalaena system, a Public Works irrigation system, irrigation management also requires a clear division of rights and responsibilities, organization and labour between the agency-managed and the farmer-managed parts of the system. In Public Works systems like the Kalaena system, the system of WUAs and TUs came in one 'package' with the canal structure. This type of irrigation development is based on the same assumptions that also characterize modernization thinking in development at large: of the superiority of new technology, normative and organizational arrangements to existing or 'traditional' ones, the unproblematic character of the 'transfer' of such externally generated elements into a 'target' population, and the automatic and untransformed acceptance and internalization of these elements by the water users.

However, at least part of the Balinese settlers were experienced irrigators commanding some knowledge of the technical, organizational and normative dimensions of Balinese subak. Part of the section on Balinese settlement in Luwu traces the history of articulation between the complex of technology, organization, norms and rules associated with state-initiated WUAs and those associated with Balinese subak. I explore to what extent and in what ways Balinese knowledge and practices, norms, regulations and organizational arrangements pertaining to irrigated agriculture have interacted with the standardized engineering approaches to irrigation management represented by the Public Works system, its WUAs and TUs. The case study of Balinese settlement in Kertoraharjo covers chapters 7 to 10.

As the description of the research theme and the short introductions to the three cases through which I approach this general theme will have made clear, I analyze different processes of social transformation and complex regulation related to 'land and water' in different settings, covering various scales and levels of social organization, and involving various actors. The three cases are primarily linked through their common relation to 'land and water'. The analysis of each case has its own insights to contribute to the overall theme of complex use and regulation of land and water resources. Concluding remarks on the three case studies will mainly be presented at the end of each case study section. However, in the final chapter I will also take up the challenge of abstracting from the individual case studies. What do these 'multi-sited' case studies indicate? What message do they convey about regulation of the use of land and water in the framework of rural development? What do the cases contribute to our understanding of Luwu as a legally and otherwise complex society? What kind of society has Luwu, with its multiple identities, realities and 'development projects' become in post-Suharto Indonesia? What could this mean for human ambitions and capacities to regulate and intervene for the sake of development?

5. Structure of the book

Finally, I give a short overview of the chapters of this book. In Chapter 1 I will present a theoretical and conceptual framework for analysis of the various themes. Chapter 2 will return to the major themes of this book, and sketch the broader context of the case studies. This chapter focuses on the regional setting (Luwu), land and regulation of land tenure, and the context of irrigation development and Balinese irrigation management. Chapter 3 will present the case study of migration to lowland Luwu in relation to emergence of Toraja identity, processes of expansionist search for 'Lebensraum', and strategies of gaining access to land resources. In Chapter 4, the focus shifts to the case of PIADP. This chapter will sketch the general project context and history, and trace the history of the shift from a technical engineering focus in PIP towards a socio-legal engineering focus in PIADP. Chapter 5 will fully concentrate on the story of implementation of land reform and settlement, from the optimistic beginnings to its chaotic demise. In Chapter 6, I analyze the long-term effects of land reform and settlement on security of tenure in the former area of PIADP. Chapter 7 is a general introduction to the Balinese village of Kertoraharjo, and its settlement and land development history. Chapter 8 will focus on the processes of agricultural diversification and expansion of Balinese control of land resources, and of the social differentiation that has become visible from the eighties onwards. Chapter 9 traces the history of Balinese subak in Kertoraharjo, especially in relation to the establishment of the tertiary irrigation units of the Kalaena system. Chapter 10 focuses on these water users' associations, and traces the role of elements of the Balinese institution of subak in these organizations. In Chapter 11 I will present final conclusions to this book, with a focus on legal regulation and development in the complex society that Luwu has become.

I am aware of the fact that the diversity of issues dealt with in this book will not always make it easy reading. Though I hope, of course, that the reader will devour the three case studies as a three-course menu, *à la carte* reading of the separate themes is also possible. Thus, chapter 3 on identity, migration, and access to land, chapters 4 to 6 on land reform and settlement in PIADP, and chapters 7 to 10 on Balinese transmigrant settlement and local irrigation management can be read separately, in combination with the introductory chapters.

The complexities of development

1. The hidden normative and legal dimensions of development

In recent years there is a growing interest in the normative and legal dimensions of processes of development. Development has been analyzed in terms of the gap between intentions and outcomes (Grindle, 1980; Quarles van Ufford, 1988; Porter et al., 1991), as hegemonic discourse involving specific knowledge and power constellations (Escobar, 1995; Ferguson, 1990), as complex processes involving multiple actors in a diversity of arenas at various scales and levels (Grillo and Stirrat, 1997; N. and A. Long, 1992), and as involving processes of management of ‘knowledge’ and ‘ignorance’ (Hobart, 1993a, 1993b; Quarles van Ufford, 1993). Notwithstanding its ambitions of ‘doing good’, rationality, and practical efficiency the concept of development itself and practices related to it are full of hidden teleological, moral, and normative connotations (F. von Benda-Beckmann, 1993; Hobart, 1993a; Quarles van Ufford et al., 2003). However, such normative and more straightforwardly legal dimensions have long remained screened-off from critical analysis and reflection.

When law is openly recognized as a major force in development, it is primarily in an instrumental sense, ascribing to a variety of ‘crafted’ or ‘traditional’ legal and institutional arrangements the capacity to generate, enforce or reproduce the kind of intended societal changes called ‘development’. Even if scientific analyses show a greater appreciation of the complexity of development, policies and practices associated with development as a field of human activity tend to be highly instrumental, reflecting a social engineering view of processes of planned change. Legal dimensions become more directly implicated, and hence also more clearly visible, in agendas for ‘law and development’ (Rose, 1998) or ‘good governance’ (Crook, 2001; World Bank, 1999; WRR, 2001). Legal and governance reforms and ‘rule of law’ have even gradually evolved from preconditions or instruments of development into its main objectives.

Often, the normative-legal basis of development remains implicit, hidden behind slogans like ‘sense of ownership’, ‘participation’, or ‘good governance’ that express abstract and general policy ideals and principles buzzing around in the national, international or multilateral donor world. Even if such concepts are not, in a direct sense, part of any legal regulation, their use may have legal consequences or be expressed in straightforwardly legal forms of regulation. Once they become policy, general conceptions, ideals and principles pertaining to, for instance, access of farmers to land or devolution of irrigation management tasks are expressed in legal (re-)definitions of bundles of property rights to land, water and infrastructure. Such conceptions may stress economic growth and production, equity, sustainability or security, or combinations of these. Associated policies and practices may either find their ultimate legitimacy in state law, or be based on vaguer normative foundations not expressed in law but with no less serious legal, livelihood, equity and security consequences for those involved.

Even if increasingly shaped by transnational or global processes, lower-level interactions continue to be important.¹ Processes of localization, re-interpretation and transformation of interventions devised at whatever level of governance remain a major focus of research. However, greater attention to the role of norms and law in such interactions at various scales and levels is desirable (Mehta et al., 2001b). As Crook (2001) stresses, law does not always play a prominent role in a direct sense (that is: through courts and the legal profession), but rather indirectly, in dealings and practices of (state) regulatory, administrative and quasi-judicial institutions. However, development interventions may also have a more explicit legal basis in ‘project law’, specifically created to reach development goals (F. von Benda-Beckmann, 1993). Project law creates a structure of decision-making, stipulates do’s and don’ts for ‘beneficiaries’, and forms the basis of justification for allocative decisions. Thus, it creates legitimacy for intervention. Apparently neutral policies and activities of development, then, often take the form of law or find expression and ultimate validation in legal terms. Development is a form of ‘socio-legal engineering’, in which desired situations are projected into the future, while existing conditions are negatively labelled as ‘hindrances’ (F. von Benda-Beckmann, 1993; see Arce and Long, 2000; F. von Benda-Beckmann et al., 1996; Crook, 2001; Hobart, 1993; Quarles van Ufford, 1993; Quarles van Ufford et al., 2003).

This new interest in normative-legal dimensions of development cannot be seen in isolation from the mixed performance record of development policies and practices. Generally speaking, excessive preoccupation with what ought to be rather than what is or is possible in complex contexts of intervention, with ‘doing’ rather than understanding, has not paid off in terms of results. Development is a field of human thought, reflection and activity with a distinctively moral dimension. However, the purely instrumental rationality characteristic of socio-legal engineering has come to predominate. In order to reach developmental goals, moral and normative notions of desired directions of change and ideal human behaviour are translated into legal forms of regulation. Posing as politically neutral ‘policy’ backed by professional knowledge and legitimate authority, such regulation is implicitly assumed to determine human behaviour in a direct way. Hence, it forms the backbone of notions of manageability of the development process, of the assumption that there is a straight road from policies and plans to pre-determined and intended outcomes, that the relationships between actors at various levels, and between intentions and outcomes is unproblematic. These are important factors in creating or maintaining public and political support, and generating funding (see Quarles van Ufford, 1993).

Law in development, then, emerges primarily as an instrument for ‘implementation’ of pre-determined goals, as part of the solution to developmental problems. Like instrumental approaches to law, development as a field of human activity (as a profession) has become increasingly closed off from the societies in which it is applied by validating, supporting and stimulating certain types of action, organization and behaviour while marginalizing, discrediting, discouraging or forbidding others. The main capital of both law and development is their image as effective and efficient ‘machines’ for establishing and maintaining a desired societal order. However, the relationship of both to actual behaviour, and, hence, their significance in daily life, is at least problematic. Both in law and development, the tension field between the normative and the empirical, between ‘ought’ and ‘is’, plays a crucial role. Where the need for critical analysis of development is weighed against that for maintaining notions of manageability, this tension field is often elided or treated in a way

¹ With the increasing importance of transnational and global governance dimensions of socio-economic, environmental and other issues, and the definition of state- or local-level problems in global terms, sources of legal regulation and legitimacy increasingly derive from supra-state institutions (see K. von Benda-Beckmann, 1999; Mehta et al., 1999, 2001a).

that does not harm, or even affirms, basic notions of order and control (see F. von Benda-Beckmann, 1993; Colebatch, 1998; Crook, 2001; Quarles van Ufford, 1993; Spiertz, 2000).

Thus, 'the legal' and 'the developmental' are more closely related than is often realized. Much of this book basically deals with normative assumptions about regulation, notions of manageability, hidden normative points of departure of interventions and their managerial, organizational and legal consequences. Not as abstract principles, norms, and rules but in relation to the day-to-day practices of resource use and management from which they derive their ultimate meaning. Criticism of development primarily derives from the (mainly academic) field of critical development studies, sociology and anthropology of development in particular. Critical research and reflection on the legal dimensions of development and the instrumental use of legal forms of regulation in development practices derive mainly from anthropology of law. Recent approaches to development have moved towards more interdisciplinary ways of coming to terms with complex developmental issues. This chapter provides a conceptual-theoretical introduction to the main themes developed in this book. The next section gives a short overview of the debates on processes of development. In the third section I focus on the concept of legal complexity and explain its contribution to the analysis of development. The fourth section shifts to the field of studies of use and management of natural resources, in particular property rights reforms in land and water. Section five continues the discussion on the analysis of complex resource use settings, with specific attention to the contribution of the concept of legal complexity. In the final section I discuss a number of other conceptual-theoretical approaches that are also relevant to the main themes of this book.

2. Development: from solution to problem

Development has long been conceptualized as a rationally planned, controlled and coherent linear process in which the relationship between intentions and outcomes is unproblematic. Gaps between intentions and planning on the one hand, and the stubborn reality of 'implementation' on the other were usually explained in terms of a variety of social, cultural or legal 'hindrances' to development expressed in dichotomies like 'modern' versus 'traditional', 'formal' versus 'informal', or translated into the need for more appropriate planning, more regulation and better implementation (see Colebatch, 1998; Crewe and Harrison, 1998; Quarles van Ufford, 1988, 1993; Robertson, 1984).² While the former provided a justification for more intervention in often unknown and hardly understood social settings, the latter tended to reconfirm and reproduce the basic tenets of development thinking in terms of linear progress and increasing control (see Hobart, 1993). From the seventies onwards, the emergence of 'integrated' and 'bottom-up' approaches meant a shift of focus away from 'top-down' state models towards other actors in the development process. It was assumed that such approaches would close the gap between intentions and outcomes, and thus solve the main problems of development (Grillo and Stirrat, 1997). In the meantime, the basic assumptions of control and manageability of planned change remained pleasantly undisturbed. Often, realization of the complexity of development in real-life settings went hand in hand with even higher ambitions of social engineering in policies and practices of planned development.³

More in-depth and critical analytical approaches to planned change emerged as well. Initially, these approaches concentrated on state-society relations and state capacities (or the lack thereof) to

² For a discussion focusing on law in development, see F. von Benda-Beckmann, 1993.

³ A clear illustration of this is the case of PIADP discussed in this book (chapters 4 to 6).

bring about planned changes in society (e.g. Migdal, 1988; Robertson, 1984; see also Arce et al., 1994). Analyzing development planning as a symbolic system, Robertson focuses on the interface between state bureaucrats and society. He touches upon a number of key issues: the assumption of control, the consensus-building functions, the power of language and symbols associated with planning, the way in which socio-political problems are reduced to technical ones, and the temporal (phasing) dimensions of planning which make it self-referring rather than related to ongoing historical processes in real-life society, both retrospectively and onwards into the future. Migdal also focuses on state-society relations and - often limited - state capacity to bring about planned societal change, resulting in a diversity of 'accommodations' (1988: 9) or even loss of state power. State-society relations, he argues, are characterized by complex mixtures of forms of social organization (based on ethnicity, class, residence etc.), of which the state is only one among many.⁴ At the local level, implementation of state programmes tends to be transformed under the influence of bargains struck in, what Migdal calls, 'triangles of accommodation' (idem: 248-249) between state agents and local power groups.⁵

This renewed interest in the state coincided with a growing awareness that the organizations and institutions of development themselves were part of the problem. Rather than as a rational, deliberately designed, efficient and effective machine, development was analyzed as a field of human activity that is basically 'ambiguous, uncertain and problematic' (Quarles van Ufford, 1988: 9). The gap between intentions and outcomes of development interventions was no longer explained in terms of an elusive and negatively labelled 'context' but related to tensions, ambiguities and contradictions within and between organizations, as well as between organizations and actor groups in their environment. The basic tension between, on the one hand, the towering ambitions and claims of rationality and manageability that form the hard core of the identity of institutional actors in the development policy world, and the complexity and ambiguity of the real-life processes to be controlled on the other, came to be seen as a major cause of the sense of loss of direction and crisis characteristic of the eighties and nineties (see Booth, 1994b; Gardner and Lewis, 1996; Long, 1992; Quarles van Ufford et al., 1988; Quarles van Ufford, 1993).

Thus, while policy-related work on development remained firmly rooted in assumptions of manageability and control, social-scientific approaches became more critical of these very assumptions. Development policy itself, and the practices related to it, were now becoming the object of critical research (Booth, 1994b). In the course of the eighties, the gap between development policy and academic reflection assumed vast proportions. In the former, understanding of the relationship between intentions and outcomes, between social engineering assumptions and human behaviour tended (and still tends) to be subordinated to images of development practices created for strategically important actors and publics like donor organizations, development agencies of donor and recipient countries, evaluation teams, or the donating public. As 'development' as a sector of human activity professionalized, this factor seems to have become ever more important (Booth, 1994a; Hobart, 1993; Quarles van Ufford, 1993; Quarles van Ufford et al., 2003).

⁴ These organizational forms also compete for law and the power to devise rules for social behaviour. In this respect, Migdal touches upon a crucial point made in the literature on legal sociology and anthropology (see Cotterrell, 1992; Moore, 1973; Spiertz, 2000): 'Non-compliance here is not simply personal deviance or criminality or corruption; rather, it is an indication of a more fundamental conflict over which organizations in society, the state or others, should make these rules' (1988: 31).

⁵ Earlier important work, in which the linkages between bureaucrats and target groups of intervention programmes, and the discretionary powers of local representatives of state agencies in dealing with these groups is analyzed, is Lipsky, 1980.

Deconstructing development

A major source of academic critique of development is associated with the advance of post-modernist thinking into the social sciences (Crewe and Harrison, 1998; Gardner and Lewis, 1996; Grillo and Stirrat, 1997). Like the social sciences at large, sociology of development has also had its 'post-structuralist' (and, to some degree, post-modern) turn. 'Deconstruction' of 'grand narratives' and the recognition of 'multiple realities' became a major concern of critical development analysis. The focus shifted from ideals and blueprints of planners, project cycles, and a-priori assumptions about 'target groups' towards an empirical-analytical rather than instrumental interest in practices of intervention and the role of social actors and actor groups in using, giving meaning to, and transforming development interventions (see Long, 1992). Long and van der Ploeg (1989) criticize the prevailing models of the development policy process, all based on notions of control and linear progress. Taking the notion of 'human agency' and the concept of 'interface' as their point of departure, the authors call for an actor-oriented deconstruction of development intervention.⁶ Attention shifted from thinking in terms of the assumptions and repetitive routines of development policy towards criticism of the restrictive, a-historical spatial and temporal framework associated with 'project' thinking and practices. Intervention is 'the continuous production of discontinuities' (idem, 231), in which certain local practices and resources are de-legitimized while others are normatively promoted as 'development' (idem, 231).⁷ Rather than only being victims of hegemonic external forces, local actors pursue their own 'development projects' within the room for manoeuvre available to them. Thus, they crucially mediate and transform processes of planned development (Long and van der Ploeg, 1989; Long, 1992, 1996).

This approach to the analysis of planned change has greatly contributed to our understanding of such processes. The focus on the (local) dynamics of intervention meant a leap forward in coping analytically with the gap between intentions and outcomes, with the issue of differential responses to development interventions and the contingencies of policy transformations. It has replaced structuralist and other biases of development thinking with a focus on real-life processes and the people involved in them. Planned change is analyzed as a socially constructed and negotiated process, the meaning of which is produced, reproduced and transformed by a variety of actors in specific constellations of knowledge, power and agency. Subject to processes of internalization and (re-)localization, planned change is inherently contingent, full of tension and conflict, and characterized by a diversity of interpretations, meanings and interests of the actors involved (see Arce et al., 1994; Arce and Long, 2000; Berger and Luckmann, 1966; Long, 1992).

Social constructivist approaches to the received wisdom of the development policy world have been enormously influential in the development debate. These approaches put into perspective the simplifications of, and abstractions from a complex reality for the sake of the routines of policy-making. Keywords in this stream of critical literature are locality, context, diversity, ambiguity,

⁶ According to Long, 'the notion of agency attributes to the individual actor the capacity to process social experience and to devise ways of coping with life ... Within the limits of information, uncertainty and the other constraints (e.g. physical, normative or politico-economic) that exist, social actors are "knowledgeable" and "capable"' (1992: 22-23); see also Giddens, 1984, 1987. Interface is 'a critical point of intersection or linkage between different social systems, fields or levels of social order where structural discontinuities, based upon differences of normative value and social interest, are most likely to be found' (Long, 1989: 1-2).

⁷ In later work, the basics of an actor-oriented approach applied to development were discussed more extensively; see N. and A. Long, 1992. For other work with a focus on social actors in project settings, see Bierschenk, 1988; Elwert and Bierschenk, 1988; for a critical review of the 'actor-oriented approach', see Booth, 1994a; F. von Benda-Beckmann et al., 1989.

complexity, contingency and conflict. However, a price had to be paid as well. Thus, Booth (1994) criticizes the almost exclusive focus on action in a local (micro-) context, at the cost of more structural macro-factors that set limits to local agency. Further, this focus on local diversity and heterogeneity, specificity of local context, history and experience has pushed attempts at generalization and comparison to the background (Booth, 1994c).⁸

Fierce criticism was raised against radical deconstructionist approaches to development, especially the forms of discourse analysis associated with authors like Escobar (1995) and Ferguson (1990). This kind of analysis of development as a 'hegemonic' discourse, based on generalizing statements that equate large institutional actors with 'discourses', replaces mechanistic notions and practices of development with a simplistic rendering of the great variety of forms and manifestations of development as a monolithic 'development discourse'. By essentializing and dichotomizing a wide variety of worldviews, approaches, interests and practices, such forms of deconstruction tend to create a simple 'us' versus 'them'.⁹ Such positions tend to exclude the possibility of finding common ground and, hence, a way of being actively engaged in giving shape to new forms of development discourse. They deepen the crisis rather than contributing to its solution (see Arce et al., 1994; Crewe and Harrison, 1998; Gardner and Lewis, 1996; Grillo, 1997; Quarles van Ufford, 1993; Quarles van Ufford et al., 2003; de Vries, 1997). In this respect, Quarles van Ufford et al. (2003) plead for the reconstitution of development as an inherently moral field of human action and reflection. Squeezed in between the instrumental and heavily professionalized development policy approaches and routines on one hand, and radical criticism on the other, this dimension of development has gradually disappeared from view.

3. Legal complexity

The concept

Notwithstanding critical voices, policy assumptions of control of planned change continued to have the upper hand. As I have stressed earlier, legal regulation is a major instrument for steering planned change and human behaviour in development programmes. It is mainly through legal forms of regulation that the general moral and normative principles that guide much development thinking, planning and action are localized ('implemented') into real-life settings. In the process, such moral principles and general notions of 'good' development are translated (and stripped of their moral and political connotations) into a set of instrumentalities of 'rational', 'efficient' policy. It is important to recognize the values of instrumental rationality and legitimate authority on which such policies are based. Actions based on them are presented in terms of shared goals, determined by legitimate authority. Thus, policy as a concept both explains and validates action (Colebatch, 1998). Attention to the legal dimensions of development, therefore, is the logical counterpart to critical reflection on notions of manageability and control in development policy.¹⁰

However, legal regulation in a development context is not projected onto a cognitive and normative void, but in a local setting in which specific conceptions of existing conditions, norms and rules, rights and responsibilities with various sources of validity already exist. There is a

⁸ Similar criticism can be raised against legal pluralist approaches; see below.

⁹ Or, rather, a trichotomy is created between 'the developers', 'those being developed' and 'those who resist development' (Grillo, 1997).

¹⁰ Thus, it has the same 'double faceted character' as ascribed to law; see Cotterrell, 1992.

growing recognition of the relevance of legal complexity for analyzing processes of planned change. ‘Legal pluralism’ or ‘legal complexity’ refers to the existence and interaction of different (often state and non-state) legal orders in the same socio-political space (see F. von Benda-Beckmann, 1997, 2002; F. von Benda-Beckmann et al., 1996; Griffiths, 1986; Merry, 1988, 1992; Woodman, 1998).¹¹ The concept of legal complexity allows for the possibility of existence of more than one legal system in society, and often unpredictable forms of interaction and hybridization between them. Analytically, there is no a-priori reason for distinguishing between state and non-state (or supra-state) forms of normative ordering, and for exclusively associating ‘law’ with the centralized (modern) state (see F. von Benda-Beckmann, 1997, 2002; Spiertz, 2000). Therefore, the concept of ‘law’, at least as legal anthropologists and many social scientists use it, is not exclusively reserved for state law, but expanded to a diversity of forms of normative ordering in society. Examples of non-state normative orders are customary law, religious law, and ‘project law’ (see F. von Benda-Beckmann, 1997, 2001, 2002).¹²

Before the eighties of last century, in a period in which ‘the dominant theories about law ... were antagonistic to all notions of legal pluralism’ (Woodman, 1998: 22), the concept was still in a state of ‘combative infancy’ (Griffiths, 1986: 1). Its spread during this period is closely associated with Griffiths’ objective ‘to combat the ideology of legal centralism and its denial of the character of law to normative orders other than that of the state’ (Woodman, 1998: 33). In the nineties, use of the concept as an analytical tool expanded beyond the relatively isolated field of legal anthropology. It is particularly influential now in studies of natural resource use and management (see below). Notwithstanding its growing popularity, even today many legal theorists adhere to ‘legal centralist’ conceptions of law (Woodman, 1998). Therefore, ‘legal pluralism’ has remained the subject of fierce and often rather unproductive debates between and among legal anthropologists and legal scientists (see F. von Benda-Beckmann, 1997, 2002; Roberts, 1998; Tamanaha, 1993, 2000; Woodman, 1998). First, the multiple meanings historically associated with ‘pluralism’ have given rise to serious misunderstandings about its meaning in legal anthropology. Thus, Starr and Collier (1989), quite wrongly associating the concept with the assumption of equal power relationships between the legal systems involved, avoid its use. In addition, even the basic tenet of legal pluralism, its allowance for the theoretical possibility of the existence of multiple legal orders, is not universally accepted and has generated debates about the applicability of the term ‘law’ for non-state normative orders. Tamanaha (1993; see also Merry, 1988), for instance, argues in favour of confining use of the term to state law, but ends up in tautological arguments that have little appeal to social scientists.¹³

It is the main objective of this introduction to focus on the relationships between law and development and, within that field, to concentrate on natural resources. Therefore, I will not be plunging deeper into the ongoing discussions on law and legal pluralism than is necessary. However, starting from a broad conceptualization of law to analyze the resource use settings

¹¹ I will use both ‘legal pluralism’ and ‘legal complexity’ here though, to avoid misunderstandings associated with the concept of ‘legal pluralism’, I prefer the latter; see below. The history of the concept is discussed in F. von Benda-Beckmann, 1997; Roberts, 1998 and Woodman, 1998. Earlier sources are Galanter, 1981; Gilissen, 1971; Griffiths, 1986; Hooker, 1975; Merry, 1988; Vanderlinden, 1971, 1989. For an important precursor, see Moore 1973, 1978. For transnational processes, see Merry, 1992.

¹² As stressed by Malinowski in the early days of professional anthropology, the ‘western’ conceptualization of law ‘in terms of central authority, codes, courts, and constables’ (1926: 14) has detracted attention from other sources of social order. He concluded that, rather than focusing on *form* and whether the observed phenomena fit within our category of law, we should focus on their *function* (see Roberts, 1979: 28).

¹³ See, however, Tamanaha, 2000.

discussed in this book at least requires a basic understanding of what law is and how it could be approached analytically. I mention two important approaches here that are partly overlapping but differing in scope. In the first approach, law is analyzed as a dimension of variation in social control, variation being primarily operationalized in terms of specialization and professionalization. Griffiths, focusing on a continuum of forms of social control with varying degrees of 'legalness', prefers to avoid the term 'law' altogether (Griffiths, 1986, 1996). In a similar way, Woodman (1998: 45) argues that, from a social scientific perspective, law can be analyzed as 'a continuum which runs from the clearest form of state law through to the vaguest form of informal social control'. The advantage of this approach is that, instead of taking a myopically state-oriented point of view, it allows for a diversity of more or less 'legal' sources of social order in society. But a price is paid as well: on the one hand it is very broad, leaving us with a much too undifferentiated concept; on the other hand, it is too restrictive in reducing law to its normative dimension and function, at the cost of its cognitive aspects and non-control functions.

The second approach stresses and incorporates exactly these aspects by approaching law as a complex of cognitive and normative constructions that are part of social organization. This approach is reminiscent of Geertz' remark that 'the "law" side of things is not a bounded set of norms, rules, principles, values, or whatever from which jurial responses to distilled events can be drawn, but part of a distinctive manner of imagining the real' (1983: 173). Like anything cultural, law is about representation, about creation and objectification of meaning in the normative dimension of life. Law enables or constrains the behaviour of members of society in a legitimate way, states do's and don'ts, validates actions and transactions, and provides rules and procedures for conflict resolution with varying scopes, domains, spaces and levels of validity. The cognitive process of creation of meaning typically involves the construction of 'situation images' of a variety of social and natural domains of life. These images form the basis for legal evaluation and the formulation of legal consequences. In addition, this approach copes with the relationship between empirical phenomena and analytical categories in a way that shows greater sensitivity to the possibility of functional differentiation. Property rights, for instance, do not exclusively belong to the domain of law but can also belong to other domains like the social, economic, and political. Whether, and to what extent that is the case, remains a question for empirical research on actual functions of property in specific societal contexts (F. von Benda-Beckmann, 1997, 2002; F. and K. von Benda-Beckmann, 1999; see also Geertz, 1983). In addition to this general demarcation of the concept of law, this approach distinguishes a number of dimensions of variation that can be used for the comparative analysis of empirical manifestations of law in society.¹⁴

The dividing line between the 'legal' and 'non-legal' will not always be clear and sharp, and certainly not equivalent to the distinction between state and non-state normative phenomena. At least for social-scientific use, taking legal complexity as a point of departure for analysis seems to be far more productive than approaches that exclusively associate law with the state. A broad concept of law, which includes legal complexity, can be used as a heuristic device in the analysis of a wide variety of social phenomena (see F. von Benda-Beckmann, 2002).

¹⁴ Von Benda-Beckmann (2002) distinguishes between morphological and functional dimensions. The former include: extent and scope of institutionalization, systematization, internal and external differentiation; the extent of differentiation of legal knowledge from everyday knowledge, of professionalization, theoretization and scientification; the character of the basic underlying legitimation; the degree of mandatoriness of legal rules; the oral or written character of transmission of legal knowledge; the social and geographic scope of validity; and substantive content. An analysis of empirical functional dimensions brings into focus the degree of functional variation and differentiation behind the assumptions (e.g. the assumption of law as social control).

Let me conclude this section with some final remarks. First, recognizing the theoretical possibility of existence of a multiplicity of legal orders does not entail a political predilection for either state or non-state legal orders, nor for legally complex societies. Second, the recognition of state and non-state legal orders does not mean that power differences between these legal orders do not or should not play a role in their analysis. Analysis of the relationship between law and power in legally plural situations is crucial. The presence of a plurality of legal orders tends to be expressed in relations of domination and subordination between these orders, through which law becomes an instrument of oppression, resistance or liberation, an empowering or disempowering force (Crook, 2001; Houtzager, 2001; Merry, 1992). The impacts of different legal orders on social life and human behaviour is a question to be answered by research in specific settings, and cannot be answered in general terms (F. von Benda-Beckmann, 1997, 2002). However, empirically the state is an important, if not primary, actor throughout the world, including in many development settings. Hence, the state legal system should be treated accordingly in any socio-legal analysis (Houtzager, 2001). Often, description and analysis of formal state law are a true representation of social fact, and not merely 'legal doctrine', as Griffiths would have us believe (Woodman, 1998; see also F. von Benda-Beckmann, 2002). Third, legal 'systems' or orders are *not* discrete, homogeneous and internally consistent entities. More often than not, there exist a variety of forms and interpretations that either interact or not, that are contradictory and conflicting or mutually supportive to various degrees. Local interpretations of customary law, for instance, may differ considerably from interpretations 'recognized' by the state (F. von Benda-Beckmann et al., 1997; Bruns and Meinzen-Dick, 2000; Spiertz, 2000).

Legal complexity and processes of planned change

An important contribution of analyses that take into account legal complexity is their focus on the social-processual dimensions of law and the relationship between law and behaviour. Rather than merely assuming a direct relationship between legal rules and behaviour - an assumption often implicitly or explicitly present in development policies and interventions - in legal anthropology this relationship has become a major issue to be addressed by empirical research. This interest in the social significance of law for (groups of) people in specific social arenas has replaced rule-centred approaches to law characteristic of early legal anthropology (Starr and Collier, 1989). As the factor of 'human agency' - actors and their interests, strategies, options, constraints, dilemmas and choices - entered the analysis of legally complex situations, more systemic approaches to legal pluralism gave way to actor-oriented approaches centring on law as a resource or 'weapon' (Turk, 1978; see F. von Benda-Beckmann and M. van der Velde, 1992; Starr and Collier, 1989).¹⁵ In strategizing to reach their goals people have at their disposal more than one legal option deriving, for instance, from state and non-state sources. Though differences in power, capacity and 'knowledgeability' (Long, 1992) play a role, social actors can weigh various legal options. Thus, they can make a selective use of these options, a phenomenon known as 'legal shopping' or 'forum shopping' (K. von Benda-Beckmann, 1981). Analyzed in specific interaction settings, law ceases to be a mere abstraction separated off from social life, and assumes its actual social meaning and significance. It is 'from below', from day-to-day human experience, that we should try to understand the social

¹⁵ For earlier work exploring the legal options of people in legally complex settings, phrased in terms of 'semi-autonomous social fields', see Moore 1973, 1989.

significance of law (see Spiertz, 2000).¹⁶ The important message for development studies is that people are constrained by law, but can also use it as a resource. In the process, they interpret it, give meaning to it and change it. Though law ‘follows rather than determines social relationships’ (Crook, 2001; Houtzager, 2001; Woodman, 2001), in development policy the ambition of legal engineering is the opposite: to precede and determine behaviour and social relationships; an ambition that often founders on these very realities of daily life.

Further, the shift from structure-centred, ‘systemic’ conceptions of law towards its dynamic, interactive, fluent, elusive and ambivalent aspects makes the hybrid and ‘messy’ character of law stand out more clearly. Not only are ‘legal systems’ in legally plural conditions coexisting, they are also mutually constitutive; interaction makes them different from what they were initially. Often to such an extent that such interactions produce new, hybrid, forms of law that have incorporated elements of two or more legal systems into a totally new form of ‘local law’ (F. von Benda-Beckmann et al., 1997). In such hybrid forms it is often very difficult or even impossible to distinguish separate constitutive elements, e.g. ‘state law’ and ‘customary law’. Attention to hybridity as a crucial dimension of legal complexity is a relevant contribution to the analysis. It warns against excessively simplistic conceptualizations of law, against the uncritical use of oppositions like ‘state’ versus ‘customary’ and ‘traditional’ versus ‘modern’, and therefore provides a strong point of entry for the analysis of socio-legal change.

What people experience in real-life situations is not primarily law in its abstract, de-contextualized and de-localized form but its manifestation in a specific development setting. More often than not, processes of interpretation and transformation have been at work in such a way as to create a gap between initial ‘design’ and intended outcomes on the one hand, and its transformed character and actual working in society on the other (F. von Benda-Beckmann, 1993). This is an important point, especially in development settings where the basic congruence between planning and design on one hand, and interpretations and perceptions on the part of the ‘beneficiaries’ on the other is generally assumed and comfortably bracketed out from (policy) attention. Therefore, actual relationships between rules and behaviour should be more critically investigated.

It is not surprising, then, that legal complexity is now being rediscovered, incorporated into development studies, and given a place in policy-related approaches to development. Mainly confined to academic debates previously, the concept has reached the institutions of development policy. On the one hand, this wider acceptance in academic development studies and development policy circles should alert us. Having become part of ‘dev-speak’, it runs the risk of becoming stripped of its analytical force and basic message of tension, ambiguity and potential conflict, and reduced to yet another meaningless buzzword.¹⁷ Can development policies and interventions break with a long record of forcing complex local processes, relationships and structures into relatively

¹⁶ Attempts at ‘localizing’ law in terms of ‘systems’ related to a distinct geographical or other space have, not surprisingly, always remained problematic in conceptualizations of legal pluralism (see Woodman, 1998). This is also reflected in terminology. Socio-legal literature uses a hodgepodge of terms like ‘legal systems’, ‘orders’, ‘mechanisms’, ‘elements’, ‘sources’, ‘phenomena’, ‘contexts’, ‘frameworks’, ‘bodies’, ‘fields’, ‘domains’, ‘discourses’, and ‘repertoires’ to convey the basic idea of the approach. However, a term like ‘repertoire’ is an apt expression of the fact that actors have a variety of legal options on the shelf, to be activated in specific contexts and interaction settings.

¹⁷ An example is the emergence of the ‘multi-stakeholder platform’ as the latest fad in development. In such approaches, once they have become received wisdom of the policy world, there is the risk of incorporation of concepts like ‘legal complexity’ in such a way as to make them play second fiddle to the overall policy ambition of producing relatively simple and manageable recipes for planned change.

simple and (assumedly) easily manageable images of reality, of creating and reproducing 'ignorance' rather than contributing to analysis and understanding (see Hobart, 1993)?

On the other hand, its liberation from academic squabbles about the advantages and disadvantages of a broad concept of law and about the question whether non-state authoritative and enforceable normative orders should or should not be called 'law' have opened new, analytically promising fields of application. Roberts (1998) doubts whether approaches focusing on legal complexity are productive, if they represent a (sub-)disciplinary claim of a specifically *legal* pluralism. Calling it 'a lawyerly way of looking at the social world' (1998: 97), he states that legal pluralism 'is now ... graciously embracing others in its discourse, seeking to tell those others what they are' (1998: 98).¹⁸ Though I doubt whether there is a serious danger of such a legal perspective becoming 'hegemonic' in natural resource studies, there is the danger of sliding back into debates about the 'legal' or 'non-legal' character of social phenomena. Therefore, while the crucial importance of attention to law and legal complexity in issues of natural resource use and management is beyond dispute, it should be recognized that many dimensions are involved at the same time, and that approaches that transcend disciplinary boundaries are more productive than (sub-)disciplinary ones. In the past, legal complexity has primarily been an issue of debate among legal anthropologists and legal scientists. Research agendas tended to focus on the objective of finding recognition in the field of legal studies.¹⁹ While the academic debates on the character and scope of law are going on, a much more productive use of the concept across disciplinary boundaries is made in fields like forestry, fisheries and irrigation.²⁰ Used heuristically, a broad definition of law and recognition of legal complexity as a basic characteristic of political organization at various levels is a strong analytical tool in the analysis of complex settings of resource use and regulation.

4. Debates about resource use and management: continuity and change

Both in academic and policy-related debates, two contradictory trends can be discerned. On the one hand, as capitalist and neo-liberal ideology became ever more firmly established throughout the world, agendas for creating 'well-defined' property rights in terms of private exclusive ownership have rapidly spread and become increasingly influential. Property rights reforms, often based on a complex of unsubstantiated assumptions and ideological notions about the relationship between a property regime of alienable private individual rights and societal values like economic efficiency, tenure security, equity and ecological sustainability have been (and still are) enormously influential (F. and K. von Benda-Beckmann, 1999; Hann, 1998; see Ostrom and Schlager, 1996). On the other hand, mainly in reaction to Hardin's 'Tragedy of the Commons' (1968), analyses of property rights to natural resources have gained in depth during the last decades. The field has moved away from

¹⁸ A similar point is made by Comaroff and Roberts, 1981 and Starr and Collier, 1989.

¹⁹ Perhaps because of this, the comparative and interdisciplinary research agenda of legal pluralism is rather poorly developed. Hence, there is not a clear comparative and interdisciplinary agenda. In that sense, it resembles the field of 'actor-oriented' studies.

²⁰ Recent studies in which the concept of legal complexity is used for analyzing settings of natural resource exploitation are, for instance, Bavinck, 1998, 2001; F. von Benda-Beckmann, 1991, 2001; F. and K. von Benda-Beckmann, 1999; F. von Benda-Beckmann et al., 1996; van den Berg, 2000; Boelens and Dávila, 1998; Boelens and Hoogendam, 2002; Bruns and Meinzen-Dick, 2000; Crook and Houtzager, 2001; Fisiy, 1992; Guillet, 1998; Mehta et al., 2001; Meinzen-Dick and Pradhan, 2001; Pradhan et al., 1997, 2000; Roquas, 2001; Slaats, 1994, 1999, 2000; Spiertz, 1991; Spiertz and de Jong, 1992; Spiertz and Wiber, 1996.

sweeping generalizations about (selfish) human behaviour and ideal property regimes towards more empirically grounded studies of property rights.

This type of research, mainly on common pool resources and common property regimes, has focused on two issues: first, it has critically inquired into the performance of various property regimes in terms of developmental values like productivity, efficiency, sustainability, and equity. Second, it has tried to formulate the conditions and incentive structures under which certain types of resource management with specified outcomes are possible. The approach has yielded a vast literature on resources exploited and managed under various property regimes throughout the world. It has stressed the point that property entails social relationships between (groups of) people rather than a mere relationship between people and a resource. It has shown that people and their local management arrangements matter, that understanding such arrangements is a precondition for policy-making, and that local management or co-management of natural resources under a variety of property regimes are options open to policy-makers. After a long period in which assumptions about property regimes and strategies of intervention based on them were biased towards either state or private property regimes, the emergence of 'common property resources' (CPR) theory was an important counterpoint to such state- and market-biased approaches (F. von Benda-Beckmann et al., 1996; Feeny et al., 1990; McCay and Acheson, 1987; Mosse, 1997; Ostrom et al., 2002).

Property rights reforms in land and water

Notwithstanding these positive developments, property rights reforms that aim at the establishment of private individual ownership rights under a state-issued title have been, and continue to be, very influential. In the last few decades, such programmes for the reconstruction of property rights have played a key role in development programmes all over the world. They reflect a wide variety of ideals, biases, and assumptions of an economic and developmental (production increase, food security, creating an economically viable rural society, reaching the poor), and political character (establishing and expanding political control by the central state, increasing state capacity to control and allocate scarce resources, etc.).²¹ This book deals with aspects of such reforms in land and water resources in Luwu, a combination of civil and socio-legal engineering operations, which entail the construction of new property rights regimes and resource management arrangements.

State programmes for the allocation, registration and titling of land, not only in Indonesia but also worldwide, clearly show the limits and limitations of state-initiated approaches to the legal regulation of land tenure. Such programmes tend to assume a causal relationship between security of tenure through the creation of private individual ownership, and efficiency and productivity of land use. Land registration and titling by a state agency are seen as *the* providers of security of tenure, and hence as the key to efficient land use and higher productivity. In contrast, the absence of state-issued land titles in areas where customary or 'traditional' property rights prevail is associated with tenure insecurity, indecisiveness and lack of willingness on the part of property holders to invest labour and other resources, and hence with stagnation and poverty. Secure tenure conditions tend to be defined in terms of full individual ownership rights. Private individual ownership, which 'frees' land resources from traditional social ties and networks that are assumed to have a constraining influence on the development of land as a transferable and marketable commodity, is

²¹ In the case of Indonesia, for instance, the developmental aspects of the resettlement of farmers from Java in combination with agricultural development (as was the case in Luwu) cannot be separated from the geopolitical dimensions of such a programme (increasing central control, Javanization of the archipelago); see chapter 2.

seen as an absolute precondition for development (see F. von Benda-Beckmann, 1991, 1999, 2001; Hann, 1998; Hirtz, 1998; Slaats, 1999, 2000).²² In many developing countries, state programmes for land reform, registration and titling were part of such more encompassing agendas for creating rural social, economic and political stability through agrarian reforms that were to strengthen individual ownership and increase agricultural production (e.g. Walinsky, 1977).²³

Substantive criticism has been raised against such programmes. First, they are myopically state-biased in regarding the state as the only institution that can create and guarantee tenure security, and do not take into account the possibility of existence of multiple normative frameworks in which rights to land may be differentially defined. Second, in such views land tends to be reduced to a marketable commodity and its function in society to a purely economic one. Thus, property rights to land tend to be isolated from the specific local context of social, kinship and other relations in which these rights are embedded. Third, and related to the preceding points, they deny even the slightest degree of agency to those confronted with such programmes. Rather than embracing state-initiated land registration and titling programmes on the basis of their formally stated advantages in terms of tenure security, farmers will weigh the advantages and disadvantages of state interventions in terms of their own normative precepts, earlier experiences with, and estimations of such interventions (F. von Benda-Beckmann, 1991, 1993, 1999; Hirtz, 1998). Especially if alternative legal options are available, neither the surplus value nor the hegemonic role of state regulation can be taken for granted.²⁴ Under certain conditions, state regulation of land tenure may even be seen as a source of *insecurity* (see Bruce, 1994; Hirtz, 1998; Jansen and Roquas, 1998; Slaats, 1999).

Water resources development for irrigated agriculture may also entail the redefinition and redistribution of existing property rights or the establishment of new ones. Three typical settings and processes may be at stake: first, state expansion and intervention in 'traditional' or 'indigenous' farmer-managed irrigation systems, involving physical rehabilitation programmes, renegotiation of existing rights to land, water and infrastructure, and reorganization of existing management structures and practices against a background of increasing pressure on water resources and competition between uses and user groups. Second, interventions with a similar impact in existing state-built (or partly state-, partly farmer-operated and maintained) systems in the framework of, for instance, irrigation sector reforms. Third, the establishment of new systems, organizational structures and property rights. Research on water rights has focused mainly on the first field, where redefinition of water rights often takes place in a setting of increasing pressure on water resources and competition between multiple users and uses. The existence of multiple sources and definitions of rights - like state law and customary law - is the rule rather than the exception.

²² Ladejinsky, whose objectives were social justice, stability, and productivity increase, wrote: 'a reform worthy of its name is supposed to strengthen the principle of private property where it was weakest, at the base of the social pyramid. By multiplying the number of independent landowning peasants, there comes into being a middle-of-the-road, stable rural society with enhanced status, rights and privileges' (Walinsky, 1977: 364-365).

²³ The creation of individual ownership conditions also fitted in with reforms associated with the Green Revolution: the provision of 'packages' of agricultural inputs (HYV seeds, fertilizers, pesticides), credit (with the land title document as a collateral), infrastructure (irrigation and transport, cooperatives, channels for marketing etc.) (see Hirtz, 1998).

²⁴ For critical discussions of such registration and titling programmes in other regions, paying attention to legal complexity, see Hirtz (1998) for the Philippines, Jansen and Roquas (1998) and Roquas (2002) for Honduras, Nuijten (1997) for Mexico, Coldham (1978) for Kenya, Fisiy (1992) for Cameroon, Hitchcock (1980) for Botswana, Moore (1989) for Tanzania, Bruce and Migot-Adholla (1994) and Downs and Reyna (1988) for several African countries.

Less attention has generally been paid to irrigation systems designed, built and operated by state agencies or under arrangements of 'bureaucratic-communal' management (Chambers, 1980; see Meinzen-Dick and Bruns, 2000). In many parts of world, the performance of large canal irrigation systems based on engineering technology did not match the enormous investments in the irrigation sector by developing countries, donor countries and multilateral donor institutions like the World Bank.²⁵ As awareness of the importance of social and organizational dimensions of irrigation development and management grew in the seventies, irrigation policies became more sensitive to these factors. There was a shift from 'concrete' to 'people'. Participation in irrigation management at the level of the TUs by farmers organized into WUAs came to be seen as the solution to performance problems of irrigation systems. This policy led to more intervention in TU construction, organization, operation and maintenance. TU development and the establishment of WUAs entailed the establishment of a form of co-management in which operation and maintenance of the main system remained the responsibility of irrigation agencies, while that of the lower-level, tertiary systems was transferred to the WUAs. Often, this came down to a devolution of management responsibilities to the lower level, supported by an ideology of 'community participation' and creating 'sense of ownership' (see Hunt, 1989). In the eighties and nineties, turnover and transfer policies were given a new boost by worldwide policy agendas for cost reduction and deregulation. However, only slight attention was paid to the rights dimensions of such constructions.

Generally speaking, canal irrigation requires a considerable amount of collective effort and human cooperation. Getting the right quantity of water in the right place at the right moment, repairing and cleaning canals and other infrastructure, solving conflicts and making decisions on allocation, to mention some important tasks, require forms of cooperation and collective action based on more or less shared rules, definitions of rights and responsibilities. However, it is not always clear which sources or whose rules and definitions of rights and responsibilities are accepted, and thus become socially relevant in a specific context of resource use and management. In this respect, policy slogans like 'community participation' hide more than they reveal. 'Bureaucratic-communal' irrigation systems are not only complex from a physical, but also from an organizational and socio-legal perspective. Legally, such systems combine characteristics of state property, common or 'communal' property, and private property (F. von Benda-Beckmann et al., 1996; Boelens, 1998; Feeny et al., 1990; Meinzen-Dick, 2000; Meinzen-Dick and Bruns, 2000). Intricate constellations of public and private, individual and collective, internal and external bundles of rights and responsibilities pertaining to resource and infrastructure at various levels may exist in them. A further distinction can be made between rights to regulate, control, supervise and represent on the one hand, and rights to use and exploit on the other (F. von Benda-Beckmann et al., 1996; see Ostrom and Schlager, 1996; for water rights, see Boelens and Hoogendam, 2002). In addition, the WUAs created through such policies are legal entities, usually formalized by a combination of the key elements of basic law (enabling law), bylaws, and transfer agreements between the irrigation agency and the WUAs (see Geijer et al., 1995; Salman, 1997). The formal governance and management structure in irrigation systems with WUAs is based on this form of legal regulation.

This approach to irrigation, which is also characteristic of the history of irrigation development in Luwu discussed in this book, suffers from more or less the same assumptions about the relationships between regulation and behaviour as in the case of reforms of property rights to land. First, in such modernizing approaches, irrigation development is the exclusive domain of expert knowledge of engineers. Absolute primacy is accorded to technology: irrigation development is

²⁵ See a.o. Bottrall, 1985; Chambers, 1988; Coward, 1980; Coward and Levine, 1989; Diemer and Slabbers, 1992; FAO, 1982; Geijer, 1995; Mollinga, 1998.

reduced to a mere routine of physical construction and ‘transfer of technology’; no attention is paid to the normative and social dimensions of technology. Claiming superiority of modern technology, modernization approaches treat the technology itself, and interactions between people, technology and resource as basically unproblematic. Second, such models do not take into account human agency as an important factor in irrigation development and local irrigation management (see Vincent, 2001). Hence, users’ perceptions of engineering approaches to irrigation are regarded as irrelevant. It is generally assumed that, once the desired (engineering) technology is in place, water users organized into WUAs will sooner or later ‘adapt’ to the structural characteristics of the system, and let their behaviour be guided by norms, rules and regulation implied in the technology choice and related managerial requirements. WUAs are too easily regarded as local ‘communities’, the basic unity, homogeneity and participation of which is taken for granted (Agrawal and Gibson, 1999, 2001; Hunt, 1989). Third, such approaches do not take into account the possibility of existence of various normative-legal, technical or organizational frameworks to which irrigators can orient their behaviour. As farmers’ perceptions of technology, organizational and normative-legal dimensions of irrigation do not seem to matter, the choices made by farmers on the basis of such perceptions are either not taken into account at all or explained and labelled in terms of rule compliance and deviation (see Spiertz, 2000). Interest in the impact of (legally) plural conditions on processes of irrigation development and management is of recent date. An increasing number of studies on irrigation now pose the question how to cope with legally complex situations, and the new interactions and problems of governance and management emerging from such conditions.²⁶

5. Analyzing complex resource use settings

Common property resources (CPR) studies have considerably contributed to the analysis of property rights as a social phenomenon embedded in local ecological and societal contexts. The combination of empirical analysis of resource use and management with the same basic notions and ambitions of manageability and control, of social engineering and ‘crafting’ (Ostrom, 1992) of institutions that characterize mainstream developmental approaches make this approach very popular (see Mehta et al., 2001b). However, it has also been criticized for being economic and one-dimensional in its treatment of human behaviour and collective action: as explainable in terms of rational choice and game-theoretical perspectives in a neo-institutionalist framework.²⁷ Analysis is sometimes sacrificed to a policy-driven search for new forms of social-institutional engineering with ‘community’ as their main point of entry.²⁸ Firmly based in social anthropological research with a (mainly) local focus and influenced by the post-modernist and deconstructionist turn in the social sciences, recent critical work distances itself from such biases and instrumental ambitions. It is no less critical of the idealizing trends and fads in development, like the focus on ‘community’ and ‘community management’ that has replaced negative stereotypes and representations of local

²⁶ See e.g. Boelens and Dávila, 1998; Boelens and Hoogendam, 2002; Bruns and Meinzen-Dick, 2000; Horst, 1996a; Pradhan et al., 2000; Spiertz, 1991; 2000; Spiertz and de Jong, 1992.

²⁷ One point of criticism is, for instance, the purposive, instrumental conceptualization of institutions as ‘working rules’ or ‘rules in use’ (Ostrom, 1992) and the social engineering ambitions associated with it.

²⁸ Mosse (1997) points out some of the basic similarities between the rational choice / institutionalist and the community / moral economy approaches that merge in common property resources discourse. Both ‘tend to construct a specific kind of a-historical, a-political “locality” as a (perhaps necessary) basis for planned interventions’ (1997: 470).

societies.²⁹ on ‘indigenous knowledge’, or on discourses that establish, reproduce, and legitimize certain courses of action while de-legitimizing and marginalizing others. Assumptions about manageability and the possibility of ‘engineering’ gave way to a new awareness of ambivalence and complexity, uncertainty and contingency, tension and conflict (see Agrawal, 1995; Agrawal and Gibson, 1999, 2001; Cleaver, 2000; Leach and Fairhead, 2000; Li, 1996; McCay, 2002; McCay and Jentoft, 1998; Mehta et al., 1999, 2001; Mosse, 1997).

Notwithstanding different accents, these approaches have much in common. They avoid economic or institutional generalizations, but also steer clear from idealization of ‘tradition’ or ‘community’ and the social relations, identities, institutions, knowledge and practices associated with it. The focus is on the locally specific character and historicity of resource use and management, and their socio-political, cultural and ecological embeddedness. Institutions are no longer treated as unproblematic and uncontested rule systems, but as contested, and shaped in specific knowledge and power constellations. Hence, as complex, dynamic and negotiated rather than fixed, stable and with an agreed-upon function. Social and other identities, and diverse and contested meanings are seen as important factors. Legal complexity is acknowledged to be both an important source of uncertainty as well as of opportunities for strategizing and organizing. In short, these approaches represent a more case-specific and ethnographically ‘thick’ (Geertz, 1973; see McCay and Jentoft, 1998) way of dealing with resource use and management (Cleaver, 2000; Li, 1996; McCay, 2002; McCay and Jentoft, 1998; Mehta et al., 1999, 2001; Meinzen-Dick and Pradhan, 2001; Mosse, 1997).³⁰ In addition, new approaches have emerged that widen the scope from an exclusive focus on the relationship between management options and sustainable resource outcomes towards a focus on livelihoods, rights and entitlements, and sustainability of resource outcomes (e.g. Leach et al., 1999).

A focus on law and legal complexity in resource use and management

Attention to legal complexity has proven to be an asset in the analysis of resource use and management settings in which multiple claims and definitions of rights exist. Analyses paying attention to legal complexity have contributed several insights. I mention some of them here. First, a conception of law as a social phenomenon with both normative and cognitive dimensions has increased attention to the cognitive and cultural character (and diversity) of conceptualizations and definitions of resources, of classifications of resources into legal categories, and of constructions of rights to resources (see F. and K. von Benda-Beckmann, 1999). Second, it has replaced normative evaluations of behaviour in terms of rule conformity and deviation in both scientific and policy-related approaches with an interest in human choices, motivation and behaviour in legally complex settings. Conformity to a single set of rules is not self-evident, nor will it always produce the best management outcome (Bruns and Meinzen-Dick, 2000; Meinzen-Dick and Pradhan, 2001; Mosse, 1997; Spiertz, 2000). Third, it has introduced into the analysis of property rights the important (analytical) distinction between various ‘layers’ of rights at the levels of ideals, actual rules and regulation, social relationships and practices.³¹ Fourth, it has broadened the analytical perspective on functions of resources and property rights. The focus has shifted from almost exclusive attention to economic functions to a broader perspective incorporating political, social (security), symbolic

²⁹ For earlier critical work on ‘community’, see Anderson (1983) and Cohen (1985).

³⁰ For an analytical approach to institutions, see Scott, 1995.

³¹ For application of this distinction to the analysis of water rights, see Boelens and Zwarteveen, 2002.

and religious functions (see F. and K. von Benda-Beckmann, 1999).³² Finally, it contributes to the analysis of uncertainties in natural resource use and management (Meinzen-Dick and Pradhan, 2001).³³

6. Complex resource use in Luwu: approaching the case studies in this book

I feel affinity with the approaches mentioned in the foregoing section, which stress the historicity, local embeddedness and complexity of resource use and management. The theoretical-conceptual insights on development, the role of agency, and (legal) complexity in resource use and regulation play an important role in the analysis of the three main case study themes of this book. What these themes have in common is their shared relationship to processes of planned change in access and rights to, and use and management of land and water resources in lowland Luwu. They are, in fact, three illustrations of resource use and regulation embedded in various socio-political, economic, cultural and other situations and contexts at various levels and involving different types of intervention based on different agendas for socio-economic and political change.³⁴ Mosse (1997), using Appadurai's (1996) phrase 'production of locality' in an analysis of tank irrigation in south India, stresses that (external) development programmes tend to produce specific localities associated with the approaches, demands and interests of external forces involved. Thus, development typically involves complex articulations of different and competing definitions of locality that require analysis of such settings as rural development interfaces characterized by specific properties of agency and (normative-legal) structuring (see also Long, 1996). However, an appreciation and analysis of these articulations in their full complexity requires other approaches and concepts. In this section, such approaches and concepts will be shortly discussed for each of the themes outlined in the general introduction.

Migration from Tana Toraja to Luwu: emergent identity, regional migration and access to land resources

In chapter 3 I explore the relationship between emergent ethnic identity and access for highland farmers to land in lowland Luwu, in a wider context of rapid and radical socio-political change. My point of departure in tracing the recent history of migration to lowland Luwu was the assumption that there was a relationship between the changing map of identities and boundaries in the region on one hand, and the emergence of new livelihood opportunities through massive migration, settlement and control of land on the other. I intend to show that the emergence of Toraja ethnic identity was

³² A major point of legal anthropological criticism of neo-institutionalist approaches is, that the latter can cope neither with legal complexity nor with the layered character of property rights. Hence its simplistic approach to institutions as 'rules-in-use' (Ostrom, 1992; Schlager and Ostrom, 1992). Such approaches reduce legal complexity to dichotomies like 'formal' versus 'informal', or '*de jure*' versus '*de facto*' rights.

³³ Meinzen-Dick and Pradhan (2001) analyze legal pluralism as a factor contributing to management uncertainties, e.g. knowledge uncertainty. The existence of multiple legal frameworks leads to knowledge uncertainty in two ways: first, resource users will not have the necessary knowledge of all frameworks; second, uncertainty at the level of behaviour increases, due to the increasingly complex relation between legal regulation and human behaviour in situations where people have more than one legal option.

³⁴ For the notion of 'embeddedness', see McCay, 2001; McCay and Jentoft, 1998.

an important condition of possibility under which new opportunities for migration and control of lowland land resources could emerge. At the same time, the creation of new boundaries of identity and administrative space, and political agendas of 'other-ness' made the actual pursuit of these resource exploitation opportunities increasingly difficult and politically sensitive.

Barth's 'Ethnic Groups and Boundaries' (1969) pioneered a landslide change in thinking about ethnic identity. Earlier approaches stressed the importance of primordial ties and attachments, local and particularistic forms of solidarity based on kinship, language, region, race, religion or custom. These were seen as basically ascriptive and culturally 'given'. People are born into them, and accorded no agency in coping and dealing with them. In this 'primordialist' view, identity involves discontinuous differences between discrete and static cultures, related in a one-to-one fashion to discrete social groups inhabiting spaces defined by clear boundaries (see Barth, 1969; Cohen, 2000; Donnan and Wilson, 1999). Geertz (1973), though critical of primordialist thinking, more or less reproduced it 'in seeing the nature of this solidarity as culturally-given rather than individually, practically, or self-interestedly constructed' (Hoben and Hefner, 1991: 22).³⁵

Barth criticized primordialist theories for their static and a-historical character, preconceived ideas about significant factors and relations of causality in explaining ethnic identity, and ways of dealing with the relationship between socio-cultural substance and boundaries. Instead, he approached ethnic identity as a dynamic form of social organization, focusing on the social boundaries rather than on the 'cultural stuff that it encloses' (Barth, 1969: 15). Further, as Barth stressed, ethnicity entails not only categorization and ascription by others, but also active self-ascription (see also Donnan and Wilson, 2002). Barth approached ethnic identity as a dynamic and socially constructed phenomenon rather than a static cultural or biological given of human life. Defining ethnicity as 'the social organization of cultural difference' (Barth, 1993; see Jenkins, 2002), he initiated the downfall of earlier a-historical, essentialist, primordialist approaches to identity. The focus shifted towards the dynamic and interactive, socially constructed and situational, imagined or 'invented' character of ethnic identity (e.g. Anderson, 1983; Hobsbawm and Ranger, 1983; see also Jenkins, 2002).³⁶ Identity is now widely regarded as dynamic and ambivalent, relational and contextual. It is relational because all 'social identities ... find their definition ... in relation to significant Others just as they articulate ideas of self or selfhood which are communicated and given meaning through social interaction' (Rew and Campbell, 1999: 13; see Cohen, 2000a). It is contextual because various identities may be at stake in different socio-political contexts. Rew and Campbell stress that 'a particular identity is situationally defined in the course of social interaction' (1999: 10). People can have multiple identities, each of which becomes meaningful in specific social contexts.³⁷

³⁵ Rew and Campbell (1999) distinguish between structuralist and phenomenological approaches to identity. While the former stress its primordial character, the latter tend to focus on the subjective and instrumental dimensions of identity.

³⁶ Theorizing on identity was given a new impetus by processes of globalization and localization, and the spread of ethnic war and mass violence even into the 'civilized' world in the nineties (see Appadurai, 1996; Rew and Campbell, 1999).

³⁷ Changes in the way ethnic identity is conceptualized are closely related to changing approaches to culture. While earlier conceptions stressed uniformity and shared values, integration and cultural determination of human behaviour, recent approaches stress the individual production of cultural frameworks of meaning in processes of social interaction (Rew and Campbell, 1999). Appadurai defines as cultural 'those differences that either express, or set the groundwork for, the mobilization of group identities' (1996: 13). According to Appadurai, the idea of ethnicity 'takes the conscious and imaginative construction and mobilization of differences as its core' (1996: 14; see Jenkins, 2002).

However, this stress on the imagined and contextual character of ethnic identity does not mean that such identities are just boundlessly relative and negotiable instruments of human agency, action and interaction. Cultural constructions of similarity and difference entail processes of inclusion and exclusion, of differentiation between ‘us’ and ‘them’ (Donnan and Wilson, 1999). People invest in identities, boundaries and images of authenticity, making these more than just a ‘disposable tactical resource’ (Cohen, 2000b: 5-6). Ethnic identities and differences are experienced as natural, and objectified as a biological or cultural ‘given’ of life. Even if socially constructed, invented or imagined, identities are real as markers of group difference. They are imagined but not imaginary (Jenkins, 2002). Embedded in local histories, experiences and struggles about rights and entitlements, identity is not always negotiable, flexible and contextual but may also be rigid, confrontational and explosive in its commitment to a group or community (Appadurai, 1996; Donnan and Wilson, 1999; Jenkins, 2002; Rew and Campbell, 1999).³⁸

New approaches to ethnic identity have bridged the gap between primordialist and instrumentalist views of ethnicity (see Jenkins, 2002). However, theorists on identity are still struggling with the role of individual volition and motivation as a causative factor in the formation of identities. On the one hand identity is a basis for group mobilization, on the other it is a product of individual motivations and emotions. Identities are not only the product of ascriptions by outsiders, but also of agency and active self-ascription and -definition (Rew and Campbell, 1999). Rew and Campbell stress that there has been too little attention to these affective dimensions of identity. Attempting to link lived experience to wider socio-political contexts through processes of formation of identity, they focus on the role of affect and emotion (Rew and Campbell, 1999; see also Appadurai, 1996). Another field of study is the interest in the construction and meaning of boundaries as conceptual constructs that express perceptions and experiences of similarity and difference of social groups. According to Barth (2000), ethnicity entails the drawing of non-bureaucratic boundaries to define social groups and order experiences of cultural contrast. The construction of such boundaries is not only an expression of felt similarity and difference, but it also entails self-definition and definition of ‘the other’ in terms of identity, inclusion and exclusion, opportunities for some and limitations for others, with unpredictable socio-political consequences (Barth, 2000; see Donnan and Wilson, 1999). However, Barth warns against the tendency to reduce human life to words, culture and representation at the expense of the social, economic and political dimensions involved, ‘as if our cognitive maps single-handedly *created* the terrains they depicted’ (2000: 31).

Irrigation development, land redistribution and titling in PIADP

The case of intervention in land tenure in PIADP (see chapters 4 to 6) can be analyzed as a ‘rural development interface’, using a critical actor-oriented approach to processes of development policy-making and implementation. In the PIADP case, human agency and policy transformations in the arena of intervention are prominent factors. However, the central role in PIADP of conflicts about property rights as a consequence of their redefinition by outside intervention in the framework of an ‘integrated’ rural development project also requires a socio-legal approach which pays due attention to this dimension of land tenure. The gradually emerging socio-legal engineering focus of PIADP, the ambitions pertaining to legal reform of land tenure, and the various normative and legal

³⁸ Appadurai speaks of ‘ethnic implosion’ to express his view that ethnic conflict is part of larger processes and events. Interactions with larger socio-political processes produce local identities that may ‘implode’ into ethnic conflict (Appadurai, 1996: 149; see also Rew and Campbell, 1999).

definitions of property rights to land at stake turned implementation of PIADP into a struggle about property rights to land and, through land, about access to additional project benefits. The existence of multiple normative frameworks had an important structuring influence on, and gave a specific meaning to the development interface. Constraining human behaviour while at the same time providing people with strategic opportunities, the role of law seems to have been crucial here. The focus on law and legal complexity shows how human agency operates in a legally complex intervention setting in which a major regulatory role is accorded to project law. It shows not only who the actors are, but also to what extent they are able to transform policies and project plans by using law as a resource.

In terms of law, the case involves a mix of customary rules, principles and practices pertaining to land tenure, national agrarian law (the 1960 Basic Agrarian Law; see chapter 2), and project law specifically created for PIADP. In project law, rights to resources and project benefits are defined, hierarchies of priority in their allocation formulated, and procedures for weighing claims and interests, and categories of ‘beneficiaries’ and ‘non-beneficiaries’ established. Thus, it can be seen as a translation of general and context-less moral and normative donor principles and policy norms into blueprints for implementation and forms of legal regulation of land tenure in specific real-life social, cultural and historical contexts of intervention. Project law is the instrument of, as well as the justificatory basis for planned changes.

The concept of ‘labelling’ (Wood, 1985) is also relevant here. Labelling refers to ‘an act of valuation and judgement involving prejudices and stereotyping’ (1985: 6). What is crucial is not so much its objectivity, but primarily effectiveness of its use in policy discourse and practice. Labelling, according to Wood, is a crucial instrument in the public management of scarcity in processes of allocation, distribution or redistribution of resources. It entails processes of classification, in which normative values and interests are made to appear as universal truths, presented in seemingly rational categories and technical language. According to Wood, labelling is ‘the counterpart of access in that the authors of labels ... have determined the rules of access to particular resources and privileges. They are setting the rules for inclusion and exclusion, determining eligibility, defining qualifications’ (idem: 10). Labelling implies a simplified classification of people and their identities for policy purposes, which ‘de-links’ them from the social processes and relationships they are part of. ‘Identities ... are broken, to be re-established on the basis of a person’s relationship to an actual or potential category of state activity. The designation thereby acquires a logic in which specified kinds of behaviour and interaction are demanded’ (idem: 13). Where the ‘efficient’ allocation of scarce resources is at stake, such ranking on the basis of labels becomes a major instrument in the ‘management of dissatisfaction’ (idem: 14). Often unaware of the criteria used, people are ranked as either deserving and loyal or recalcitrant and uncooperative, and treated accordingly (see de Vries, 1992). Thus, practices of labelling form an important link between abstract and general moral notions and normative standards of development on the one hand, and the broader structures of justification and legitimacy on which practices of intervention are based on the other (see also Long, 1989, 1996).

Complex use and management of land and water resources in a Balinese transmigrant settlement

The study of a Balinese transmigrant settlement in North Luwu focuses on the role of land and water in a migrant setting, paying special attention to the role of legal complexity in local irrigation management (see chapters 9 and 10). Most studies that take into account legal complexity focus on farmer-managed irrigation systems (FMIS), but little is known about local irrigation management in systems based on modern engineering technology (Diemer and Huibers, 1996; Meinzen-Dick and

Bruns, 2000). However, the apparent normative-legal, technical-infrastructure and organizational uniformity of such systems, in which rights to land and water are allocated and material infrastructure and users' organizations designed and created by state agencies, may hide a variety of norms and rules, knowledges, organizational arrangements and organizing practices that do not always fit harmoniously into 'the system', its managerial set-up, and the legal regulation on which it is based. Engineering norms, definitions of rights, rules and organizational arrangements may differ considerably from, or even be external to perceptions of the users of (parts of) such systems (see Boelens, 1998; Horst, 1996a).

The point of departure for this part of the study is the Janus-faced character of local irrigation organization: on the one hand anchored in participatory ideology and approaches to irrigation management, on the other legally imposed and bureaucratically enforced. The research on local irrigation management among Balinese settlers in the Kalaena irrigation system shows that, within the seemingly uniform order of a state-built irrigation system, considerable diversity in local irrigation management exists. It identifies Balinese cultural practices pertaining to irrigated agriculture, mainly associated with the Balinese institution of *subak*, as the main source of that diversity. New, context-specific forms of articulation have emerged between 'engineering' approaches to irrigation and tertiary irrigation management, and conceptualizations of rights, norms, forms of regulation and organization, technology and practices associated with *subak*, in whatever adapted, transformed, or re-interpreted form the latter may emerge in this new irrigation setting. This requires a focus on the everyday organizing practices of Balinese irrigators at the interface of *subak* and WUA, with due attention to legal complexity.

Apart from attention to the specific property characteristics of this type of canal irrigation (see above), the case also requires an approach to technology as socially constructed. More specifically, attention is needed to the relationships between technology (in the sense of material infrastructure), the organizational, and the normative dimensions of irrigation.³⁹ An exploration of the socio-legal landscape of local irrigation management requires an approach that transcends 'the legal', 'the social-organizational' or 'the technical' as an exclusive focus of inquiry and analysis. Approaches stressing the socially constructed or heterogeneous character of technology are a way out of such partial perspectives. We cannot talk about technology in the abstract. Technology refers to, or rather embodies, important social, organizational and normative properties. Any human use of technology entails processes of sociotechnical stabilization. Bijker and Law state that 'the concern with sociotechnical stabilization ... is close to ... the problem of securing the social order' (1992: 293). Irrigation systems (or parts of them) can also be analyzed as 'sociotechnical systems', intricate complexes of physical-technical, organizational and normative-legal dimensions of water control that develop in a wider agro-ecological, politico-economic and socio-cultural context.⁴⁰ The outcome of processes of sociotechnical change, then, is basically contingent and uncertain. The social and technical dimensions are intertwined to such an extent, that it is not very useful to conceptually separate them.

A well-functioning irrigation system requires a sufficient degree of stability between norms and rules, infrastructural technology, and organizational arrangements for irrigation management (Boelens, 1998). Ideally, existing norms pertaining to water distribution and definitions of rights to

³⁹ Apart from the physical-technical, normative and organizational elements mentioned above, a fourth factor of agro-productive elements (soil, crops, technology, capital, labour, knowledge) can be discerned; see Boelens and Hoogendam, 2002. The elements can also be analyzed as dimensions of water control. Thus, Boelens (1998) discerns technical, socio-legal, political, organizational, and cultural-metaphysical control.

⁴⁰ For its use in irrigation, see Diemer, 1990; Diemer and Slabbers, 1991; Mollinga, 1998; Vincent, 1997, 2001.

water based on such norms form the foundation of, and are physically reproduced by, material technology like division works. In the same way, general norms and principles pertaining to rights, responsibilities and conceptions of equity form the basis of organizational elements like local irrigators' organizations. These, in their turn, reproduce such norms and principles but are also co-determined by technical properties and demands of the irrigation system. Normative-legal dimensions of irrigation, then, are important connecting elements in processes of stabilization and harmonization at work in irrigation systems. Therefore, they should not be analytically isolated from other dimensions of irrigation and water control mentioned above (see Boelens, 1998).

The assumption that local irrigation management practices in this Balinese transmigrant setting developed in a socio-cultural environment shaped by more than one complex of normative-legal, organizational and technical properties formed an important point of departure for field research on this theme. Such complexities create uncertainties and constraints, while at the same time entailing options for different normative, organizational and technical choices (see Meinzen-Dick and Pradhan, 2001; F. von Benda-Beckmann et al., 1996). With a focus on farmer-managed irrigation systems, Boelens (1998) distinguishes between endogenous and external irrigation design and development. In the former, design principles (in their technical, normative and organizational dimensions) originate from system users themselves (or at least from their socio-cultural environment). In the latter, system users are not the designers; irrigation design and development are based on the inputs of external intervention.

In such situations of introduction of external technology, normative and organizational structures, dimensions of cultural identity and the socially and culturally embedded character of irrigation management practices are a crucial but often neglected factor. Irrigation use and management settings cannot be reduced to their instrumental and economic properties, but should be analyzed as historically specific constellations of socio-political and cultural dimensions of life in a particular setting (see Gelles, 1998; Mosse, 1997). In this case, Balinese normative and cognitive repertoires pertaining to irrigation as opposed to a generalized and blueprinted engineering set of norms and rules, principles, and forms of applied knowledge become a major focus of analysis. However - and here I return to the remarks on agency and interface - farmers' choices and behaviour are not unilaterally determined by either of the two. No a-priori statements about interactions and outcomes in terms of relationships between norms and principles, technology and organization are possible (Boelens, 1998; Boelens and Hoogendam, 2002; F von Benda-Beckmann et al., 1996; Spiertz, 2000).

Land and water in Luwu

1. The New Order context of development in Luwu

In chapter 1 I have outlined the theoretical insights and conceptual choices that inform this research. In this chapter I will introduce the research setting and necessary background information pertaining to the main themes of this book. This chapter is organized in such a way, that each section provides the background of one of the main themes. Together, they form a relevant overview of Luwu District, its recent history, and the main characteristics of processes of planned transformation pertaining to land and water resources in the New Order period and before. The chapter consists of the following sections: this section gives a concise overview of the New Order and its development programmes. In the second section I will present the general socio-historical context of South Sulawesi and Luwu, and give a short sketch of the history of Luwu from kingdom to administrative district and ethnic ‘Miniature Garden’. I will also discuss the colonial history and strategies of resource exploitation, and the New Order development agenda of transmigration and irrigation development. This section provides the general background for all themes of this book, and more specifically the regional historical background for the chapter on migration, identity and access to land in Luwu. The third section focuses on land rights and state regulation of land resources. It provides important background information for the case of land redistribution and titling in PIADP. The fourth section, with a focus on irrigation development, WUAs and Balinese subak, forms the essential background for the chapters on the role of legal complexity in local irrigation management among Balinese settlers in the Kalaena system. Finally, in the fifth section I give an overview of the research questions for each of the major themes developed in this book.

The New Order period

The ideology of *pembangunan* (development) was a major basis of New Order political legitimacy.¹ Development was presented as the main characteristic distinguishing Suharto’s New Order from his predecessor Soekarno’s ‘Old Order’. While the latter was associated with economic crisis, poverty, hunger and political conflict, the New Order was propagated as a symbol of development (Heryanto, 1995; Schulte-Nordholt, 1981). Development required, of course, a strong state and political stability. Therefore, after ‘diversity’ had ruled for almost two decades, under the New Order regime ‘unity’ was strictly enforced in the name of development.² The Indonesian Communist Party (PKI) had been exterminated in 1965. In the seventies, the last remains of the pre-

¹ For the New Order regime, see a.o. Dirkse et al., 1993a; Hill, 1994; Vatikiotis, 1993.

² The national motto of Indonesia is *Bhinneka Tunggal Ika* (Unity in Diversity).

1965 party system were dismantled and replaced by a strictly controlled three-party system. Mass organizations were controlled, and politics banished from the lower administrative levels. Village administration was standardized and brought under strict control. A *de facto* political monopoly at all levels had been created for Suharto's GOLKAR party, membership of which was obligatory for members of the administration, state agencies and armed forces.³ GOLKAR political ideology could be freely disseminated and influence the political process and elections without competition from other parties. On the surface, the New Order state was a tidy democracy, with political parties campaigning every five years for parliamentary elections. President and vice-president were appointed by the people's congress that convened once in five years to do what it was expected to do: re-elect Suharto. Basic to this ritual was a system of political screening, appointments, co-optation and patronage. Suharto himself preferred another reading: he was called by his people again and again to serve his country as *Bapak Pembangunan* (the Father of Development).

A New Order development agenda

But the New Order was more than repression only. It also had to 'deliver' and live up to its promises of development. Throughout the fifties, the issue of regional imbalances had been a major threat to national unity. Therefore, some shift of economic benefits from the centre towards the periphery was seen as a precondition for greater stability. Funded by bilateral and multilateral donors, Indonesia embarked on an ambitious road towards development. From 1969, the so-called REPELITAs (Five Years' Development Plans) became the instrument of New Order development planning.⁴ Under Soekarno, Indonesia had experienced severe food shortages, and been a major importer of rice, the staple food of a growing population. Therefore, the increase of agricultural production and attainment of self-sufficiency in rice production was a major objective of New Order planning; a goal attained in 1984 (Sajogyo, 1993). A large share of the REPELITA I budget - more than one third, mainly spent in Java and Bali - went to (irrigated) agriculture. From REPELITA II onwards, there was a gradual shift from economic stabilization and infrastructure development to more balanced regional development, diversification and industrial development (Cheetham and Peters, 1993; Harvey, 1977, 1989; Hill, 1989, 1994; Holtzappel et al., 2002; MacAndrews, 1986b; Sajogyo, 1993; Soegijoko, 1993; Tjondronegoro, 1993).

Indonesia's macro-economic performance astounded the world. In the nineties, Indonesia became one of the economic 'Tigers' of Asia. The income per head continued to rise while the number of people below the poverty line declined (but see Dirkse et al., 1993; Hill, 1994). Yet, New Order performance on poverty eradication was not impressive (see Tjondronegoro, 1993). A policy of 'betting on the strong' (Wertheim, 1978), conferring economic favours upon local elites and well-to-do farmers formed the basis of rural order and stability throughout the New Order regime. Though there was a gradual shift from sectoral programmes to 'integrated rural development', the unreformed and hierarchical societal structure blocked meaningful poverty-oriented approaches to rural development (Mubyarto and Soetrisno, 1989).

Transmigration - a state-sponsored population transfer from densely populated Java and Bali (and Madura and Lombok) to islands with a relatively low population density - was a key component of the New Order development strategy. In 1905 the Dutch had started experiments with this large-

³ Golongan Karya ('Functional Groups').

⁴ Rencana Pembangunan Lima Tahun; this type of planning was not a product of the New Order. During the Soekarno regime a five years' plan had been formulated for 1956-1960, and an eight years' plan for 1961-1969. Major differences between 'Old Order' and 'New Order' plans are the higher degree of political stability and of international financial support in the latter period.

scale resettlement of farmers from Java (and later also Bali). Initially, people moved through Dutch colonization were resettled in southern Sumatra. Later destinations were Kalimantan and Sulawesi (Amral Sjamsu, 1960; Hardjono, 1977; Heeren, 1967; Suratman and Guinness, 1977).⁵ The Republic of Indonesia continued this state-organized migration policy. As in the Dutch period, the focus remained demographic: solving the population problem of Java and Bali by transferring part of the population to other islands (Hardjono, 1977). Hence, from the early fifties onwards, Indonesian approaches to transmigration were primarily oriented towards quantitative targets, and remained so throughout the New Order period, notwithstanding a formal policy shift from demographic to regional developmental objectives (Arndt, 1983; Arndt and Sundrum, 1977; Hardjono, 1977, 1986; Otten, 1986).⁶ New Order transmigration policy has been fiercely criticized on several grounds.⁷

2. Luwu: from kingdom to ‘Miniature Garden’

South Sulawesi and Luwu

South Sulawesi Province, in the northeast part of which Luwu District is situated, covers the southwest peninsula of Sulawesi (see map 1). It had a (1998) population of 7,897,000 people (BPS, 2001). There is a marked difference in population densities between the northern and the southern parts of the province, the latter being more densely populated.⁸ South Sulawesi harbours four major population groups, distinguished as ethnic and language groups: Bugis, Makassarese, Toraja and Mandarese. Bugis and Makassarese, together numbering more than six million, form the largest groups. Mandarese and Toraja live in the northwest and northeast parts of the province respectively. The Makassarese mainly inhabit the coastal and inland southern part, while the plains and foothills South of the home areas of Mandarese and Toraja form the Bugis homeland. There is much diversity within these groups, as well as marked similarities between them in language, history, and socio-cultural characteristics. Though the languages are different, the dividing line between Bugis and Makassarese has largely disappeared, making place for a common identity. Bugis and Toraja are also closely related. Their languages have a common source, while Bugis and Toraja myths of origin show many similarities.⁹ However, mainly under the influence of religion, differences and rivalries rather than similarities came to be stressed during the last centuries (Andaya, 1981; Bigalke, 1981; Errington, 1989; Pelras, 1996; Volkman, 1985). Religion became an important

⁵ Depending on sources and definitions (not all forms were fully sponsored; both in the colonial period and, later, during the Old Order and New Order periods, there were also partly sponsored and so-called ‘spontaneous’ (*spontan*) forms; see Hardjono, 1977), the number of people migrating to colonization areas in the 1905-1941 period is estimated at between 200,000 and 225,000 (see Amral Sjamsu, 1977; Hardjono, 1977; Heeren, 1967; Suratman and Guinness, 1977).

⁶ The Tambunan plan (1952) planned a population reduction for Java from 54 million to 31 million, to be attained around 1987.

⁷ Criticism concerned geo-political goals (central power, Javanization), human rights, the destruction of local cultures and marginalization of ethnic groups, and ecological damage to tropical rainforests (Colchester, 1986a, 1986b; Otten, 1986; Persoon, 1994), its target focus (population redistribution rather than rural development; Babcock, 1986) and economic inefficiency (Babcock, 1986; see Li, 1999). For a moderately positive evaluation, see Babcock, 1986; for land use, see MacAndrews, 1986; for political security objectives of transmigration to ‘strategic areas’, see Law No.3, 1972 (Departemen Dalam Negeri, 1981).

⁸ Pelras (1996) gives a (1990) population density of 84/km² for South Sulawesi. For the (then) five northern districts (48% of the area), population density was 30/km²; for seventeen southern districts, it was 112/km².

⁹ While Bugis and Makassar languages had a script, the highland languages did not (Volkman, 1985).

marker of these ethnic identities. Adherence of Bugis and Makassar to Islam became a formative element of their common identity. Bugis and Toraja identities, on the contrary, were deeply influenced by the different paths of socio-cultural change of these groups. While the Toraja remained animist until the establishment of colonial rule and Protestant mission in the early twentieth century, and then in majority converted to Christianity, Bugis identity became primarily Islamic.¹⁰ Relationships between these groups became coloured by a dichotomization in terms of a contrast between ‘pagan’ and ‘primitive’ upland Toraja and Islamized and civilized inhabitants of the Bugis lowland, and later of Christian Toraja and Islamic Bugis. As a consequence of intensive slave trade between the highlands of (current) Tana Toraja and the Bugis lowland (and also Luwu), the relationship between highland and lowland has long been conceptualized as one of exploitation of the Toraja population by Bugis traders (see below).¹¹

The tensions and changes that swept Indonesia during the crisis did not leave Sulawesi unaffected. Sulawesi has had its share of demands for administrative change and provincial autonomy.¹² Luwu was also affected by administrative changes: it became the object of long-cherished wishes on the part of the provincial administration to break up this large district into smaller pieces. In 1999 it was formally subdivided into two new districts, Luwu District (*Kabupaten Luwu*) and North Luwu District (*Kabupaten Luwu Utara*; see map 1).¹³ The new Luwu District, with Palopo as its capital, consists of sixteen subdistricts (*kecamatan*) with a total area of 3,247.77 km² and a (2001) population of 403,931. North Luwu District, with Sabbang as capital, covers an area of 14,447.46 km², and consists of 19 subdistricts with a total (2001) population of 442,267 people.¹⁴ North Luwu District will be split up again to create East Luwu District (*Kabupaten Luwu Timur*) in the northeast part of current North Luwu, with Malili as its capital.¹⁵ At the same time, Luwu became the core of a movement claiming administrative autonomy at the provincial level. From 1999, a political movement in Luwu and Tana Toraja started lobbying for the creation of Greater Luwu Province (*Propinsi Luwu Raya*). Luwu Raya, as conceptualized in these plans, should encompass the current Districts of Luwu, North Luwu and Tana Toraja. After earlier signs of possible recognition of such a province, its establishment seems to have been blocked now. This is not the first time that Luwu’s provincial ambitions are nipped in the bud. There is a major field of tension between the established interests of South Sulawesi Province and its fear of losing a crucial part of the province, and the ambitions of Luwu (and Tana Toraja). However, there is also an important element of history and identity involved.¹⁶ Very recently, in June 2003, proclamation of Luwu Raya, including Luwu, North Luwu and East Luwu but excluding Tana Toraja, by politicians from Luwu shows that these relationships and identities are full of tension, ambivalence and political manoeuvring (see below; see chapters 3 and 11; see also Morrell, 2002).¹⁷ Unless specific reference to new administrative units or plans for their establishment is necessary, I will generally refer to the pre-1999 situation: Luwu District in South Sulawesi.

¹⁰ The pre-Christian religion of the Toraja is known as Aluk to Dolo (‘ways of the ancestors’). Under the New Order it was officially recognized, and formally classified as a form of Hinduism (see Ramstedt, 2003).

¹¹ In his historical account of highland-lowland trade in coffee, firearms and slaves, Bigalke (1981, 1983) shows that such dichotomies give a too simplistic image of highland-lowland relationships.

¹² For South Sulawesi alone, five political initiatives for the formation of new provinces were recently mentioned (*Tempo Interaktif* 28-4-2001). See also Morrell, 2002.

¹³ Law of the Republic of Indonesia no.13, 1999.

¹⁴ TVRI Makassar on the net: Profil Kabupaten Luwu Propinsi Sulawesi Selatan.

¹⁵ Jakarta Post 24-9-2002. Recently, formation of Luwu Timur was ratified (*Fajar Digital News* 27-1-2003).

¹⁶ See *Suara Pembaruan Daily* 14-12-2001; *Kompas Cyber Media* 07-6-2002.

¹⁷ See *Fajar Digital News* 26-6-2003 and 27-6-2003.

From kingdom to administrative district

The Luwu Kingdom

Until 1959 Luwu was a kingdom governed by a *datu* (king / queen). The *datu* was assisted by a council (*hadat*) of four ‘ministers’.¹⁸ Luwu is widely regarded as the oldest kingdom in South Sulawesi, and cradle of Bugis civilization.¹⁹ It is closely associated with the *I La Galigo* myth of divine origin of kingship in Luwu and, through the offspring of the Luwu nobility, in South Sulawesi. Being its setting and area of origin, Luwu is regarded as the core area of Bugis culture itself (Andaya, 1981; Errington, 1989; van Fraassen, 1991; Koolhof, 1999; Pelras, 1996). Though associated through myth and history with the Bugis world, Luwu was (or is) not an exclusively Bugis area. Though court culture and language in Luwu was Bugis, the majority of the population of Luwu speak Tae’ (the language of the Sa’dan highlands, more or less covering current Tana Toraja District) rather than Bugis (see chapter 3).²⁰ Luwu must have reached the apex of its power between the tenth and sixteenth centuries (Andaya, 1981; Pelras, 1996). It is believed to have owed its power to large deposits of iron ore with a high nickel content, crucial for *keris* (dagger) making in the Javanese Majapahit kingdom between the thirteenth and fifteenth centuries. Later, when iron trade shifted to eastern Sulawesi, its power declined. Around 1605, the Luwu nobility converted to Islam. From then, a syncretist form of Islam spread over South Sulawesi. From the seventeenth century, the Bugis kingdom of Bone (see map 1) became the main power centre in South Sulawesi, while the power of Luwu declined (Andaya, 1981; van Fraassen, 1991; Pelras, 1996).²¹

Control by the high nobility in the centre of the kingdom over local elites and their followers rather than direct and evenly spread territorial political control determined Luwu’s sphere of influence and the degree to which its power was recognized in the periphery. Based on social and kinship ties, and shifting political alliances rather than on territoriality, the relationships between Luwu and its periphery was dynamic and flexible rather than fixed and stable (Errington, 1989; Schrauwers, 1995). In its long history Luwu included parts of current Central Sulawesi, Southeast Sulawesi, and large parts of southern Sulawesi (including parts of the current districts of Tana Toraja, and of the Bugis lowland) (Bigalke, 1981; Errington, 1989; Pelras, 1996; Volkman, 1985).

Socio-cultural and political ties of Luwu with the Sa’dan highlands were an important factor in regional politics, and remain so to this day (see chapter 3). Kinship and other relations had connected Luwu with the highlands since times immemorial. However, the character and scope of these ties varied between regions and historical periods. Relations existed with the elites of the northern Sa’dan highlands and with the states of Makale, Sangalla and Mengkendek, which at the

¹⁸ These functionaries had the titles of Opu Pabicara, Opu Patunru, Opu Tomarilalang, and Opu Balairante. Another important functionary was the Anak Arung (guardian / keeper of genealogies) (van Braam Morris, 1889; Sanusi Dg. Mattata, 1967). Lower power holders subject to the Luwu kingdom were known under titles like Arung, Palimpang, Madika, Sulewatang or Makole. Local leaders held titles like Tomakaka, Matoa, and Paranata.

¹⁹ See, however, Caldwell (1998).

²⁰ Before Toraja identity became established and reflected in the administrative structure in the twentieth century, it is better to speak of the Sa’dan highlands; see chapter 3; see Bigalke, 1981.

²¹ From the sixteenth century, the kingdoms of Goa / Tallo (near current Makassar) and Bone emerged as power centres in South Sulawesi. Bone emerged from a struggle with Goa as the new regional power after the Bone ruler, Arung Palakka, had joined the VOC under Cornelis Speelman against Goa’s Sultan Hasanuddin in the Makassar war (Andaya, 1981).

time represented the highest form of (enduring) state formation in the southern highlands (map 2).²² Such ties were expressed in myths of the divine and common origin of the early kingdoms of South Sulawesi - Luwu, Goa (Makassar) and Sangalla - like the Batura Guru myth (Volkman, 1985).²³ Luwu's claims of power over part of the highlands became manifest in tributary relationships between the highland population and the Luwu kingdom, like the *medatu* ceremony, in which rice was blessed by the king in exchange for highland submission. These relationships of dominance and submission were not recognized throughout the highlands. In the nineteenth century, Sangalla refused to accept Luwu's claim to superiority.²⁴ Economically, increasingly strong ties existed between the highlands and Luwu (and with other kingdoms in South Sulawesi), mainly in the form of cooperation between lowland and highland elites in the trade of coffee, firearms and slaves. From the nineteenth century, there was a growing Bugis cultural influence on the highlands, especially through cultural orientation of the highland polities to these kingdoms (Bigalke, 1981, 1983).

Colonial intervention

Direct colonial intervention in the affairs of Luwu came relatively late. The Dutch had long restricted direct presence and political control to southwestern (Makassar) and northern Sulawesi. Until the nineteenth century, the South Sulawesi kingdoms, formally subjected to the colonial power, had been virtually independent. In the course of the nineteenth century, the Dutch gave up their policy of non-intervention in favour of more active intervention in South Sulawesi (Coté, 1996; Locher-Scholten, 1994). In 1904, the colonial state definitively asserted its power through a military expedition against the southern kingdoms. In 1905, Bone was subdued. After the defeat and subjection of Bone, it was Luwu's turn. By accepting the so-called 'short declaration' of submission to the colonial government in 1905, Luwu was incorporated into the colonial administrative structure as an *Afdeling* (division) of *Gouvernement Celebes en Onderhorigheden* (Government of Celebes and Dependencies) under a Dutch assistant-resident (Arsip Nasional Republik Indonesia, 1995a; Arts, 1986; Locher-Scholten, 1994). After conquering the lowland, Dutch troops continued into the highlands of Luwu and the Sa'dan highlands, meeting with fierce local resistance there.

In the process of subjection and incorporation into the colonial political-administrative structure, some existing ties of the Luwu kingdom with other regions were severed (e.g. with Wajo in the South and Poso in Central Sulawesi), while others were artificially created or strengthened.²⁵ Thus, the Sa'dan highlands were incorporated into Luwu as the subdivisions (*Onderafdelingen*) Makale and Rantepao of Luwu Division.²⁶ Historically, the general picture had been one of decreasing power and gradual erosion of Luwu political influence in the highlands. However, the Dutch, basing themselves on incomplete and partial accounts, interpreted the relationship between the two areas as one of absolute highland submission to Luwu. The decision to incorporate the Sa'dan highlands into Luwu led to fierce protests, especially from Sangalla, which feared loss of its autonomy. Thus, the Dutch had frozen the dynamic and shifting power relations in the area into fixed territorially based

²² Makale, Sangalla and Mengkendek were small kingdoms in the southern Sa'dan valley. Each of these statelets was ruled by a *puang*. This highest form of enduring political organization in the highlands was called *lembang*. Therefore, they are generally known as *Tallu' Lembangna* (the three lembangs).

²³ In the I La Galigo epic, Batura Guru descends from heaven, becoming the first human being on earth and founding father of the Luwu kingdom and Bugis society (Koolhof, 1999).

²⁴ Quite the contrary: the *puang* of Sangalla even played an important role in the ceremony accompanying the accession of a new datu in Luwu (Volkman, 1985; see Bigalke, 1981; van Lijf, 1947).

²⁵ The Dutch administration was bent on making the Poso region independent from Luwu. In the 1887 short contract with Luwu, it had still recognized Luwu sovereignty over this area (Arts, 1986; Schrauwers, 1995).

²⁶ Other subdivisions were Palopo, Masamba, Malili and Kolaka. The subdivision was the lowest unit under Dutch administrative personnel, the *controleur*.

administrative units. In doing so, they over-estimated the political relevance of territorial control and geographical boundaries for polities like Luwu (Bigalke, 1981; Errington, 1989). After the permanent establishment of Dutch control in Luwu, intervention in various spheres of life intensified. Though Luwu had been given the status of *zelfbesturend landschap* (self-governing territory) in which the lower administrative functions were fulfilled by indigenous staff, politics and administration were strictly controlled by the Dutch. The power of the Luwu aristocracy was mainly restricted to implementing policy measures imposed by the Dutch. The Dutch also screened, selected, appointed and fired important customary functionaries, including the king.

The Sa'dan highlands, administratively incorporated into Luwu, were of special concern to the colonial government in its struggle against Islam. Admission of missionary activities to the colony had long been strictly regulated for fear of the emergence of politically dangerous forms of competition between Islamic and Christian missionary activities. As colonial policy changed from relative abstention to active intervention, the government became bent on restricting the influence of Islam and preventing it from expanding into 'pagan' territories where colonial rule was still absent or weak. One way to reach these objectives was through the Christian mission. As in the Poso area (see map 2), where a Dutch missionary post had been established in 1892, in the Sa'dan highlands the establishment of missionary activities fitted in neatly with the main political-administrative preoccupation of the colonial government: creating a buffer against 'incursion' of Islam into these areas.²⁷ Events in other parts of the colony, especially Aceh in northern Sumatra, had made the government afraid of the possibility of expansion of Islam from the Bugis lowland (a process that was already going on in the nineteenth century; Bigalke, 1981). Thus, once colonial rule had been established in the Sa'dan highlands, in 1914 the Dutch Reformed Mission (*Gereformeerde Zendingsbond*; GZB) was formally given access to the western part of Luwu, encompassing the Subdivisions of Makale and Rantepao, Palopo and Masamba (Van den End, 1985). Especially the boundary areas between the 'pagan' highlands and the Islamic lowland played an important role in the buffer strategy of government and mission. These areas enjoyed special attention from the mission. In the course of the colonial period, the boundary areas between Luwu and the Sa'dan highlands became the scene of increasingly fierce competition between Christian and Islamic missionary activity (Bigalke, 1981; Plaisier, 1993; Pronk, 1935; see chapter 3).

Early 1942, the Japanese occupation suddenly interrupted colonial rule. Under Japanese rule, the Luwu kingdom attempted to tighten its grip on the highlands (Bigalke, 1981; van Lijf, 1947). In 1946, after the defeat of Japan, the allied forces returned and the Dutch administration was re-established. Under its king Andi Jemma, Luwu fiercely resisted the colonial regime (Sanusi Dg. Mattata, 1967). At the same time, tensions were building up between Christian and Islamic sections of the highland population, as well as between highland Christians and (mainly Muslim) lowland *pemuda* (revolutionary fighters). While the former distrusted the ambitions of Islamic *pemuda*, the latter accused Christian leaders of cooperation with the Dutch in creating a Christian highland buffer (Bigalke, 1981). In the same year, the Dutch made the subdivisions of Makale and Rantepao independent from Luwu. Under the name Tana Toraja, the former subdivisions of Luwu became a self-governing territory (*swapraja*) governed by the so-called *Tongkonan Ada'* government.²⁸ In December 1949, the Dutch recognized Indonesian independence but imposed a federal political

²⁷ For the Poso area, see Arts, 1986; Coté, 1996; Schrauwens, 1995.

²⁸ Bigalke sees this as a Dutch attempt to create a highland buffer in the Sa'dan area, free from lowland political influence. Separation served the short-term interests of both parties. It strengthened the Dutch in their attempts to restore colonial rule, and gave the Toraja population, under Christian leadership, a chance of strengthening its political and administrative position independent from the Islamic lowland. Note that the separation of Makale-Rantepao was an unprecedented breach of a short declaration, in this case between the colonial government and Luwu (Bigalke, 1981; Schiller, 1955).

structure upon the country, which did not last long. In 1950, Indonesia became a unitary republic, and the federated system was dissolved. Tana Toraja came under an emergency administration (*pemerintah darurat*). The pre-1946 area of Luwu was recognized as a self-governing territory (*swapraja*). Thus, while the Luwu kingdom was allowed to manage its own affairs, Tana Toraja was returned to Luwu again and lost its administrative autonomy acquired under the Dutch in 1946.

Post-colonial Luwu between independence and New Order

After the revolution against the Dutch and the breakdown of the federal state structure in 1950, Sulawesi and Luwu entered into a new period of political instability.²⁹ Conflicts arose in South Sulawesi about the terms of incorporation into the Indonesian national army (TNI) of guerrilla units that had fought the Dutch, as well as about the character of centre-periphery relations in the new unitary republic. Kahar Muzakkar, a young man from Luwu who had been banned from that area after a conflict with the Luwu royal elites, joined revolutionary groups in Java and organized resistance against the Dutch in South Sulawesi. Finally he became the leader of a resistance movement against the central government that was to put its stamp on the region for almost fifteen years.³⁰ The conflict rapidly developed into a downright civil war with separatist elements. Shifting ideologically from socialism to Islam, from 1953 the movement became known as Darul Islam Tentara Islam Indonesia (DI/TII) (van Dijk, 1981; Harvey, 1989). Between 1950 and 1965, DI/TII was in control of large parts of South Sulawesi. From 1952, DI/TII operations expanded to various parts of highland Luwu. Especially in the highland Luwu regions of Bastem and Rongkong (see map 1), villages were looted and houses burnt down, leading to almost total depopulation of these areas. Even large parts of Tana Toraja were threatened by DI/TII operations, adding to the tensions between Christian highland and Islamic lowland populations. The threats of burning and looting of settlements, forced conversions and other forms of oppression set off large streams of refugees throughout the region. Most of them, mainly but not exclusively Christians, ended up in refugee camps in Tana Toraja or in the Luwu plain, where they were sheltered and given army protection.³¹

In 1957, when tensions between highland and lowland had risen high under the influence of DI/TII, Tana Toraja was granted autonomy again under pressure of Tana Toraja political parties and social organizations (see chapter 3).³² In 1959, the system of the self-governing territories in Sulawesi, including Luwu, was definitively dissolved and replaced by first, second and third-level regions (*daerah swatantra tingkat I,II,III*). Luwu became a second-level region, subdivided into

²⁹ In 1950, the new Province of Sulawesi was formed. The Region of South Sulawesi was subdivided into seven self-governing territories (*daerah swapraja*). In 1960, Sulawesi Province was split up into two new provinces, those of North Sulawesi and South and Southeast Sulawesi, the latter each under a separate *coordinatorship* (*keresidenan koordinator*). In the new system, provinces became first-level regions (*daerah tingkat I*). South and Southeast Sulawesi consisted of 27 second-level regions (*daerah tingkat II*), one of which was Luwu. In 1964 the Province of South and Southeast Sulawesi was split up into the Provinces of South Sulawesi and Southeast Sulawesi, the former consisting of 22 districts (*Kabupaten*) (Arsip Nasional Republik Indonesia, 1987a, 1987b, 1987c; 1995a, 1995b, 1996). In the same year, Central Sulawesi Province (*Sulawesi Tengah*) was established (Department Pendidikan dan Kebudayaan, 1984).

³⁰ Probably Kahar had enraged the Luwu rulers by speaking out against the 'feudal' traditional aristocracy. Kahar had the ambition of becoming commander of the Indonesian Army in Sulawesi. However, in the Indonesian government's 'rationalization' policy there was no place for ex-guerrillas. Functions were mainly given to former Dutch East Indies Army (KNIL) commanders from Manado and the Moluccas, while Javanese influence was increasing. The Javanese were seen as an occupying force, both politically and economically. The movement also had an ethno-religious component. It received most support from the Bugis-Makassarese population (Andaya, 1977; van Dijk, 1981; Harvey, 1989).

³¹ Bigalke (1981: 423) mentions about 20,000 refugees in Makale and Rantepao by 1953.

³² Emergency Law (*undang-undang darurat*) No.3, 1957.

three districts (*kewedanaan*): Palopo, Masamba, and Malili. Andi Jemma, the last datu of Luwu (a function he had fulfilled from 1935), became its leader until 1960 (Arsip Nasional Republik Indonesia, 1987a, 1995a, 1995b). In 1962, Luwu became a district (*kabupaten*), divided into subdistricts (*kecamatan*) and villages (*desa*).³³ Though the influence of DI/TII in South Sulawesi had been waning from the early sixties onwards, the movement remained active in Luwu until 1965 (when Kahar was killed by the army). From that year, the New Order regime put its stamp on Luwu. ‘Development’ became the main idiom through which state-society relations were expressed and through which the state legitimized the scope and character of its presence and interventions in the region. However, the roots of this development thinking, especially state-sponsored migration, resource exploitation and irrigation development, can be clearly traced back to the colonial period.

Exploitation of natural resources in colonial Luwu: native laziness and colonial efficiency

In colonial documents, existing conditions and cultural practices in Luwu were usually represented as hindrances to efficient economic development of the population through agricultural production increase. Especially lowland Luwu livelihood, based on sago and fish, was seen as a sign of backwardness. Practices of sago production, the use of sago as a staple food in combination with fish, and of shifting cultivation in the Luwu river catchments often fell victim to derogatory characterizations. A recurring theme is that of ‘the lazy native pampered by nature’.³⁴ Even before actual subjection of the kingdom, these themes were present in a report of a journey to Luwu (or *Landschap Loehoe* as it was then called) by van Braam Morris, Governor of Celebes:

‘Notwithstanding the fact that in Loehoe there is an abundance of agricultural land, agriculture is not really taken to heart, especially by the coastal population This neglect of rice and maize cultivation is caused by the circumstance that everywhere the area is immensely rich in sago so that there is no need for the population to make a great effort to provide itself with the basic necessities of life’ (van Braam Morris, 1889: 505; my translation).

‘All these forests are so abundantly rich in all kinds of forest products ... the collection of which would indeed form an inexhaustible source of wealth, if such would only take place on a more regular basis and if only the population, especially in the coastal zone, were not inclined to work only in times of distress due to its indolence Under a well-organized administration, an area so much favoured by nature would certainly be one of the most prosperous divisions of this region’ (idem: 509; my translation).

The colonial policy of irrigation development and resettlement of Javanese farmers in lowland Luwu in the thirties was a spin-off of the so-called ‘Ethical Policy’, notably two of its three ‘pillars’: ‘irrigation’ and ‘emigration’.³⁵ As to irrigation, the island of Java, the centre of colonial power, had long usurped the lions’ share of colonial funds for irrigation development. However, in the framework of the Ethical Policy the so-called ‘Outer Islands’ gradually attracted greater attention (Booth, 1977a, 1977b; Ravesteijn, 1997). In 1911, an inventory was made of irrigated agriculture in Sulawesi, including Luwu (van Buuren, 1911). Prospects for irrigation development in Luwu were bright. Much was also expected of the combination of colonization and irrigation

³³ Though the number of subdistricts and villages increased considerably, especially from the eighties onwards, this basic administrative structure continued to exist until 1999, when Luwu was split up.

³⁴ For a critical discussion of this theme of the ‘lazy native’ in colonial discourse, see Alatas, 1977.

³⁵ The ‘Ethical Policy’ was a more welfare-oriented colonial policy started in the early twentieth century in reaction to criticism of widespread poverty in Java. It focused on ‘emigration, irrigation and education’.

development, especially in bringing about changes in the agricultural practices of the local population and setting off a transition from subsistence-oriented shifting cultivation to intensive irrigated agriculture (ter Laag, 1941). Settlement of Javanese was seen as an instrument for the introduction of irrigated agriculture among the local population.³⁶

Until the mid-thirties, the colonial government did not give priority to construction of irrigation systems in Luwu. From 1934, the construction of irrigation works started (see van Buuren, 1911; Caron, 1933). Sulawesi was opened up for colonization by Government Decision 29-1-1937, in order to create the higher population concentrations needed for rapid and large-scale irrigation development. In the same year, site selection for irrigation development and settlement started. In a 1938 irrigation report for Luwu, 180,000 hectares were identified as suitable for irrigated agriculture (ter Laag, 1941). One year later again, the first colonists from Java arrived in Luwu, to be resettled in the Lamasi, Bone-bone and Kalaena areas (see map 1).³⁷ Settlement in Kalaena took place in 1938. Settlement in Bone-bone, located halfway between the Lamasi and Kalaena areas, in the same year. Finally, settlement in Lamasi followed in 1940.³⁸ The Luwu settlements were generally regarded as quite successful (Hardjono, 1977; Maurenbrecher, 1939). In the late thirties, construction of the irrigation systems in the Lamasi, Bone-Bone and Kalaena areas started.

New Order irrigation development: the Luwu Irrigation Project

The Dutch plans for irrigation and farmer resettlement had been stopped short by the war and later political conflicts. In 1969, when peace in Luwu had been restored, the Directorate-General of Water Resources Development started exploring possibilities for irrigation rehabilitation and expansion combined with transmigration. Indonesian priorities were clear: rehabilitation of existing irrigation systems, construction of new systems or extensions of the existing ones, land development and transmigration. North Luwu became a priority area for a development strategy based on the macro-economic objective of reaching national self-sufficiency in the production of irrigated rice. The old Dutch plans for irrigation development and colonization in North Luwu fitted neatly into this New Order priority. Therefore, the plans for Luwu showed a high degree of continuity with the earlier colonial activities.³⁹ In the early seventies, preparations for the project started with an Indonesian-Dutch fact-finding mission consisting of engineers, agronomists and economists. The mission identified some 91,000 hectares of irrigable land in the North Luwu plain, stressed the importance of improvement of the road infrastructure, and advised to develop the area for irrigated agriculture by means of transmigration of Javanese and Balinese farmers, in view of the familiarity of these groups with irrigated agriculture. For the 'indigenous population' the report

³⁶ Though sago production and shifting cultivation prevailed in lowland Luwu, irrigated agriculture was also known in Luwu. Thus, the Luwu elites held complexes of sawahs worked by the population. In the hills and mountains, complexes of irrigated fields existed as well.

³⁷ Hardjono (1977) mentions the establishment of six settlements between 1937 and 1941 (the year of the outbreak of the war in the Pacific). By 1940, the settler population in Sulawesi amounted to 23,600 (on 200,565 for Indonesia as a whole) (Hardjono, 1977: 19; see Charras, 1982; Mangunrai, 1977).

³⁸ Accounts of the number of colonial settlers in Luwu differ. Hardjono (1977) mentions 16,628 settlers in late 1940, Ter Laag (1941) gives higher figures. See Charras, 1982; Harvey, 1974; Mangunrai, 1977).

³⁹ A report by the FAO country representative states that the government of Indonesia 'wants to make sure of these old plans by rehabilitating whatever has been left by the Dutch and by completing their scheme up to its optimum capacity' (Morad, n.d.: 7).

foresaw a role in the governmental and private services sector, as labourers for estates or mining, and in fisheries (Morad, n.d.; Ministry of Foreign Affairs, 1972).⁴⁰

From 1974 onwards, irrigation and transmigration became the spearheads of a large multi-sectoral rural development programme, comprising the rehabilitation and construction of irrigation systems, roads and bridges, transmigration and agricultural development, as well as the development of co-operatives and marketing facilities: the Luwu Area and Transmigration Development Project. It was coordinated by the Ministry of Manpower and Transmigration, and financed by USAID. Irrigation development was the responsibility of the Directorate General of Water Resources Development (DGWRD). In 1975, it established a special implementing agency for irrigation development in Luwu: the Luwu Irrigation Project (*Proyek Irigasi Luwu*; PIL). From 1975, Dutch development assistance was involved in making feasibility studies and preparing a masterplan for irrigation development. The plan was finalized in 1977 (DHV/ILACO, 1977; see PIADP, 1991a, 1991b).⁴¹ Though PIL was defined in the masterplan as a 'social' project for integrated rural development with active farmer participation, it focused on construction of infrastructure. Its implementation ran up against technical but above all social problems.⁴²

Transmigration in Luwu had already started in 1969. Luwu had been chosen in view of 'the availability of large tracts of land free from any claims' (Hardjono, 1977: 79).⁴³ Luwu had a low population density, and the good prospects for development of irrigated agriculture were known from the earlier Dutch surveys and experiments with irrigation and settlement.⁴⁴ Strategic motives and the wish to 'Javanize' the area have, no doubt, also played an important role in selecting this politically unstable peripheral region as a major destination for transmigrants. From 1969 a large number of transmigrants were resettled in sites in North Luwu. Luwu received most transmigrants during the Repelita I and II periods (1969-1974; 1975-1979). From the eighties, the decreasing availability of large areas of 'free' land for transmigration settlement and the increased incidence of land conflicts led to a decline in the number of transmigrant arrivals in Luwu. A shift from food crops towards a cash crop-based farming system for transmigration settlements partly substituted for the lack of land in the irrigable areas of North Luwu.⁴⁵

⁴⁰ Increased rice production and food security for the farmer population were not the only rationale behind the plans. Both the FAO report and the mission report stress the importance of North Luwu as a food and labour provider for the Soroako mining area and planned industrial activities related to nickel extraction. Morad writes that 'this area ... forms the West boundary of the nickel mining area in Malili The farming community in Luwu could supply labour and food needed in the mining area' (Morad, n.d.: 7).

⁴¹ The masterplan covered a gross area of about 193,000 hectares. After deducing land for infrastructure and land unsuitable for irrigation, the plans involved a net irrigable area of 100,000 hectares.

⁴² Kristanto et al. (1989: 404-405) discuss these development efforts in Luwu, and mention the technical and social problems experienced. The authors conclude: 'a test of whether the problems can be overcome is the Pompengan Integrated Area Development Project in Luwu', a case study of which is presented here.

⁴³ Hardjono adds that 'the system of communally owned land, held under adat or traditional law, which has proved a great handicap to the procurement of suitable project land in much of Sumatra, is not found in Sulawesi, where disputes with local people over land have been very few' (1977: 79). She adds that 'religious and cultural traditions in Sulawesi are such that newcomers are readily accepted' (ibid.: 79). However, Guinness (1977: 86-88) mentions several conflicts between the local population and transmigrants about land, crops, fishponds and other resources.

⁴⁴ In 1969, densities varied from 30.4/km² in Bone-bone to 2.9/km² in Malili. North Luwu had the lowest population densities, especially the subdistricts of Wotu (6.4), Mangkutana (5.4) and Malili (2.9). Total population density for Luwu in that year was 11 (Charras, 1982: 76-77).

⁴⁵ For 1969-1974, Hardjono mentions a total of 20,102 transmigrants arriving in North Luwu (1977: 78). For 1969-1976 Charras gives the following data, according to origin: Javanese (16,496) Balinese (6,697), and Lombok (3,149). The transmigration office in Palopo gave the following figures (number of persons):

Until the mid-nineties, all irrigation construction programmes in Luwu were coordinated and implemented by the Luwu Irrigation Project. However, as expansion of irrigated agriculture reached its limits and funding decreased, in the course of the nineties (1996-1997) the status of the Luwu Irrigation Project was reduced to that of a 'sub-project'. Such changes led to a further decrease of the limited financial resources and increased pressure on staffing.⁴⁶ At least until the late nineties, all operative irrigation systems fell under responsibility of the sub-regional administrative division (*cabang dinas*) of the North Luwu subsection of the Public Works Irrigation Service (*PU Pengairan*).⁴⁷

The Lamasi and Kalaena irrigation systems

Two of the irrigation systems of the Luwu Irrigation Project, the Lamasi system, and the Kalaena system, form the main settings of this research (see map 1). The Lamasi irrigation system is located between twenty and forty kilometres from Palopo. It originates in the late thirties of last century, when the Dutch started irrigation development in combination with colonization of Javanese farmers. In those days, the area was mainly forest-covered and sparsely populated, and no irrigated agriculture was practiced. Before the outbreak of the war, the Javanese colonists had already started constructing the system. After independence, it was gradually expanded to accommodate additional settlement and land development in the area. However, no settlement in the framework of the transmigration programme took place here. Population increase in the area was mainly caused by the massive inflow of migrants from highland Luwu and Tana Toraja District. Irrigation remained farmer-managed until the mid-eighties. Irrigated rice agriculture had mainly been established in the upper and middle parts of the area. In the marshy and forest-covered lower part of the area, shifting cultivation and sedentary agriculture were practiced on a small scale. From 1980, Dutch bilateral development aid became involved in the Pompengan Implementation Project (PIP) for irrigation development on the left bank of River Lamasi (*Lamasi Kiri*). PIP was a project for the upgrading and expansion of infrastructure for irrigation, drainage and transport and the construction of flood protection dikes in a 9,000 hectare area, 4,450 of which with an irrigation potential. PIP also included a component for land clearing in the downstream part of the project area, and for the establishment and guidance of WUAs for operation and maintenance of the tertiary irrigation infrastructure in the upstream area. From 1986, Dutch involvement with the area continued as an 'integrated' project under the name PIADP (PIADP, 1991a, 1991b; see chapters 4 to 6).

The Kalaena irrigation area, located in the upper part of the North Luwu Plain between one hundred and 140 kilometres North of Palopo, has its origins in the colonial period as well. Resettlement of Javanese farmers took place from 1938 until the outbreak of the war. The Kalaena system has an irrigable potential of some 18,000 hectares. It consists of a right bank branch (*Kalaena Kanan*) and a left bank branch (*Kalaena Kiri*), both receiving their water supply from a weir in Kalaena river. The Dutch had already constructed parts of the irrigation system from 1938.

REPELIA I: 14,444; REPELITA II: 25,220; REPELITA III: 12,221; REPELITA IV: 4,976; REPELITA V: 10,591; REPELITA VI (1994: 1,659). Plans for 1996-2000 amounted to about 11,000 persons (Kantor Departemen Transmigrasi dan PPH, Kabupaten Luwu, April 1994).

⁴⁶ In 1996-1997 the Luwu Irrigation Project became one of nine sub-projects for the region of Luwu and Tana Toraja within the Sulawesi Selatan Irrigation Project (PISS; Proyek Irigasi Sulawesi Selatan). I have no detailed information on the changes initiated by the Indonesian crisis and subsequent irrigation sector reforms.

⁴⁷ South Sulawesi formed the regional administrative area. The sub-regional area (*cabang dinas*) covered the districts of Luwu and Tana Toraja. It was, in turn, subdivided into two sub-sections: South Luwu and Tana Toraja, and North Luwu. At each level, subdivisions existed for Operation and Exploitation, Maintenance, Tertiary Unit Development, and Administration.

Before construction under the Luwu Irrigation Project began, the pre-war part was still in use. Under supervision of Public Works, the main canal had been linked up to the river through provisional constructions in the sixties. In the early seventies, when construction of the current system began, an estimated 2,000 hectares of the right bank system were irrigated. In 1984, the new Kalaena weir took over the function of the temporary inlet. From the mid-sixties onwards, the Kalaena area became attractive for migrants from various parts of Sulawesi, especially of Bugis and Tana Toraja origin. From the late sixties, Kalaena also became a major destination for the national transmigration programme, involving settlement of transmigrants from Java, Bali, and (to a smaller extent) Lombok. In the greater part of the current command area of the Kalaena system, agriculture remained rain-fed until the eighties or even nineties (see chapters 7 to 10).⁴⁸

Luwu: from kingdom to ‘Miniature Garden’

The rapid social, political and economic transformations of the twentieth century have deeply influenced Luwu. From a kingdom chaperoned by the Dutch, it became part of the unitary state of Indonesia. With the demise of the kingdom, the difficult process of incorporation into the national state, and New Order development, Luwu lost part of its identity. In this period, the central government and its agencies penetrated into Luwu more deeply than ever before: the New Order political-administrative straitjacket, investments in rural infrastructure and a rural development strategy based on a modernization view of agrarian and agricultural change, large-scale migration and transmigration, and the opening up of Luwu for private capital and enterprise, mainly in extractive economic activities like forestry and mining, and agricultural production in the plantation sector (e.g. oil palm).

These changes have also deeply influenced the ways in which regional identities developed, how people see themselves and their society in relation to ‘others’, and what unites and divides them. In the broader context of South Sulawesi, Luwu stands out as a special case. Once the political centre of the largest, oldest and most powerful kingdom in (South) Sulawesi, it is regarded as the cradle of the major kingdoms in South Sulawesi and of Bugis culture. Luwu represents an intricate mix of socio-cultural and linguistic influences, but is not associated with any ‘recognized’ ethnic identity itself. Therefore, Luwu is felt by many to struggle with something of an identity problem. On the one hand it is claimed as a ‘Bugis’ area. As a district of South Sulawesi, in an administrative sense it belongs to the Bugis-Makassarese world. On the other hand, its historical ties with the highlands of current Tana Toraja continue to play an important role in the definition of Luwu identity. Once, a person of highland origin told me:

‘What is often regretted by the people of Luwu is the fact that their long history and Luwu’s prominent role in South Sulawesi has now almost disappeared. It would be wrong to call them Bugis, nor can they be called Toraja. People feel at a loss because there is no such thing as a clear and well-known Luwu identity. Some people with a Luwu background react to this by trying to find recognition as a separate ethnic group. They cry out, as it were, “we have been here for a long time already”. They have the feeling that history has not been just to them. Its long history, I La Galigo, Andi Jemma and the heroism of the revolution, these all belong to the past. If you want to survive as an ethnic group, you need strong symbols. Only if it has strong symbols, an ethnic group gets a place in the Miniature Garden. Take, for instance, the Toraja. Incorporating so many ethnic groups from all over Indonesia, Luwu has become a Miniature Garden. But it is not represented there itself. There is no *suku Luwu* (Luwu ethnic group; D.R.).’

⁴⁸ Large parts of the left bank and the lower parts of the right bank system.

The nineties have seen attempts to (re-)construct Luwu identity as a separate ethnic identity and relate that identity to a political-administrative status that identifies historically with the highlands of current Tana Toraja rather than with the Bugis-Makassar world of South Sulawesi Province, as against competing efforts to define Luwu identity in terms of Bugis-Makassar tradition and tie the area to that province (see above). In sharp contrast to the weakening and ultimate disappearance of the Luwu kingdom stands the emergence of a strong Toraja identity, largely in relation to the Bugis and Luwu 'other', in the twentieth century (see chapter 3).

3. Modernizing land tenure: the limits of state intervention

Customary land tenure

Historically, land tenure in Indonesia developed under a diversity of customary arrangements, usually referred to as *adat* or 'adat law' (customary law).⁴⁹ *Adat* refers to a complex of customs, moral principles, values, norms, rules, and practices. Thus, it stands for complexes of local arrangements for the moral and normative ordering of society (Haverfield, 1999). A crucial characteristic of *adat* is its embeddedness in local social, political and kinship relations. *Adat* is neither static nor homogeneous; it has proved to be dynamic and adaptive. *Adat* is an elusive phenomenon, lending itself for a variety of uses and interpretations. Social scientific approaches to *adat* would at least require a careful distinction between the many images of *adat*, sources of interpretation and representation, underlying assumptions about its role in society, and the objectives behind their use (F. von Benda-Beckmann, 1979; Haverfield, 1999; Slaats, 1999, 2000).

Land tenure is deeply embedded in the socio-political context of local societies.⁵⁰ The Dutch had long abstained from direct intervention into local resource use. The 1870 Agrarian Act and the so-called 'Domain Declaration' associated with it were the first comprehensive attempt at colonial regulation of land tenure. The Act established a dualistic land law with a double objective: to protect the livelihoods and property rights of the indigenous population, while stimulating the colonial economy by facilitating large-scale western investments through long-term leaseholds in agriculture, for which land resources were needed. It created a distinction between 'European' and 'indigenous' land, the former subject to Dutch civil law, the latter to indigenous '*adat law*'. The Domain Declaration was one of the regulative instruments to make implementation of the act possible. Restricting local conceptions of land rights and expanding state control, it paved the way for increasing political control over local populations and their agricultural practices, and for the intrusion of commercial agriculture into local settings (F. and K. von Benda-Beckmann, 1999; Furnivall, 1939; Hooker, 1978; Slaats, 1999). Starting from a western conceptualization of property rights to land in terms of 'ownership', it defined all land for which there was no proof of ownership under Dutch civil law as 'state domain': land owned by the state.⁵¹

⁴⁹ The term was introduced in the late nineteenth century by Snouck Hurgronje, who translated Arabic *adat* (custom; customary practice), a term widely used in the archipelago to refer to a diversity of customs, into *adatrecht* (adat law) or 'adat that has legal consequences'. The colonial and scholarly interest in *adat* led to the classification of *adat* systems into so-called *rechtskringen* (law areas; law circles) (ter Haar, 1948).

⁵⁰ The meaning of land and other resources cannot be reduced to a purely economic one. Land tenure can be intricately related to social and kinship relations, as well as to religion and cosmology.

⁵¹ A distinction was made between 'unfree domain' (land belonging to local communities and / or used by the population) and 'free domain' (fallow land / forest not in local use). The latter category qualified for large-scale economic exploitation by western enterprises (Furnivall, 1939; Slaats, 1999).

In the late nineteenth century, discussions arose among colonial administrators and adat scholars about issues like codification and unification of adat, the degree to which customary arrangements and practices could be described using a western legal vocabulary, and the desirability of forcing changes upon adat systems by engineering them into forms that fit western conceptualizations of (property) rights using western legal categories with the objective of speeding up economic development. The Dutch legal scholar van Vollenhoven, the most prominent representative of the so-called ‘adat law school’, was a vocal adversary of unification, description and classification of adat systems in western legal terminology, and of intervention in adat systems (van Vollenhoven, 1909, 1919, 1928). To cope with the problems caused by an uncritical imposition of western legal categories like ‘ownership’ upon adat systems, van Vollenhoven introduced a terminology based on local categories and distinctions rather than western assumptions about property rights.⁵²

Characteristics of customary tenure

Customary tenure in Indonesia is based on community control over land and other natural resources within its territory. On the basis of this community ‘right of avail’ (Du. *beschikkingsrecht*; Ind. *hak ulayat*), community members have priority over non-members in using these resources. The right of avail is not only exerted over cultivated land, but also over wastelands and forest (Du. *woeste gronden*).⁵³ Internally, the simple category of ‘communal land’ does not suffice to describe the diversity of property rights and relationships pertaining to land. In most adat systems, more individual rights to land can be established through first occupation. With first occupation, a gradual process of individualization of rights to communal land sets in. However, this process never reaches western ‘total ownership’. Some degree of communal control over individual rights continues to exist. Thus, land cannot be alienated to ‘outsiders’ or left fallow at will. Rights to land, then, are subject to a cyclic process of individualization and communalization, depending on how it is used (Slaats, 1999, 2000; see ter Haar, 1948; Hooker, 1978). Though ‘ownership’ is not an appropriate category to describe the property rights involved, the strength of the rights established by first occupation and continued use should not be underestimated. Thus, Hooker states that the concept of ownership in adat ‘is based on the idea, only imperfectly described in the term “ownership”, that the adat group ... controls the allocation and use of land. At the same time all adat systems recognize that the effort and capital put into a piece of land by an individual create something of a personal tie between the person and the land. In some sense ... he had “rights in and over” the land in question’ (1978: 118; see also Haverfield, 1999).

State regulation of land tenure: Basic Agrarian Law

Basic Agrarian Law

In 1960, Basic Agrarian Law (BAL) was enacted.⁵⁴ Until that year, Indonesian land law had been largely based on colonial law, which distinguished between land that fell under the Dutch civil law code, and land on which Indonesian adat law was applicable (MacAndrews, 1986a; ter Haar, 1948; Slaats, 1999). BAL was meant to replace the legacy of the dualistic system with a comprehensive and unitary national law that would include both adat and western types of rights to land. BAL

⁵² Examples are terms like ‘beschikkingsrecht’ (ulayat; right of avail), ‘genotrecht’, and ‘inlandsch bezitsrecht’; van Vollenhoven, 1919. For a critical review of van Vollenhoven, see Burns, 1989.

⁵³ Van Vollenhoven, 1919; see Ter Haar, 1948. Burns (1989) uses the term ‘right of allocation’ (see also Haverfield, 1999). On this type of rights van Vollenhoven’s ideas clashed with the assumptions of the Domain Declaration (see Slaats, 2000).

⁵⁴ Law No. 5, 24 September 1960.

stressed the social function of land and its role in creating a just society (MacAndrews, 1986a). It replaced colonial law with a new system that prioritized the interests of the Indonesian people, especially small farmers.⁵⁵ Enactment of the law meant a revocation of prior laws and regulations. Though BAL was formally based on adat, customary rights were in fact ‘modified’, subordinated to national forms of regulation, interests and development agendas (Gautama and Harsono, 1972: 24).⁵⁶ However, existing adat rights could in principle be converted to rights under the new system (Haverfield, 1999; MacAndrews, 1986a; Slaats, 1999, 2000).

BAL introduced important changes in land law, among which the following stand out. First, it replaced the colonial concept of state domain with the concept of *tanah negara* (state land). While the former had established absolute state control, the latter was formulated in terms of state stewardship of land resources for the well-being of the population (see Slaats, 1999; Soemardjan, 1984). Second, it replaced the dual colonial system with a limited number of legally recognized rights applicable nation-wide and for all legal subjects.⁵⁷ Third, it made registration and titling of land resources compulsory, with the objective of creating security of tenure for farmers and of establishing a national land registration which clearly distinguishes between privately owned and state-owned land.⁵⁸ In BAL, all land not held under a claim or title recognized as valid is assumed to be state land. Fourth, BAL established a minimum and maximum ownership size per household. While the minimal size is two hectares, the maximum size is region-specific and depends on local conditions (available land resources, population density, soil conditions, optimal farm size, and state of agricultural technology).⁵⁹ BAL was also intended to introduce changes in the broader agrarian relations through redistributive land reform, regulation of share tenancy, pawning and rent, and reduction of absentee landownership. Last, it covered issues like intensification and agricultural credit. BAL is supported by additional government regulations, like Regulation No. 10, 1961 about land registration and No. 224, 1961 specifying rules for the redistribution of land exceeding maximum ownership and payment of compensation (see MacAndrews, 1986a).

BAL has been criticized for being an ideological hodgepodge, ‘a volatile brew of mutually antagonistic aims, legal principles and ideologies’ (Haverfield, 1999: 42). This is especially the case with the way the concept of adat is used in BAL. Adat by definition derives its meaning and legitimacy from a diversity of local contexts. Turned into an ideological umbrella concept for national unification in BAL, it has lost its meaning. It was paid lip-service to because it was ideologically useful, but ignored as a factor in Indonesian society and subordinated to key elements of state ideology like ‘Indonesian socialism’, ‘the social function of land’, ‘national unity and stability’, and ‘national development’ (Haverfield, 1999; Slaats, 1999, 2000). Subordinated to state ideology, customary law was primarily used ‘to find the underlying adat bases of a unitary legal system’ (Hooker, 1978: 27). Rather than to customary tenure, BAL gives primacy to a western concept of land rights (individual, unlimited, transferable, registrable, mortgageable). Similarly, the adat concept of *ulayat*, retained in BAL but elevated to ‘national *ulayat*’ was abused at all levels

⁵⁵ BAL clearly reflects the socialist ideology that prevailed in the pre-New Order ‘socialist republic of Indonesia’. For early criticism and an impressive account of this period, see Walinsky, 1977.

⁵⁶ See Article 5 of BAL on the position of adat law.

⁵⁷ Right of ownership (*hak milik*), right of exploitation (*hak guna usaha*), right of building (*hak guna bangunan*), right of use (*hak pakai*), right of lease (*hak sewa*), right of clearing (*membuka tanah*), right of collection of forest produce (*memungut hasil hutan*).

⁵⁸ BAL does not give a full ownership guarantee on titled land. MacAndrews (1986: 27-28) stresses that ‘the issuance of certificates of rights of land is only strong (but not final) evidence of ownership’.

⁵⁹ Thus, in the classification of areas according to population density, Luwu and Tana Toraja were classified as *tidak padat* (not densely populated; up to 50 people per km²), allowing for a maximum ownership size of 15 hectares of sawah or 20 hectares of rain-fed land (Departemen Dalam Negeri, 1981).

(Haverfield, 1999). A related point is the state stewardship over land resources as reflected in the concept of state land. The Indonesian concept of state land is based on the ideological premise of the state as representative of the welfare and developmental interests of the people as a whole (contrary to the colonial conception of land owned by the state, as implied by the Domain Declaration). The vagueness and inconsistency of BAL (e.g. on the point of customary rights), but especially the arbitrary use of the state land concept to legitimize the New Order agenda for national development (in the same way as the legal process as a whole in the New Order state was subordinated to state ideology and executive powers in the name of development), have caused much conflict and uncertainty about the character and scope of rights to land (F. and K. von Benda-Beckmann, 1999; Haverfield, 1999; Lindsey, 1999a, 1999b; Slaats, 1999, 2000).⁶⁰

Land reform, registration and titling: a conflictive and problematic history

The history of land reform in Indonesia is inextricably related to vigorous political struggle and instability in rural Java and Bali in the sixties. Large landowners could easily avoid redistribution of their land by making use of a number of weaknesses in the law.⁶¹ From 1963 the Indonesian Communist Party PKI had made redistributive land reform a key issue in its political programme. Its strategy of 'unilateral action' (*aksi sepihak*), aiming at the enforcement of land redistribution as enacted in BAL, led to violent confrontations between followers of PKI and landowning opponents of land reform. PKI was blamed for the 1965 coup, which marked the downfall of president Soekarno and brought to power president Suharto. Especially on Java and Bali, members of Muslim groups and political parties, landowning elites and the military took a cruel revenge on (alleged) members and supporters of PKI in a massacre leading to the complete elimination of this party as a political force (see Huizer, 1972; MacAndrews, 1986a; Mortimer, 1972; Tjondronegoro, 1972; Utrecht, 1969). Being associated with leftist politics, land reform was put in cold storage. Land redistribution as a development strategy was discarded; transmigration became the New Order substitute for land reform (see MacAndrews, 1986a; Mubyarto and Soetrisno, 1989).

Another major objective of BAL was the creation of security of tenure for the large rural population of Indonesia (Departemen Dalam Negeri, 1981).⁶² However, BAL has not been very successful in systematically increasing the percentage of registered and titled land. Though BAL has made land registration and titling mandatory, it is estimated that only seven to eight percent of Indonesian land resources had been registered until the mid-nineties. In practice, land registration and titling were an option for the happy few that could afford it and had compelling reasons for seeking a title, like project developers and large landowners. So-called 'sporadic registration' was inaccessible for economically weak groups like small farmers. In addition, geographical and bureaucratic distance, corruption, long and arbitrary procedures, uncertainty about their outcome, and a strong adherence to local conceptions of land rights as a source of security of tenure and legitimacy are not an incentive for state titling. From 1981, the PRONA programme (*Proyek Operasi Nasional Agraria*) attempted to bring land titling within reach of rural smallholders at reduced costs.⁶³ The number of PRONA registrations remained low; the programme had a very small impact on registration (BAPPENAS/BPN, 2000; MacAndrews, 1986a; Slaats, 1999, 2000).

In the course of the nineties, new approaches to land titling were introduced that incorporated thinking about the continued discrepancy between 'modern' and 'traditional' rights to land. The

⁶⁰ For land appropriation and compensation for mining in Soroako, Luwu, see Robinson, 1986.

⁶¹ Ladejinsky was very critical about BAL. He states that 'despite the stated and implied promises of land to the tiller, the enabling document is shot through with conservative safeguards in order to prevent any significant redistribution of land' (see Walinsky, 1977: 298).

⁶² See BAL article 19, clause 1 (registration of landownership to guarantee security of tenure).

⁶³ Letter of Decision of the Ministry of the Interior No. 189, 1981 about PRONA.

ILAP (Ind. PAP) project, started in 1995, reflects important changes in thinking about customary land rights and processes of land registration and management.⁶⁴ One of the recommendations emerging from the project is to replace BAL with a new land law which 'should expand ownership opportunities and allow communities to own land' (BAPPENAS/BPN, 2000).⁶⁵ Developments in Indonesia after the New Order show an upsurge of public discussion about customary law. It is beyond doubt that adat, in whatever form or interpretation from whatever source of legitimacy, continues to be an important point of reference for people. Land tenure has, of course, radically changed during the last century. Initially abundant land resources are now fully (or over-) exploited, population densities have dramatically increased, as have mobility, market influences and non-agricultural uses of land. Thus, in many areas communal rights have partly or wholly faded away, to be replaced by more individualized conceptions of land rights. However, as Slaats (2000) remarks, these processes should not be mistaken for a definitive trend towards acceptance of state regulation as the sole or even primary point of legal orientation. Such processes of individualization that have come with transformations of customary systems under the influence of rapid socio-economic development, for instance, can also take place outside a state-oriented framework of land rights.

Notwithstanding the integrative ambitions of BAL, to this day Indonesia has remained a society characterized by legal pluralism.⁶⁶ This plurality was edited out of BAL in several ways. First, BAL left no room for recognition of the diversity of customary legal systems and their renderings and interpretations. Second, for the sake of ideology, adat was abstracted from the contexts that give the concept its meaning. Third, no attention was paid to the real-life messiness of the relationships between legal systems, especially the adapted, transformed and hybrid character of customary principles, uses and practices existing as 'local law' (F. von Benda-Beckmann et al., 1996) or 'unnamed law' (F. von Benda-Beckmann, 1992). Problems of regulation (e.g. in land registration) caused by the *de facto* denial of the existence of a plurality of normative-legal systems and sources of regulation of land tenure tend to be simply blamed on adat. Thus, MacAndrews recognizes the legally plural character of land tenure but analyzes it in a narrow framework of rationalization and formalization. He states that 'although the BAL ... placed the adat under the modern legal system, the still strong hold of traditional adat in many parts of the country is a considerable hindrance to development' (1986a: 78).⁶⁷ Haverfield (1999) more realistically concludes that, in a society where local social and legal practices are still important, land titling by the state remains rather irrelevant compared to the various forms of 'living law' prevailing in local societies.

Changing land tenure in Luwu

Detailed accounts of the history of rights to land and other resources in Luwu are scarce. According to Pronk (1935), both in the plain and the mountains local settlements exerted a right of avail over land. The local leader or customary functionary exerted this right. Centres of power above the local

⁶⁴ Proyek Administrasi Pertanahan; Land Administration Project; a World Bank-sponsored project aiming at a more efficient system of (large-scale) land registration; see Haverfield, 1999; Slaats, 1999, 2000.

⁶⁵ Haverfield pleads for 'critical pluralism', giving customary tenure systems voice by making them visible in the national legal system. In this respect, she also pleads for collective registration. In 1999, a new Ministerial Regulation recognizing village land was issued (Peraturan Menteri Agraria No. 5, 1999; see F. and K. von Benda-Beckmann, 2001)

⁶⁶ For the plural character of Indonesian land law, see Fitzpartrick, 1999; Haverfield, 1999; Hooker, 1978; Slaats, 1994, 1999, 2000; F. and K. von Benda-Beckmann, 1999.

⁶⁷ For critical remarks about this approach to adat as a 'hindrance to development', see F. von Benda-Beckmann, 1993; Haverfield, 1999.

community but subordinate to the kingdom (*lili*) held higher-level rights of avail. However, this was not a simple relationship of superiority and inferiority: minimal regulation, protection, and conflict resolution rather than pervasive intervention in local affairs seem to have formed the basis of these relationships.⁶⁸ On the condition of informing the local leader, inhabitants had the right to clear and cultivate land over which the right of avail was exerted. Sometimes, outsiders could also clear and work land there. Usually, so-called ‘recognition’ (Du. *recognitie*) in kind (usually sheaves of paddy) had to be paid to the local ruler. Rights to land acquired in this way by locals were not ‘total’ ownership rights but circumscribed in several ways. First, agricultural practices were subjected to the planting instructions of traditional ritual specialists like the *bunga’ lalan*.⁶⁹ Second, the right to land was recognized only to the extent that it was actually used. Once this was no longer the case, a variety of rules applied, depending, among others, on the type of land (irrigated fields, forest clearings, gardens) (Pronk, 1935).

Rather than simply being ‘communal land’, a great diversity of ‘indigenous property rights’ to land existed for a variety of uses (a.o. cutting, hunting and gathering, pasture). Such rights could either have a more individual, a kin group (*pusaka*), or a communal character, and were dynamic and changing rather than static.⁷⁰ Individual rights could, for instance, revert into rights with a more communal character. While, according to Pronk, the first and second could be rented out, pawned and transferred in several ways (including sale), the third type of rights typically involved a managerial function of the local leader or adat functionary, with specific rights and responsibilities for both the functionary and the community members.⁷¹ This land could not be alienated. However, Pronk notices the increasing importance of practices of this communal land being turned into *pusaka* land by the local leaders, especially under the influence of the Dutch administration. Such distinctions also applied to the kingdom as a whole. As to irrigated fields, a distinction should be made between *galung datu* (land owned by the datu) and *galung adatue / galung datui* (land owned by the kingdom). While the former was owned by the datu, and hence alienable and transferable, the latter was not privately owned. Other (forested) land claimed by the datu (*ongko datu*) was often used for deer hunting by the royal elites.

The demise of the Luwu kingdom as an autonomous polity, the increasing extent to which the national state and its laws and agencies penetrated into Luwu, and the growing importance of land resources for various economic activities have radically changed land tenure. Land was increasingly claimed for land settlement, private enterprise, and the state. Land rights were conceptualized in new ways and given legitimacy by reference to state law. However, such transformations are far

⁶⁸ Similarly, an earlier report states that the relationships between datu and hadat members are ‘aristocratic’, and those between hadat members and district or kampung heads ‘democratic’ (Militaire Memoriën, 1923). Colonial intervention had probably made these relationships more hierarchic. Thus, the same report states that from 1922 the (irrigated) fields of the hadat members (*arajang*) were worked by *corvée* labour ‘in order to give the higher heads more standing through property. If all fields are worked, the income generated is quite substantial’ (idem: 43).

⁶⁹ Lit. ‘opener of the way’. The agricultural function of the *bunga’ lalan* shows many similarities with the function of the *pekaseh* in Balinese subak (see below and chapters 9 and 10). In the nineties, the district Agricultural Service (PERTANIAN) referred to the *bunga’ lalan* in its agricultural programmes and attempts to increase planting discipline.

⁷⁰ The bilateral kinship system and mixed settlement patterns associated with it are also an important factor.

⁷¹ The communal ‘right of avail’ does not seem to have been very strong. Local claims and rights to land (*ongko, pasang tedong*) seem to have been rather closely associated with the ruling elites, who more or less regarded the land as family property. As land registration and land tax payment were introduced, such rights came under increasing pressure. Sometimes, large stretches of such land, often many square kilometres, were filled up with settler groups with whom customary or kinship relations existed. Such solutions were preferred to losing the land to transmigration or other uses by outside intervention (interview Andi Pangerang, Palopo).

from unproblematic. Though exact data are lacking, Luwu is no exception to the overall picture of land registration and titling in Indonesia. The emergence of 'modern' property rights in the form of individual ownership covered by a state-issued title document was assumed to be part and parcel of more general processes of agrarian transformation associated with intensification of agricultural production, irrigation development and transmigration. In the North Luwu plain, the transmigration programme was a major source of titled land. In transmigration projects, land titles were often distributed in a routine fashion, without attention to the actual location and boundaries of the land, to possible conflicting claims on the land, or other differences between planned allocation and actual use of the land. Aside from transmigration, the PRONA programme was the first effort in the field of land titling on a larger scale. In the nineties, large-scale land registration and titling were implemented in the Kalaena area in the framework of the Provincial Irrigated Agriculture Development Project (PIADP), financed by the Asian Development Bank.⁷² Usually, titling in Luwu was implemented on a project basis (with foreign or Indonesian funding), with a strong focus on quantitative targets (in terms of number of land titles distributed within a certain period).

4. Diversity in uniformity: irrigation development in Luwu

Irrigation development in Indonesia

In many parts of Indonesia, irrigated agriculture has a long pre-colonial history. On islands like Java, Bali, Sumatra and Sulawesi, irrigated rice agriculture had been known since a long time and often formed an important economic basis for local polities. However, in the colonial period western engineering approaches to irrigation increasingly influenced such local practices. Until the late colonial period, Dutch interventions in irrigation were mainly concentrated on Java and Bali. Later, attention shifted to regions like Luwu, and were combined with colonization. Indonesian approaches were a continuation of earlier colonial practices. Massive donor support to the sector during the New Order strengthened this trend. In the late sixties, large sums of foreign donor funding for irrigation became available.⁷³ After an initial focus on rehabilitation of existing systems, gradually the focus shifted from rehabilitation to expansion of the irrigated area through the construction of new systems or expansion of existing ones.⁷⁴ New Order irrigation development was a project of modernization, the exclusive business of engineers. Preoccupation with centralized control, suppression of local initiative and autonomy, and the strong economic interests related to construction-biased approaches to irrigation have proved not very conducive to the development of strong local organization and initiative outside the technical and organizational frameworks determined by the irrigation bureaucracy. Low performance, serious operation and maintenance problems, degrading infrastructure, and continued dependence on rehabilitation projects characterized many systems in the seventies and after (see Booth, 1977a, 1977b; Bruns, 2003; ter Hofstede and van Santbrink, 1979; Horst, 1996a, 1996b, 1998; Ravesteijn, 1997).

⁷² Not to be confused with the Pompengan Integrated Area Development Project (also PIADP), which is the subject of part of this book (chapters 4 to 6).

⁷³ The New Order period in Indonesian history is a clear example of the relationship between irrigation development and the wider socio-economic and political constellation of society (see Ravesteijn, 1997).

⁷⁴ Ravesteijn estimates the total expenses for water resources development in the 1969-1989 period at about \$ 6.5 billion. For the 1968-1993 period, Bruns (2003) mentions a total of \$10 billion invested in irrigation, 70% of which from external loans.

In Indonesia, irrigation systems are classified as ‘technical’ (*teknis*), ‘semi-technical’ (*semi-teknis*) or ‘simple’ (*sederhana*). This distinction, based on colonial engineering classifications, has survived until today. It classifies irrigation systems according to the degree to which (components of) a system can be measured, regulated and controlled (Oad, 2001; Schrevel, 1993).⁷⁵ A ‘technical system’ provides - at least in theory - the highest degree of technical water control (Booth, 1977a; Gany, 1993; Horst, 1996b).⁷⁶ Throughout Indonesia, systems built, rehabilitated or expanded under the responsibility of the Ministry of Public Works and based on engineering technology (‘technical’ systems) are characterized by a similar physical-technical, organizational and operational set-up.⁷⁷ Such systems typically consist of a weir and a hierarchy of primary, secondary, tertiary and quaternary canals. Off-take structures and devices for measurement and control form the division points between primary and secondary, and between secondary and tertiary canals. The section of the system below the water division gate to the tertiary canal is called the tertiary unit (TU). Inside the TU, water division boxes with flap gates regulate water flows to quaternary canals, from which water is divided to individual plots. The systems have separate canals for transport and distribution, and a separate hierarchy of drainage canals (see Schrevel, 1993).

Water Users’ Associations (WUAs)

The WUA in Indonesia

From the seventies, water users were organized in WUAs responsible for operation and maintenance at the level of the TU.⁷⁸ From the eighties, training projects for ‘participatory irrigation management’ were introduced (Ravesteijn, 1997; Salman, 1997). A 1984 presidential decree made the formation of WUAs in the TUs of Public Works irrigation systems compulsory (Schrevel, 1993). While the main system part of the canal hierarchy (weir, primary, and secondary canals including the tertiary gate and the first fifty metres of the tertiary canal) remained under responsibility of the irrigation section of Public Works, the WUA was given a key role in tertiary irrigation management. Thus, most ‘technical’ systems belong to the type of irrigation systems often referred to as ‘jointly managed’ or ‘bureaucratic-communal’ (Chambers, 1980; Coward, 1980; see Uphoff, 1986). Ideally, the WUAs created through such policies become legal entities.⁷⁹

TUs in Indonesia often cover an area between fifty and 150 hectares, depending on local conditions. The units are defined by a set of formal principles for design and use (subdivision into

⁷⁵ According to Oad (2001), the Indonesian government currently has responsibility for the management of 2.3 million hectares of ‘technical’ systems, and 900,000 hectares of ‘semi-technical’ systems. Farmer-managed systems cover some 1.6 million hectare (Oad, 2001). For the size of systems, see Bruns (2003).

⁷⁶ However, such technology choices impose strict requirements on staffing, management capacity and capabilities, and entail elaborate bureaucratic procedures. It is management-intensive, requiring frequent interaction between bureaucracy and WUA. As most systems are short of staff or other means, there is a gap between formal procedures for allocation and distribution, and actual management routines; between planned and actual use of technology for measurement and regulation of flows, and between design and operational assumptions on which WUA training is based, and operational realities (see Horst 1996b).

⁷⁷ In 2000, Public Works became the Ministry of Settlement and Regional Infrastructure (Oad, 2001).

⁷⁸ In Indonesia called P3A (Perkumpulan Petani Pemakai Air; Water Users’ Association).

⁷⁹ The legal framework pertaining to WUAs generally contains the following elements: a national basic law (‘enabling law’), which authorizes the establishment of WUAs as legal entities, contains provisions for this, and provides regulations pertaining to water fees etc.; ‘bylaws’, in which the establishment of specific WUAs as legal entities is regulated, data on the WUAs are included, and further specifications are given on organization, rights and obligations etc.; and ‘transfer agreements’ in which the transfer process for specific WUAs is arranged in greater detail (Geijer et al., 1995; Salman, 1997).

quaternary units, separated canal functions, rotational water distribution) as well as for internal organization (a WUA board with chairman, vice-chairman, secretary, treasurer; water master, etc.; prescribed administrative procedures). After the introduction and development of WUAs, system performance generally remained problematic. In 1987, the Irrigation Operation and Maintenance Policy (IOMP) was formulated in response to growing donor concerns about the Indonesian irrigation sector. This policy included the introduction of cost recovery principles and an Irrigation Service Fee (ISF). In the late nineties, the political changes in Indonesia and the growing awareness of the continuing problems in the irrigation sector led to new reforms. These reforms, formalized in Presidential Instruction No.3, 1999, should enable further devolution of rights and responsibilities for irrigation management, and empower WUAs to become viable and autonomous institutions (Bruns, 2003; Geijer, 1995; Oad, 2001; Ravesteijn, 1997; Soenarno, 1995; Vermillion et al., 2000).

Criticism of WUA development

The Indonesian WUA model has been criticized for its focus on formal organizational arrangements, routines and procedures rather than on ways of building local decision-making and management capacities, flexibility and effectiveness in coping with acute problems through 'episodic mobilization' (Bruns, 1992). Form has been mistaken for content, quantitative targets for substance. 'Participatory irrigation management' approaches associated with WUA development propagated the establishment of formal organizations that do not have the capacity to focus WUA activities on, and mobilize water users for, local management needs. WUAs are often ineffective in coping with problems of tertiary irrigation management. By stressing formal structural dimensions of local irrigation management and creating long-drawn bureaucratic procedures for reporting even the smallest problems, WUAs mainly raise transaction costs for water users (Bruns, 1992, 2003; Oad, 2001; Vermillion, 2000).

Another point of criticism concerns scope of rights and responsibilities transferred to WUAs. Rights delegated to WUAs are usually presented as (near) 'total' rights, providing farmers with *rasa milik* (sense of ownership). In practice, the bundle of rights delegated to WUAs is very limited. Until the late nineties, turnover was a top-down devolution of management tasks and responsibilities to farmers rather than a participatory process involving the empowerment of user groups and the establishment of strong local rights to water and infrastructure. According to the Indonesian constitution, water belongs to the state, like system infrastructure. WUA rights are derived and strictly circumscribed. The only right actually delegated to water users in the WUAs is the right to use a state-owned natural resource delivered to the TUs through a public irrigation system. By this lack of attention to the property rights dimensions of WUAs, the complex character of jointly managed irrigation systems was disregarded. The complex mix and interaction of public, common and private property dimensions in such systems was seen as unproblematic. Hardly any attention was paid to the interface between the main system and its public (state) property characteristics, and the WUAs with their common property characteristics. Nor to the interface between the latter and the private property dimensions of the resource as it enters the individual fields. In addition, in many irrigation systems in Indonesia, including the Kalaena system, the transfer part of the process of establishment of TUs as legal entities for tertiary has not or only partly been realized. In practice, this means that WUAs in a system like Kalaena continued to depend on the generation of funds for rehabilitation through construction projects. Thus, even under the reforms in the eighties and nineties WUA development meant, above all, a target-driven transfer of responsibilities to the WUAs rather than the empowerment of WUAs with a more complete bundle of responsibilities and rights, including those pertaining to tertiary infrastructure. The government withdrew without creating space for new local institutions. The concept of participation as used in WUA development was fully controlled and appropriated by the state, and the process of transfer itself characterized by routinization and bureaucratization (see Bruns, 2003; Meinzen-Dick, 2000; Oad, 2001; Soenarno, 1995; Vermillion, 2000).

Transmigrants as irrigators: Balinese subak in Luwu

The Balinese subak

Large-scale irrigation development in Luwu clearly shows the major trends and characteristics of irrigation development described above. However, under the influence of transmigration and regional migration, North Luwu has become a multi-ethnic society. After discussing the uniform impact of large-scale irrigation development, this part focuses on a possible source of local diversity in these systems: the Balinese subak. The subak has a long historical record: first mention of it was made nine hundred years ago (Sutawan et al., 1990; Universitas Udayana, 1975).⁸⁰ However, subak is not something that belongs to the past only. Recently Bali counted more than 1,200 subaks with a total area of 100,000 hectares (Sutawan, 1986; Sutawan et al., 1990).⁸¹ Colonial and post-colonial authors recognized the importance of subak as an institution with both secular and religious-ritual functions related to irrigated agriculture. They also stressed ‘subak autonomy’, its relative independence of other institutions, and its key role in Balinese irrigation (Korn, 1924; Lansing, 1991; Lieftrinck, 1969).⁸² Dutch administrators and engineers were interested in subak as a potential model for Javanese irrigation management (Happé, 1919, 1935; see Ravesteijn, 1997). An issue in the colonial debates of the thirties was whether to opt for a proportional or an absolute water division, the former originating from subak and the latter belonging to the domain of engineering technology (Ravesteijn, 1997; see Booth, 1977; Horst, 1994, 1996a, 1996b).

After decolonization, subak continued to draw attention, especially from anthropologists. Geertz (1959, 1967, 1972, 1980) stressed the near-total local autonomy of the ‘village republic’, of which the subak was distinguished as a ‘wet’ variant (Boon, 1977; Schulte-Nordholt, 1986).⁸³ Later, the focus shifted from exclusive attention to the subak, its organizational structure and functions, to higher levels of integration of which subaks are part. Lansing analyzed the role of agricultural rituals as ‘scheduling mechanism’, and of regional networks of water temples as ‘managers of the terrace ecosystems’ (Lansing, 1987: 327; 1991; see Barth, 1995). New functions continue to be ‘invented’ for, and projected on, subak. Thus, Sutawan (1998) pleads for the development of subak into a ‘multipurpose institution’ engaging in commercial agriculture (*agribisnis*) and environmental protection of the catchment areas in which they are located.

In legal-anthropological approaches, subak is no longer reduced to its formal properties, but more broadly analyzed in relation to actual behaviour of actors in interaction settings where subak, government agencies and development programmes meet. Subak, its constituent parts, or higher integrative levels, and its normative-legal basis can become subject to differing definitions and interpretations, and undergo important transformations. From this perspective, stale images of ‘the subak’ as a discrete, unchanging ‘traditional’ institution are criticized and placed back into the real world of living social actors. The image of subak as encompassing an area of irrigated fields served by one dam, as assumed by Geertz (1972), may well satisfy the need on the part of irrigation policy

⁸⁰ First known use of the term is in a more than 900 years old text from the Balinese kingdom of Klungkung. Probably the word derives from *seuwak* (good or just distribution of water), or implies ‘good and just behaviour’. Subak, then, refers primarily to the moral and normative roots of water distribution (Universitas Udayana, 1975).

⁸¹ See Barth, 1995; Birkelbach, 1973; FAO, 1982; Geertz, 1972, 1980; Grader, 1960; Happé, 1920; Horst, 1996a, 1996b; Jha, 2002; Korn, 1924; Lansing, 1987, 1991; Lansing and Kremer, 1993; Lieftrinck 1969; Ravesteijn, 1997; Schulte-Nordholt, 1986, 1996; Spiertz, 1991, 1992, 2000; Sutawan, 1987, 1990.

⁸² Colonial intervention required strong local organization for irrigation management, agricultural production, administration and tax collection (Korn, 1924; Lansing, 1991; Spiertz, 1989).

⁸³ As Geertz writes: ‘A subak is, first and foremost ... a kind of “wet village”, as opposed to the “dry” one in which people reside’ (1972: 27).

makers for a readily identifiable 'traditional' unit to concentrate their interventions on rather than reflecting Balinese social reality (Spiertz, 1989, 1992, 2000).⁸⁴

Important subak characteristics

A subak is a complex of between tens and hundreds of hectares of (mainly) irrigated fields. Physical boundaries (rivers, ravines), hydrological (e.g. a shared water source), and socio-political factors play an important role in determining the subak area, which often crosscuts village boundaries. Depending on local conditions, subak may be subdivided into smaller units (called *tempek* or *munduk*), and be part of larger complexes of subaks (*subakgede*).⁸⁵ At the subak level, a distinction is made between the subak administration (*prajuru*) and the membership (*krama subak*). The subak head is called *klian subak* or *pekaseh*, who is assisted by a number of other functionaries.⁸⁶ Subak leaders, priests and other functionaries are usually exempted from labour services, and may also be (partly) exempted from other contributions like *sarin tahun*, the seasonal subak tax to be paid in money or kind (Grader, 1960; Sutawan, 1986, 1987; Sutawan et al., 1990).

Subak has a wide variety of functions related to (irrigated) agriculture and religion: construction, repairs, operation and maintenance, water allocation and distribution, determination of cropping patterns, timing of agricultural activities, prevention and eradication of pests and diseases, control on the keeping of domestic animals in the rice fields, temple construction and maintenance, timing, coordination and performance of rituals, maintenance of religious purity, collection of funds, fines and other contributions, conflict solution, creation and enforcement of subak regulations, and application of sanctions. Subaks may intervene in land tenure issues and transactions, and have a savings and credit function for their members. Subak membership is associated with a bundle of rights like the right to obtain a share of water, to take part in ritual and make use of the services of a priest (*pemangku*), to elect subak leaders or be elected, and to have a say in subak affairs. Important responsibilities and obligations are labour contributions, water use in accordance with allocated shares, following planting and cropping schedules, guarding against pollution (in a religious sense) of the sawah complexes, attending meetings, and contributing to subak funds in money or kind (Barth, 1995; Birkelbach, 1973; FAO, 1982; Geertz, 1980; Jha, 2002; Lansing, 1991; Lieftrinck, 1969; Sutawan, 1986; Spiertz, 1989).⁸⁷

Subak is associated with specific irrigation technology which basically consists of the following components: a weir diverting water from a river, tunnels and aqueducts, and a hierarchy of canals connected by water division structures. Technology for inter-subak and internal water division is mainly based on the fixed proportional division of continuous water flows through wooden, stone-cement or concrete overflow weirs (*temuku*). An advantage of this method is, that the water flow is

⁸⁴ Spiertz applied this approach to the analysis of fields of interaction between subak and government programmes for rehabilitation and upgrading, operation and maintenance of irrigation systems. Here subak becomes a strategic 'resource' in processes of decision-making about financing of construction, operation and maintenance, and farmers' contributions of labour (Spiertz, 1989, 1991, 1992).

⁸⁵ The *sedahan* and *sedahan agung* functionaries used to provide a link to former Balinese centres of power. They still play a role as intermediaries between subak and government (Barth, 1995; Geertz, 1980; Grader, 1960; Lieftrinck, 1969; Spiertz, 1989).

⁸⁶ In Bali, terminology may vary considerably. Sometimes the subak head is called *pekaseh*. However, this term is also used for the (higher) institutional level encompassing various subaks, as well as for the head of this overarching arrangement. Other subak functionaries are: deputy leader (*wakil klian*), secretary (*penyarikan*), treasurer (*juru raksa*, *bendahara*), and messengers (*juru arah*). Subak ritual is performed by a priest (*pemangku*) (Barth, 1995; Birkelbach, 1973; Geertz, 1980; Lieftrinck, 1969; Sutawan, 1986).

⁸⁷ Sutawan (1990) defines subaks as a socio-religious irrigation association.

divided in a direction parallel to the current.⁸⁸ The only variable being the width of the proportional openings in the structure, water division through these structures is relatively transparent and can be easily controlled by farmers. Water division between subaks and inside the subak is the outcome of the process of the more or less proportional determination of water allocation based on area irrigated (Horst, 1996a, 1996b; Liefrinck, 1969; Spiertz 1989, Sutawan, 1986, 1987).

Subak and 'development'

From the sixties, subak was discovered by 'development', and often praised for its effective irrigation management (FAO, 1982; Oad, 2001; Soenarno, 1995). Government programmes for the introduction of high yielding varieties and related technology for the intensification of rice production increasingly influenced subak. Often with radical consequences for the agricultural, technical and the social-institutional dimensions of these systems (Birkelbach, 1973; FAO, 1982; Horst, 1996a; Lansing, 1987, 1991; Soenarno, 1995; Spiertz, 1989, 1991; Sutawan, 1986, 1987; Sutawan et al., 1990). As funding for the irrigation sector increased, programmes for 'upgrading' and 'rehabilitation' of infrastructure and for TU development penetrated the subaks. Such programmes did not only entail physical (re-)construction but also interventions in the normative-legal and organizational dimensions of subak (e.g. reallocation of rights and responsibilities, new definitions of water rights). Balinese irrigation technology was replaced by engineering technology that was not based on historically developed and negotiated shares reflected in the proportional division structures, but on irrigation efficiency and crop water requirements. In an analysis of the impact of Public Works engineering interventions on the subak, Horst (1996a) shows that such changes in the subak were often not accepted and led to conflicts between farmers and the programme. Relatively simple subak division structures were replaced by intransparent engineering division structures. The system of proportional distribution combined with determination of turns and rotations, planting dates and cropping patterns based on locally available knowledge and experience was replaced by a labour and (engineering) knowledge-intensive system of data collection (water requirements), measurements, and (too) frequent adjustment of gates, all in the hands of the irrigation bureaucracy. Often, the ultimate outcome was a forced project shift back from 'modern' engineering technology to 'traditional' subak technology (Horst, 1996a).

Little research has been done on subak outside Bali. One important exception is the study by Vermillion (1986, 2000) on Balinese irrigators in Sulawesi. As Vermillion shows, irrigation practices are not determined by formal rules, but essentially involve processes of social interaction in which actualized rights to water are evolving. Norms, rules and regulations become 'resources' in processes of claim-making, negotiation, competition, testing, adjustment and assertion between users on the basis of 'justifying criteria'. Vermillion distinguishes between 'first approximation' (allocation based on general characteristics like design and proportionality of land size) and 'second approximations' (changes in water allocation that are the outcome of such interactions between water users, and contribute to achieving greater equity in water distribution). Paying due attention to the relationship between rules and formal rights on one hand, and actual behaviour and actualized rights on the other, Vermillion stands very close to legal-anthropological approaches to the study of subak and Balinese conceptualizations of water rights. However, his 'sociotechnical approach' basically comes down to a stress on the importance of both rather than a deeper investigation into sociotechnical complexes (see Mollinga, 1998). Further, his focus on dichotomies like 'rule' and 'rhetoric', 'formal' and 'informal', 'legal' and 'ad-hoc' is a bit confusing.

⁸⁸ This in contrast to division structures often used in engineering technology in Public Works systems in Indonesia, where water is divided in a direction perpendicular to the flow direction. There is evidence that acceptance of this method by Balinese farmers is low (Horst, 1996a; Sutawan, 1987; see also chapter 10).

5. Land and water in Luwu: questions for research

A history of highland-lowland migration: questions about resources, identity and boundaries

When I was working in Luwu in the early nineties, the sensitive character of highland-lowland relationships, especially with regard to migration and control of land, had struck me. In their stories about the recent history of Toraja migration to Luwu, several people in Luwu and Tana Toraja had stressed the importance of the factor of identity in relation to this migration. They also stressed this factor in their accounts of communal violence in lowland Luwu, though such allegations were taboo in New Order Indonesia. In public, people talked about mass violence in Luwu as if it was a kind of natural disaster. This had attracted my attention to the role of ethnic identity in highland-lowland migration. I posed myself the challenging question in what way changing conceptions of identity in the region were related to migration from the highlands to the lowland, and to agendas for political-administrative change. Finding an answer to this question required an analysis of regional migration of Toraja farmers to lowland Luwu as one dimension of more encompassing processes of socio-political, cultural and administrative change and re-orientation in the region. While Bigalke (1981) has analyzed the issue of emergence of Toraja identity and the political ideal of Greater Toraja, their possible impact on post-colonial processes and relationships have remained unexplored.

The main question guiding this part of the research was the following: is there a relationship between, on the one hand, changing conceptions of identity in the highlands and the actual or imagined administrative boundaries based on them, and strategies for gaining access to land resources through massive migration from the highlands to lowland Luwu on the other?

The case of PIADP: agency, legal complexity and coping with interventions in land tenure

The case of land redistribution in PIADP is interesting because it was one of the few cases of land redistribution based on BAL in New Order Indonesia. It is also illustrative of mainstream approaches to intervention in land tenure: as a basically technical and administrative operation to reform local tenure by a combination of state law and donor-created 'project law'. It was *not* seen as involving externally imposed changes in complex social relationships to land, as a process given different meanings and interpretations, and involving differences of interest and conflicts between various actors. It also showed the main bias of most land tenure interventions: the effectiveness of land law as an instrument of control of land tenure was taken for granted, and so was the surplus value of registration and titling in terms of tenure security. Further, the case illustrates the crucial role of human agency in determining the fate of state attempts at intervention in land tenure. Local farmers were classified as 'beneficiary' or 'non-beneficiary', and labelled as 'cooperative' or 'non-cooperative'. People affected were assumed to be passively accepting project regulation and behave accordingly. However, as the case will show, the gap between the ambition of bureaucratic-legal regulation and real-life human behaviour remained unbridgeable. At least in part, that behaviour was based on local normative conceptions of rights to land.

The complex history of project intervention, especially its ambitions of legal regulation, raised several questions about its long-term impact on tenure security. The research on (former) PIADP explores the ways in which various actors have coped with the complexities, tensions and conflicts caused by this project. The main questions guiding this exploration of the long-term effects of socio-legal engineering in PIADP were the following: which version of definitions of land rights has won in the long term: local conceptions, or rights to land as redefined and reallocated in the

framework of PIADP? To what extent, and in what ways, did project decision-making on land tenure influence later land tenure in the former PIADP area? If project intervention has added another definitional layer of rights, how do the various actors involved cope with this situation of legal complexity? If conflicts occur, how are they solved? Which persons, administrative units or agencies play a role in conflict solution? What is the role of legal institutions in conflict solution?

Settlement of Balinese transmigrants in Luwu: caught between subak and WUA

Within a more general explorative research on the role of land and water in Kertoraharjo, I focus here on the part of this study in which I analyze the role of subak in local irrigation management. In Bali, the subak is, of course, 'indigenous' and well established. In contrast, Balinese transmigrants in Kalaena settled in the planned command area of a Public Works irrigation system to be constructed in the framework of a large-scale regional development programme. Research in a settlement outside Bali was a good opportunity to gain insight into the dynamics of a 'traditional' irrigators' institution like subak in a new, non-Balinese irrigation development setting. The general research objective was, therefore, to analyze the articulations between the technical, normative-legal, and organizational arrangements and irrigation practices associated with the WUAs of a modern Public Works system on the one hand, and those belonging to Balinese subak on the other. Rather than starting from the a-priori assumption that certain relationships will have developed between people, water and technology on the basis of the blueprints of state-initiated irrigation development, I have made the character and quality of these relationships - of the forms of resource exploitation and management actually found - the major research issue.

The main questions for this research theme were: what is the role of subak and WUAs in tertiary irrigation management in TUs with a Balinese farmer population? To what extent are technology, normative, cognitive and organizational arrangements and practices of local irrigation management based on subak or engineering approaches, or hybrid forms of these? What was the impact of the introduction of WUAs on subak, and of the use of subak-derived institutional elements on WUAs? What does this mean for processes of sociotechnical stabilization in the TUs concerned? How do Balinese farmers cope with technical, normative-legal and organizational complexities in their daily irrigation management activities? What place is accorded to the specifically Balinese ritual-religious dimensions of irrigated agriculture in a system characterized by more restricted definitions of irrigation management? This research on irrigation management is embedded in a more general exploration of Kertoraharjo as a Balinese settler society in Luwu.

Some remarks on methodology

As can be seen from the short description of research themes in the introduction to this book and from the questions formulated here, I analyze different processes of societal transformation related to the use and regulation of land and water in different settings. The combination of these themes into one research project was, at least partly, the outcome of the matching of priorities of the larger research programme with those I brought in myself. What emerged from that interaction was a multi-sited research project in which all kinds of subtle linkages between the three case study themes, as well as between micro-, meso- and macro-levels became visible.

Intensive research on the case study themes mentioned above required three quite different combinations of approaches and methodologies, usually of a qualitative kind. Research for the first case study was not 'localized' in the first place. Tracing and understanding the possible links

between access to land, emergent identity, and the changing relationships between identifications and spatial boundaries involved a large number of in-depth interviews with people in Luwu, Tana Toraja, Makassar, Jakarta and other places. These interviews gave me the opportunity to explore issues, compare different readings of the same issues, or confront actors with the views of others. This research topic also required a search for archival sources on regional history.

Research on the long-term impact of land reform and settlement in PIADP on tenure security required a more localized and geographically focused kind of research. However, research on the case was not limited by the spatial boundaries of a former development project. It crucially transcends these project boundaries into the domains of consultants, government agencies, administrators at various levels, and court procedures. In this respect, my double role as former key project actor and researcher cannot remain unmentioned. Being the author of the ethnographic 'other's' reality - and most of us end up that way - is tricky enough in itself. However, my double role as former key actor and researcher on the effects of the PIADP land reform and settlement programme, which gives me the opportunity to construct a final account of it, is at least as tricky. I have based my account of the PIADP period on project historical documents, my own 'field accounts', and reports of discussions and other working experiences of the project period. I have tried not to let other considerations slip in than those that guided my counterparts and me on our slippery path between 1989 and 1992. In this account, therefore, I have kept my own presence rather low profile and, I hope, modest.⁸⁹ I let the empirical data about the long-term impact of PIADP on land tenure speak, rather than producing hindsight judgements and wisdom from the god-like position of the former project actor having done research on the effects of activities he has been involved in himself. Additional research on post-project developments involved field research in the former project area among the people affected by PIADP, as well as among administrators, former project officials and people otherwise involved. The sensitive character of the land tenure issues made this part of the research quite difficult. The fact that I had been an actor in the project myself proved a distinct advantage in many research situations, but a serious constraint in others.

The case study on the role of land and water in a Balinese transmigrant settlement is primarily based on village-level research. However, the scope of the study is much wider, if only because it focuses on processes like migration, integration and adaptation that have a basically relational character. Attention to these processes, for instance in local irrigation management, required a much broader perspective that transcends the village boundaries of 'traditional' anthropological research. Thus, research on Balinese settlement involved a combination of methods: extended case method, participant observation, semi-structured in-depth interviews (including interviews with higher-level administrators, officials, and inhabitants of various other villages in the Kalaena area through which I traced the higher-level dimensions of the research), and a village census.

Contrary to anthropological tradition, I did not try to hide the exact locations of the research by changing place names. In the first case, there is not even a geographically bounded location but a variety of people interviewed to give their account of the dimensions of regional history researched. People interviewed are collectively mentioned in one of the footnotes to the chapter, and also for information not considered to be sensitive. Some people chose to be mentioned explicitly whatever they said, others chose not to be mentioned in relation to any specific remarks or citations at all. Such requests were, of course, honoured. In the case studies on PIADP and Balinese settlement in Kertoraharjo, all names of persons cited in the text have been changed into fictive names.

⁸⁹ At another occasion, we have engaged in a more critical reflection on our own roles in PIADP. We concluded that our optimism about the outcome of extended project intervention was unwarranted. Caught in our own moral judgements about the land reform programme and basing views of what should be done on specific project 'stories', we had in the end fallen victim to the same 'cycles of optimism' that characterize many project interventions (see Quarles van Ufford and Roth, 2003).

***Lebensraum* in Luwu: emergent identity, migration and access to land**

Rantepao, Makale and Poso
 Rongkong, Mamasa and Galumpang
 All will be united into one
 The Toraja people will be unified
 Let us all become one
 Create a Greater Toraja
 All agreeing, all becoming one
 To build a Greater Toraja
 (*Toraja Raya* song)¹

1. Resources, identity and boundaries

In 1999, demonstrations demanding the formation of *Tana Luwu* or Luwu Raya Province were held in Palopo.² According to sources cited in the Luwu weekly *Sawerigading Pos*, this province should encompass the districts of Luwu, Luwu Utara and Tana Toraja because ‘these three districts are still one from a cultural-historical point of view. Further, geographically the mentioned districts were once united in the kingdom of Luwu.’ The demographic situation and the natural and human resource potential in the area would also support the formation of this province. Recently, these ideas were given further political shape by the formation in Makassar of a Committee for Luwu Raya Province.³ A declaration about the formation of Luwu Raya followed in Jakarta on 31 March 2001. In the statement, Tana Toraja, Luwu and Luwu Utara Districts are explicitly mentioned as part of this future province. It is argued that the formation of the province had already been approved of in principle by president Soekarno on 23 February 1963.⁴ According to a spokesman of the movement, the province would possess the ideal combination of natural resources (*sumber daya alam*; SDA) and human resources (*sumber daya manusia*; SDM).⁵ Apart from political and

¹ Greater Toraja (Du. *Grooter Toradja*); sung by a lowland Luwu inhabitant migrated from the highlands. Composed as a march and meant to propagate Greater Toraja, it remained popular until the sixties, when the process of formation of administrative units was completed and hopes for Greater Toraja lost.

² The Land of Luwu; Greater Luwu.

³ *Sawerigading Pos* 1-11-1999; Kompas Cyber Media 26-2-2001.

⁴ Media Indonesia on line 1-4-2001. The weekly *Tempo* gives another picture of the plans for Luwu Raya. It mentions five initiatives for provincial autonomy in South Sulawesi, including Luwu Raya, encompassing the pre-1999 area of Luwu District, but not Tana Toraja (*Tempo Interaktif* 28-4-2001).

⁵ *Suara Pembaruan Daily Online* 14-12-2001

economic arguments, socio-cultural arguments support the demand for Luwu Raya. The spokesman stresses specific Luwu ethnic and cultural values, and the need to protect them.⁶ In another account that stresses Luwu identity, a spokesman of the movement is cited stating that ‘from a socio-cultural point of view, the people of Luwu are indeed disappointed with Sulawesi Selatan’.⁷

The issues raised here - political-administrative boundaries, human and natural resources, and socio-cultural identity - have an interesting story to tell about one dimension of the history of land use in Luwu: the massive migration of farmers from current Tana Toraja and highland Luwu to lowland Luwu with its abundant land resources. Land in Luwu was a major pull factor for this migration, as it had been for Dutch colonization and was to become for transmigration later. Contrary to transmigration, regional migration was not state-planned but it was not wholly spontaneous either. Preceding the transmigration programme, it sometimes even competed with land allocation plans for the latter. Because of its massive and uncontrollable character, regional migration became an extremely sensitive issue in Luwu politics and society.

As I will show in this chapter, this regional migration cannot be understood solely in terms of demographic and economic push and pull factors. It should be analyzed and understood in the context of wider processes of social and political-administrative change in the region, and of the emergence of a new identity among the populations of current Tana Toraja and highland Luwu. The roots of this identity can be traced to the first decades of the last century. There is evidence that massive post-colonial Toraja migration to lowland Luwu is somehow related to earlier missionary and colonial discourses, especially the ideal of creating Greater Toraja, uniting all Christianized highland peoples not only in a cultural-religious sense but also in a political-administrative sense. A distant ideal, but it was there nevertheless. Toraja identity, as it was perceived among educated Christians in particular, was not restricted geographically to current Tana Toraja District, or demographically to its inhabitants.

The ideal of Greater Toraja did not disappear after independence. Rather, under the influence of socio-political changes in the region in the forties and fifties it was imbued with new meaning and urgency, finding its way into regional politics. Called ‘Toraja Raya’, it continued to reflect this newborn Toraja identity. Under the specific socio-political conditions of the early post-colonial period, it became the ideological foundation of an expansive Toraja *Lebensraum* movement, as some elderly Toraja people formerly engaged in regional politics referred to it in a combination of German and Bahasa Indonesia.⁸ Stressing Toraja identity, it also represented growing ambitions of political expansion and the felt need to actively resist and redress the social and political subordination of highland people in Islamic and Bugis-influenced South Sulawesi. It no longer referred exclusively to the colonial project of unification of the various mountain peoples classified as ‘Toraja’ during the colonial period, but also came to be associated with the large-scale migration of sections of the highland population to lowland Luwu.

In this chapter I analyze this complex of emergence of Toraja identity, expansion through migration, and struggle for new political-administrative boundaries.⁹ The second section focuses on

⁶ Kompas News 26-2-2001

⁷ Tempo Interaktif 28-4-2001.

⁸ Usually the German term was used, sometimes the Indonesian term (*ruang hidup*) or the German term in combination with Indonesian for movement (*gerakan Lebensraum*).

⁹ In the framework of research on these aspects of regional history the following people were interviewed in Indonesia: Andi Achmad Opu To Addiluwu, Palopo/Makassar; Andi Baso Rachim, Makassar; S. Danduru, Buntao; Y. Duma, Makale; J. van Empel, Makassar; P.S. Gasong, Seriti; S. Kapoa, Margolembo; Th. Kobong, Jakarta; Kombong Pong Sitanan, Palopo; F. Lande, Rantepao; P.D. Latanna, Jakarta; Y. Lebang, Rantepao; S. Lumeno, Palopo; Z.J. Ngelow, Makassar; D. Palamba, Makale; M. Palentek, Rantepao; Andi Antong Pangerang, Palopo/Makassar; Herman Parimo, Kasintuwu/Minah; D. Rantetullung, Palopo; F. Ratu,

the colonial roots of Toraja identity and its expression in the political ideal of Greater Toraja, consisting of all highland population groups in southern and central Sulawesi classified as ‘Toraja’. In section 3, I discuss the continued political relevance and new meaning of the concept in the post-colonial period, with a focus on migration. In section 4, I trace the Toraja struggle for new political-administrative boundaries in the fifties of last century. Section 5 discusses further struggle with the complex relationships between identity, boundaries and resources in the sixties: the Makula agreement about migration from Tana Toraja to Luwu, and the LUTAT movement for establishing a province comprising Luwu and Tana Toraja. This struggle for a province, frozen in the New Order period, re-emerged in the recent crisis. In section 6 I will present a short conclusion.¹⁰

2. The colonial construction of Toraja identity

The missionary roots of Greater Toraja

In chapter 2, I have sketched the general background of the arrival of colonial rule and mission in Sulawesi. One of the candidates for starting permanent missionary activities in the highlands was the Dutch Reformed Mission (GZB; see chapter 2). Established in the Netherlands in 1901, it had its own funds to contribute to missionary work. In 1912, GZB received permission to engage in missionary activities in the Sa’dan highlands. In GZB, a more or less similar view of the relationship between government and church existed as in the Poso mission in central Sulawesi, where Dutch missionary activity had started in 1892. Though sometimes critical of certain aspects of colonial policy, ‘colonial rule was taken for granted. Mission and government were generally considered natural allies in the struggle against the common enemy, Islam’ (van den End, 1985: 45; my translation).¹¹ In 1914 the colonial government gave GZB access to the western part of the Division of Luwu (Subdivisions Makale and Rantepao in current Tana Toraja District, and Palopo and Masamba in current Luwu District).¹² The coastal parts had since long been under Islamic influence while the highlands had a mainly animist population (van den End, 1985; Pakan, 1977). In the following decades, much missionary effort was directed at the boundary areas between highland and lowland, where Christian and Islamic missionaries were engaged in fierce competition for conversion of the population. Here the ‘buffer’ against Islam was to be established (Bigalke, 1981; van den End, 1985; Kobong, 1989; Plaisier, 1993; Waterson, 1987). Thus, the linguist-missionary van der Veen wrote in 1917 about the Rante Balla region in highland Luwu: ‘as to missionary work,

Palopo; A. Rumpa, Makale; J. Salubongga, Rantepao; U. Salurapa, Rantepao; S. Sampe, Rantepao; J. Sarira, Rantepao; L. Sombolinggi, Madandan; W.P. Sombolinggi, Sangalla; P. Sumbung, Jakarta; S.D. Tallulembang, Rantepao; J.K. Tumakaka, Jakarta; in the Netherlands: J. van Schie, Leiden; Th. van den End, Deventer. For privacy reasons the exact source of citations presented in this chapter is not always mentioned, especially where sensitive issues are involved.

¹⁰ The chapter is partly based on earlier writing on Toraja identity and migration to Luwu (Roth, 2003), and on local manifestations of the Indonesian crisis in Luwu (Roth, 2002).

¹¹ There was not always consistency in the relationship between government and mission. The government saw the mission as a political ally, but also feared it as a potential source of political unrest (Plaisier, 1993).

¹² After a short period of competition for access to the highlands between GZB and the government-sponsored Indies Church (Du. *Indische Kerk*). This competition had, above all, a financial background. Van den End: ‘Important in this controversy was, that the government appreciated the Indische Kerk to form a buffer against penetrating Islam as long as the mission was not able to do so, but did not want the government-financed IK to perform missionary work on a permanent basis’ (1985:106, note 1; see also Plaisier, 1993).

Rante Balla promises much for the future It is good that a firm stronghold is built there against Islam' (van den End, 1985: 158; my translation).

Colonial and missionary ambitions did not stop at this preemptive strategy of Christianization. Mission and colonial government alike hoped that this policy would ultimately result in the creation of a united Christian highland Sulawesi from which Islam would have been completely banned.¹³ In the correspondence between missionaries based in the region, reference was regularly made to such ambitions of Christian highland unity. To take an example from a letter written in 1916 by A.A. van de Loosdrecht, first GZB missionary in the Sa'dan highlands, to the Poso missionary-ethnologist A.C. Kruijt: 'you will have to admit that for the church of Poso it will also be very important if this (Sa'dan Toraja; D.R.) region is being Christianized. What a beautiful region will it be: all Central Celebes for the mission' (van den End, 1985: 133; my translation). Reporting on his visit to Rongkong, one of the highland areas in Luwu contested by Christian mission and Islam, missionary Heusdens also explicitly mentioned this issue. He wrote in 1935: 'it has often been stated by government officials that it is the intention of the government of the Netherlands Indies to form one Christian block in Central Celebes, as happened in Sumatra by Christianization of the Toba Batak lands' (Van den End, 1985: 347; my translation).¹⁴ Some years earlier, in 1933, the issue of Greater Toraja was most clearly voiced by the fiercely anti-Islamic missionary-teacher Saathof in an article in the GZB monthly *Alle den Volcke*:

'For centuries the Mohammedan coastal population has looted and murdered in the Toraja lands. Nothing and nobody was safe from the Bugis However, the Dutch government recognized Luwu's claims to the Toraja lands. The old hunting ground was formally incorporated into Luwu.¹⁵ This seems unreasonable. It would have been more rational, if the Dutch government had radically put an end to domination by Luwu and radically placed the Toraja lands under direct Dutch administration. The Toraja of the Sa'dan valley together with those from Mamasa and those from the Poso area. In that case, under Dutch guidance the Toraja tribes could have developed into a Toraja people. A Toraja people that would find its ultimate unity in a commonly professed Christianity. It would not yet be too late to move into this direction. Not too late and certainly worthwhile. Undoubtedly, the gratefulness of the Toraja could be counted on. For the Toraja, Bugis is still synonymous with oppressor' (Saathof, 1933; my translation; see also Bigalke, 1981: 305).

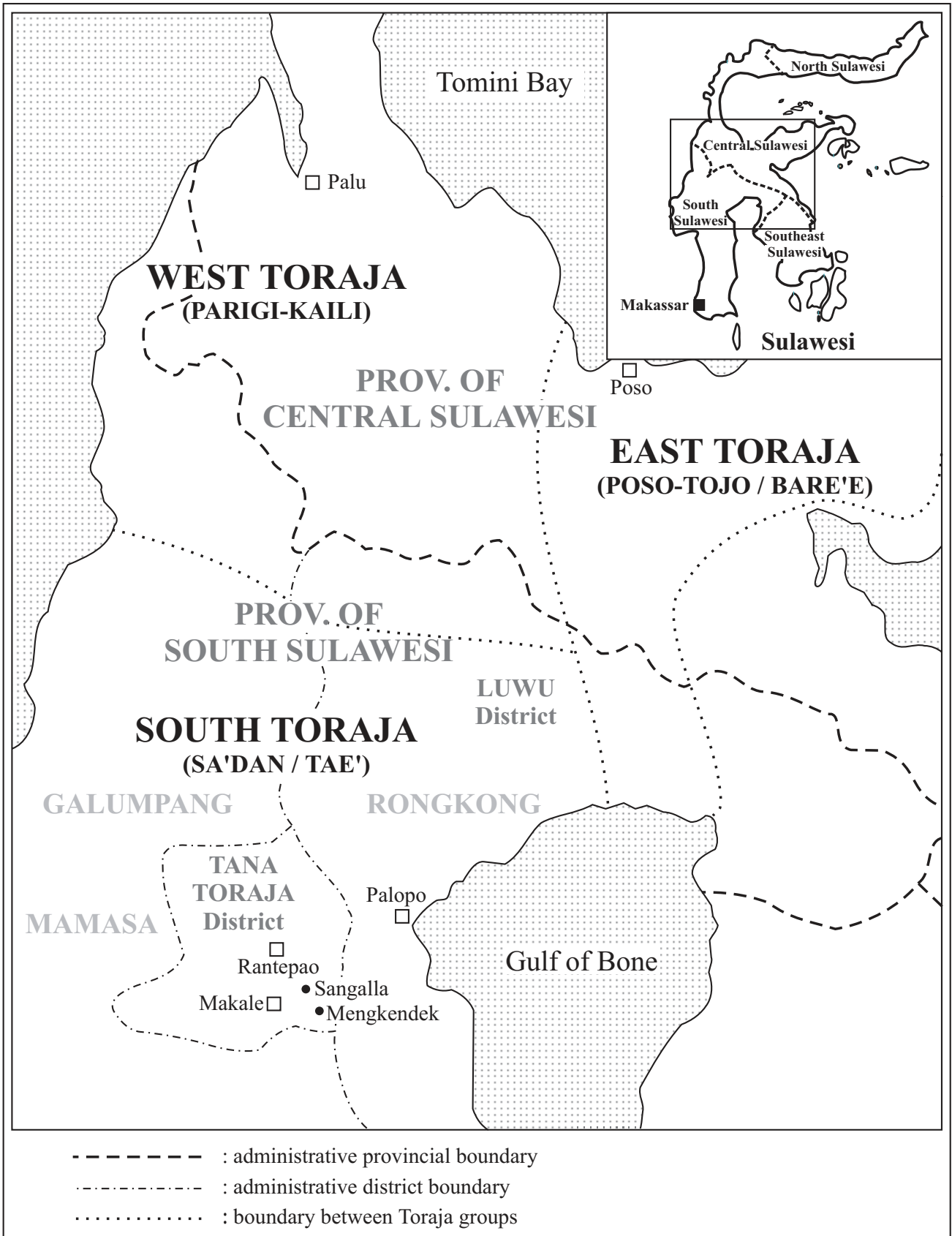
Here we have come to the missionary and colonial roots of Greater Toraja. The fragment of the Toraja Raya song above shows that, at least in and around the Sa'dan highlands, the Greater Toraja of colonial administration and GZB became more than a vague ideal of cultural-religious unification alive in missionary circles only. It was the statement of a political programme, which at least deserved an accompanying anthem.¹⁶ However, what does 'Toraja' actually mean, and what is the history of Toraja identity? Whoever looks at the map of southern and central Sulawesi (see map 2) and compares the names mentioned in the song text above with the boundaries of current Tana Toraja District on the map, will immediately be robbed of any certainty about the meaning of 'Toraja'. Rather than taking classifications and essentialist images of 'the Toraja' as a point of departure by assuming something like a static and historically fixed Toraja identity, I will ask more basic questions here about Toraja identity, and about the shifting relationships between identity and boundaries. As I will show below, the emergence of Toraja identity as a political factor is rooted in the colonial period.

¹³ Interview Th. Kobong.

¹⁴ For instance, governor Couvreur's policy of stimulating highland autonomy from Luwu, from 1924 onwards (see Bigalke, 1981: 270).

¹⁵ Meant is the incorporation of the Sa'dan highlands into the 'self-governing territory' Luwu; see chapter 2.

¹⁶ Kobong (1989: 158) uses the term 'regional nationalism'; see also Plaisier, 1993.



Map 2: colonial classifications of Toraja groups and current administrative boundaries

The changing meanings of 'Toraja'

The term 'Toraja' is generally associated linguistically with Bugis 'to ri-aja', meaning something like 'people from above' or 'highland people'.¹⁷ It was a general designation used by lowland Bugis people to denote the various mountain peoples throughout southern and central Sulawesi. Those peoples themselves probably never used 'Toraja' before the thirties of last century (Bigalke, 1981; Schrauwers, 1995). However, after 1892 it came to be used by A.C. Kruijt and N. Adriani, the first missionaries of the Poso mission in central Sulawesi and known for their ethnological and linguistic research in the region. They attached completely new meanings to 'Toraja'. Kruijt as an ethnographer and Adriani as a linguist started using it as a basis for classifying the ethnic and linguistic diversity of the mountain people of southern and central Sulawesi. 'Toraja' replaced the pejorative term 'Alfuru', used for all non-Christianized or non-Islamized peoples in eastern Indonesia (Bigalke, 1981; Pakan, 1977; Schrauwers, 1995). However, the order that especially Kruijt had created to replace it, based on a mix of religious affiliation and cultural traits, was rather arbitrary.¹⁸ Moreover, the way Kruijt and Adriani classified was influenced by the fact that they were not only scientific researchers, but also - and even primarily - missionaries with a religious and a political agenda. In Kruijt's system, the Toraja were classified into the West Toraja (Sigi or Parigi-Kaili), East Toraja (or Poso-Tojo), and South Toraja (or Sa'dan).¹⁹ Linguistic classifications were used as well. Thus, Adriani (who did not use 'Toraja' but preferred 'Sa'dan' for the southern group) used the term 'Bare'e Toraja' for the East Toraja, according to the word used for 'no' or 'not' in the language of this group. Van der Veen, using the same criterium and following the classification by Kruijt, called the South Toraja 'Tae Toraja' (see Bigalke, 1981; Pakan, 1977; Schrauwers, 1998).²⁰

Politicization and ethnic identity: 'Toraja Raya'

The ideal of Greater Toraja, consisting of all Christianized Toraja mountain peoples of the Sa'dan, Mamasa and Poso areas originated from the Poso mission (Bigalke, 1981; Van den End, 1985; 1991; Saathof, 1933: 55). However, it had its greatest impact on the Sa'dan highlands. In the Poso area the name 'Bare'e Toraja' was rejected and replaced with 'Pamona'; in the Sa'dan area, the term 'Toraja' caught on, as did the ideal of Greater Toraja. It became the expression of a supposedly common identity of the inhabitants of this region from the thirties onwards, politicized under the influence of socio-political changes (Bigalke, 1981; Kobong, 1989; Pakan, 1977; Schrauwers, 1995, 1998). From the twenties, organizations emerged in the Sa'dan highlands with the objective of improving the socio-economic position of the Toraja, raising ethnic consciousness, or both (Bigalke, 1981). As Java-based

¹⁷ As against 'to luu' or 'lau' denoting the coastal population; hence the name Luwu. This way of naming fits in with a more general habit among Indonesian peoples to use dichotomies like land / sea, up / down (Pakan, 1977). See Nooy-Palm, 1979: 6-8; Bigalke, 1981: 13-16. Kobong (1989) gives alternative explanations.

¹⁸ Especially the criterium of religion used in classification revealed the hidden agendas of mission and colonial administration, for which the basic distinction to be made was that between the lowland Islamized groups and the (usually highland-based) non-Islamized groups, whatever other cultural traits were shared by these groups (see Schrauwers, 1995; 1998; for Luwu and the Sa'dan highlands; see Bigalke, 1981).

¹⁹ This latter group included current Tana Toraja and Polmas Districts, the Galumpang and Makki' areas in Mamuju District, the Enrekang area South of current Tana Toraja, and the Pantilang, Rongkong and Seko areas in Luwu (Pakan, 1977). For a classification of 'Toraja' into four groups, see also Sarira, 1975.

²⁰ In the Dutch colonial classification, the subdivisions of Toraja groups used by Kruijt taken together were distinguished as one Toraja 'law area', separate from the South Celebes law area which included the southern Makassarese and Bugis lowland, as well as Mandar, Luwu and Mori (Adamson Hoebel and Schiller, 1948).

Indonesian nationalism was growing, emergence of Toraja identity came in handy to the colonial administration (Bigalke, 1981; Plaisier, 1993). From 1932, the monthly paper *Soelo* (Torch) was issued under rather strict control of GZB. While expressions of nationalism were banned from this paper, it did provide some opportunity for feelings of Toraja identity to be aired. Bigalke: 'for the most part GZB was able to anticipate development of political consciousness in Makale-Rantepao and channel it in a (for them) harmless direction' (1981: 293). In *Soelo*, recurrent allusions to emergent Toraja identity can be found:

'Awaken and stand up, fellow nationals; welcome that progress Those who are still in the dark, welcome it, so that the name Toraja will not remain contemptible and abject, but will become one of praise and happiness instead. Let shame disappear, and let praise be there. Aren't our Toraja lands the most extensive, if compared with the lands of the Bugis and Makassarese? Therefore, all inhabitants of my Toraja people, especially the heads and those of noble origin, be unanimous and united, mutually supportive, helping one another, and living like brothers, so that in the end your name will be heard in Celebes as well' (Tandjong, 1933; my translation).

In the thirties, *Perhimpunan Boenga' Lalan* (PBL) was the first organization to openly state the objectives of its work in terms of the advancement of a 'Toraja people' and 'Toraja land' (tanah Toraja) (Bigalke, 1981). Another, in this respect even more important organization, was *Perserikatan Toraja Kristen* (PTC), one of a number of what Bigalke calls 'social uplift organizations' established in the thirties.²¹ PTC was established in 1936 by a group of young Toraja with various educational backgrounds.²² Its objective was strengthening ethnic identity among Christian Toraja both within and outside what was now called 'tanah Toraja'. In combination with modern education, PTC was one of the early sources of growth of ethnic identity among young Toraja.²³

One of the issues on the political agenda of PTC was the growing Toraja demand for autonomy from the Luwu kingdom. This demand had the - sometimes hidden, sometimes more open - support of the mission but was generally opposed by the colonial administration, afraid of running into conflict with the datu. Stimulated by strong anti-Bugis sentiment in the highlands, the demand for separation of Tana Toraja from Luwu can be seen as a first step in a protracted process of political-administrative rearrangements envisaged by the mission, members of the colonial administration and, last but not least, the new Dutch-educated, Christian elite born from Dutch colonialism. In its most extreme form, this involved the ultimate incorporation of all highland groups in central and southern Sulawesi into Greater Toraja (Bigalke, 1981; van den End, 1985, 1991; Plaisier, 1993). Movements like PTC were not only important in creating a basis for internal (Sa'dan) Toraja unity, but also in propagating the ideal of Greater Toraja and passing it on to new generations of politically active Toraja.²⁴ It can be concluded, then, that in the thirties the initially missionary and colonial administrative ideal of Greater Toraja had, at least in the Sa'dan highlands, found its way into the process of emergence of Toraja identity.²⁵

²¹ Members and leadership belonged to the groups that had received Dutch education. The leaders were teachers or members of the 'native' administrative corps (Bigalke, 1981).

²² Among them Sampe Pongrante, also the first chairman of PTC. In 1937, Pemuda PTC was established in Luwu by Taula'bi. Both organizations played a key role in laying the foundations of resistance against the inferior position of Toraja in the lowland areas (interview Th. Kobong, Jakarta).

²³ Interview Th. Kobong, Jakarta. A hidden PTC objective was establishing Greater Toraja (Plaisier, 1993).

²⁴ Especially J. Linting, F.K. Sarungallo, and Sampe Pongrante, who belonged to the first generation but remained active in the period of emergence of a new generation of politically active Toraja like H.L. Lethe and W.L. Tambing (interview Th. Kobong, Jakarta; L. Sombolinggi, Madandan; S.D. Tallulembang, Rantepao).

²⁵ There was no general agreement on the issue of unification of the Christian Toraja areas among either missionaries or colonial administrators. An example is the issue of Sa'dan Toraja autonomy from Luwu (see van den End, 1985, 1991).

3. Lebensraum politics: Toraja migration to lowland Luwu

From incidental labour migration to massive land settlement

Origin and development of the ideal of Greater Toraja and its relation to Toraja identity are now clear. Less clear is what became of it after decolonization. In this section I focus on its postcolonial manifestation. I will show that, to some extent, it had caught on and became a significant element in regional ethno-political ideology in the politically turbulent late forties and early fifties. In its new meaning, which also reflected the growing strength of Toraja identity, it not only referred to the colonial missionary project of consolidation and unification of Christian highland territories with populations classified as 'Toraja', but also to Toraja expansionist ambitions towards lowland Luwu: the migration of large sections of the Toraja population to the Luwu plain.

In the early twentieth century a marked demographic contrast existed between lowland Luwu and the Sa'dan highlands. The former was sparsely populated and largely covered with forests and marshes; the latter was densely populated, and characterized by a hierarchical social order, widespread conflicts between competing elites, high and rising land prices, poverty, landlessness and deteriorating land tenure conditions for those with limited access to land, primarily low-status groups (Bigalke, 1981). Since times immemorial there had been political, social, economic and cultural ties between the two areas. The population of Luwu, both in the plain and in the highlands, spoke a highland language rather than Bugis, and often traced its descent to the highlands. However, migration from the highlands to lowland Luwu was a rare phenomenon until the early twentieth century. The large majority of the highland population remained inward-oriented, tied to its locality of origin by kinship, ritual, or bondage (Bigalke, 1981; Volkman, 1985).²⁶ Sometimes conflicts, lack of access to land, debts and obligations related to death ritual or gambling, and forms of bondage induced people to leave their highland area of origin and move to the lowland. These people tended to convert to Islam and completely assimilate into the lowland socio-cultural environment.

From the twenties, out-migration gradually increased under the influence of tax payment obligations imposed by the Dutch and the crisis years. From the mid-thirties, the effects of the crisis became felt. Hence, many highland inhabitants, in need of cash to fulfill their tax payment obligations, migrated to the lowland in search of labour opportunities, or were deported and employed in colonial construction works.²⁷ This migration often had a temporary character; its destinations remained restricted to a few sites of 'frontier' economic activity in North Luwu (Bigalke, 1981; van Lijf, 1952; Volkman, 1985). Some decades later the picture had radically changed. Out-migration from Tana Toraja District had become quite common. Destinations nowadays vary from Luwu to distant places like Irian Jaya and Kalimantan in Indonesia, and Malaysia (Volkman, 1985; Makmur, 1988). Especially from the sixties of last century, migration from Tana Toraja to lowland Luwu took place in the form of massive rural settlement for smallholder agriculture. The changed socio-political conditions in this period made it an extremely sensitive issue in regional politics, which it continues to be until this day. There are important differences between early migration and the more recent waves of mass migration and settlement by Toraja farmers. These seem to have much to do with the process of identity formation that influenced the relationships between highland and lowland populations, in which religion has become the main boundary marker. As a leading figure of the Christian community in Luwu states:

²⁶ Contrary to the Bugis, the Toraja are not mentioned as a group for which out-migration is important in the explanatory chapters to the 1930 census (Department van Landbouw, Nijverheid en Handel, 1931).

²⁷ For instance: the construction of the Kalaena irrigation system; see chapters 2, and 7 to 10.

‘Until this day there exists a great confusion in Luwu about which *suku* (ethnic group; D.R.) lives here. I remember a discussion between politicians in Luwu in the early fifties, in which one of the spokesmen of the king of Luwu explained, which elements the Luwu population was made up of. He said “Toraja and Bugis”. Indeed, the majority of the population must have a Toraja background, you can also see that from the language. Before the Dutch period, these people were largely animist and, once in the Islamic lowlands, adapted to local conditions including Islam. Having become *Sallang* (followers of Islam; D.R.) they lost their Toraja identity. They would rarely call themselves Bugis, but neither would they use Toraja. For the generation of migrants that came to Luwu from the fifties, things are different. Having become Christians before they left for Luwu, they had already taken on a strong identity mainly determined by their Christian religion. Therefore, if nowadays you ask these people about their affiliation, they will answer proudly “we are Christians, we are Toraja people”.’

Towards a policy of regional migration

In the forties, the Sa’dan highlands were seething with social conflict, boosted by the processes of social change generated by the presence of colonial administration and mission (see chapter 2). The Dutch were aware of the threat of social conflict related to land, status, and power in the highlands (see van Lijf, 1947, 1951, 1952; Bigalke, 1981). East of the highlands there was Luwu, with abundant natural resources, low population density, and rivers and land suitable for intensive irrigated agriculture and large-scale farmer settlement. In the late colonial period, plans for migration of a large number of highland inhabitants to lowland Luwu were first considered as a solution to highland problems. According to van Lijf, ‘the possibility was discussed of transmigration of some ten thousands of Toraja’ (1952: 274; my translation). Between 1950 and 1952, when Indonesia had become a unitary republic, such plans for mass migration of Toraja farmers to Luwu re-emerged (Bigalke, 1981: 393).

Initially, post-colonial plans for mass migration resembled the Dutch plans in their analysis of socio-economic and demographic conditions and resource use in Luwu and Tana Toraja, as well as in their solution. In 1951, a Committee for Local Transmigration (*Panitia Locale Transmigratie*) had been established, consisting of representatives of the Luwu administration and the Luwu kingdom, both of lowland and highland origin.²⁸ The committee seems to have been a first step towards realization of the colonial plans.²⁹ A report of a meeting of the committee mentions plans for the migration of 20,000 families (about 50% of farmer families in ‘Tanah Toraja’ as it was called) requiring 30,000 hectares of irrigated land and 5,000 hectares of home yards, all in the North Luwu plain. The report stresses that ‘this means that the Tanah Toraja Transmigration can take place locally, and that in this way the settlers continue to live within the boundaries of Luwu’ (ANUP-Tator 1361; my translation).

Politicization of local transmigration: refugee settlement and Lebensraum

However, not much later these plans for local transmigration came to a complete standstill as a consequence of the outbreak of the DI/TII rebellion in Luwu (chapter 2). The safety of large numbers of agricultural settlers in Luwu could no longer be guaranteed. In the highlands, DI/TII actions

²⁸ The committee had applied for financial support from the national government but was looking for ways to start migration irrespective of the availability of such aid. There is a clear influence of the colonial discourse of efficient natural resource use: an analysis of agricultural conditions in the highlands is full of Dutch terms like *rationeel* (rational), *efficiënt* (efficient), *dwerghedrijffes* (smallholdings), *rooibouw* (slash and burn), and *stroomgebieden* (catchment areas). The report points out the irrigation potential of rivers in lowland Luwu (a.o. Lamasi and Kalaena), and pleads for protection of the river catchments by resettlement of shifting cultivators (ANUP-Tator 1359).

²⁹ Interview P.D. Latanna, Jakarta. I use ‘local transmigration’ here to refer to highland-lowland migration.

displaced large numbers of refugees. With DI/TII controlling the rural areas, a safe return of the refugees to their areas of origin was impossible. Therefore, plans were worked out for resettlement in the Luwu plain. Negotiations between representatives of the Luwu nobility, the Luwu administration consisting mainly of Toraja officials, the army, as well as the highland Luwu populations affected resulted in the selection of locations in the Luwu plain where these refugee groups could be resettled under protection of the national army. Aside from the earlier colonial settlements of Javanese farmers, these settlements, established from 1952, became the first organized mass settlements in the Luwu plain. They harboured hundreds of households from the various refugee camps and, in the course of time, attracted many others (see also chapter 4).

These events cannot be understood without taking into account socio-political processes in the wider region.³⁰ A key factor was the politicization of highland-lowland relationships under the influence of emergent Toraja identity and related political ambitions, and the rise of DI/TII on the other. From the return of the Dutch in 1946, the political situation in the region had grown increasingly tense. Therefore, the position of the highlands and its population within the future administrative structure of South Sulawesi had become an issue of serious concern for the new generation of Dutch-educated, mainly Christian Toraja leaders. In Luwu, important socio-political changes were taking place as well. Though the *datu* of Luwu had been re-installed upon establishment of the republic, the demise of the kingdom as a 'self-governing territory' had become a matter of time only. The impact of the struggle for independence, nationalist ideology and emergent party politics had made restoration of the status quo very unlikely.³¹ As DI/TII expanded, the Luwu nobility itself was torn between those in support and those opposed to it; the kingdom had become a lame duck.³²

Other actors had gradually filled up the resulting void of power. First, the (Javanese) troops of the national army, present in Luwu to establish and expand central control after demise of the federal state, and, once DI/TII had broken out, to protect the threatened population in Luwu.³³ Second, the regional administrative apparatus in Luwu, heavily leaning on Dutch-educated personnel, mainly Christians of Toraja origin. The short period of colonial and missionary presence in the highlands had given its inhabitants an educational advantage over their Islamic lowland neighbours. This was also reflected in the distribution of administrative functions.³⁴ In the early fifties the former Dutch subdivisions in Luwu were headed by three officials of Tana Toraja origin, all with a Dutch administrative educational background: W.L. Tambing in Palopo, H.L. Lethe in Masamba, and Sampe Pongrante in Malili. The first had also been the initiator of the Committee for Local Transmigration (he was the vice-president). With the others, he was to play an important role in 1952, negotiating the refugee settlements in the Luwu plain described above. He was also involved in various other political activities and organization of military action.³⁵ In 1955 he became a representative in the national council in Jakarta where, together with J.K. Tumakaka from Central Sulawesi (see below), he represented the Greater Toraja

³⁰ For this analysis of the socio-political context in the early fifties I owe much to, among others, L. Sombolinggi, S.D. Tallulembang, and P.S. Gasong.

³¹ In 1953, M. Guli, head of the Luwu People's Representative Council (DPRD) expresses these feelings in a written statement: 'I say that the whole population of Luwu, both those who are affiliated to a political party and those who are not, still love Andi Jemma but not the *Datu* of Luwu' (ANUP-APS 208).

³² The political-administrative structure of the kingdom, including its four 'ministers', continued to exist. In matters of regional politics and administration the *datu* was mainly represented by the Opu Pa'bicara, Andi Pangerang (interview Andi Antong Pangerang, Palopo).

³³ The long-term Javanese interest in Sulawesi was to establish a Javanese-dominated order conducive to Javanization of peripheral areas like Luwu through e.g. transmigration.

³⁴ For colonial education in South Sulawesi, see Harvey, 1989.

³⁵ Thus, he organized the 1953 military action against warlord Andi Sose; see below.

ideal.³⁶ Sampe Pongrante and Lethe had graduated from OSVIA.³⁷ The former had been one of the foremen and first chairman of PTC in Tana Toraja (see above). Lethe had been head of the Tana Toraja regional administration (*Tongkonan Ada*) for a short period. All three were politically affiliated to PARKINDO (Partai Kristen Indonesia; Indonesian Christian Party).³⁸

Third, from the late forties party politics had gradually emerged on the scene, as far as tolerated by the Dutch. In 1948, two PTC leaders had established the first branch in South Sulawesi of the Indonesian Christian Party (PARKI), which drew its basis of support from the membership of social organizations like PTC. In 1950 the party changed its name into PARKINDO. In the fifties, PARKINDO grew rapidly under the influence of the political events. There was a close association between political party and church, and a high degree of overlap between church membership and political support.³⁹ PARKINDO came to represent both Christianity and Toraja identity. The newly established *Gereja Toraja* (Toraja Church) and related organizations were closely interwoven with PARKINDO through leadership and members (Bigalke, 1981).⁴⁰ In Luwu, like in Tana Toraja, support for PARKINDO was growing.⁴¹ Its growth was boosted by the violence against Christian settlements and by the success of increasingly assertive Toraja military actions like those against Andi Sose.⁴² According to one formerly PARKINDO-related politician of highland Luwu origin:

‘Like most intellectuals, I used to be a member of PSI (Indonesian Socialist Party; D.R.) and to be active in that party, though I had contact with many PARKINDO people. But when DI/TII started stirring up trouble in the highlands I changed my mind. From that moment the theoretical debates and the scenarios for the distant future with which the intellectuals of PSI used to be concerned had totally lost their significance to me. Something was demanded of us; no more theorizing. There was a serious threat that had to be faced by many people. PARKINDO was the only political party ready to consistently strive for this issue. Therefore, in the 1955 elections I gave my vote to PARKINDO. Not so much because it was a Christian party but because, through its organization, it tried to improve the position of the Toraja people in Luwu.’

One of the clearest manifestations of Toraja assertiveness in lowland Luwu and the highlands is the 1953 Andi Sose affair. Andi Sose, a regional trader-warlord, had cooperated with DI/TII before defecting with his troops to the national army TNI. The troops were stationed in Tana Toraja, to combat DI/TII.⁴³ Provided with material resources by TNI, Sose continued to go his own way. His

³⁶ Their association with ‘Toraja Raya’ is also mentioned in a government publication on the history of Central Sulawesi, in which eight options for administrative division of Sulawesi are mentioned. The option covering the Poso region and Tana Toraja is called ‘konsepisi Tumakaka-Tambing’ or ‘konsepisi Propinsi Toraja Raya’ (Departemen Pendidikan dan Kebudayaan, 1984: 170).

³⁷ Opleidingschool voor Inlandse Ambtenaren; Training College for Indigenous Officials.

³⁸ Apart from the administrative apparatus, the majority of government agencies and institutions in Luwu were also headed and staffed by Christian, Dutch-educated people of highland origin (e.g. the Land Registry Agency, Forestry, Agriculture, Information Service, and regional court); interview L. Sombolinggi; S.D. Tallulembang.

³⁹ The association between church and party went so far, that members of the Toraja church not affiliated to PARKINDO were sometimes regarded with suspicion as ‘no real Christians’ (interview Th. Kobong, Jakarta).

⁴⁰ The Toraja church had emerged from GZB in 1947 (van den End, 1985; Sarira, 1975).

⁴¹ This regional popularity of PARKINDO was reflected in the results of the 1955 elections. Harvey (1976) gives the following vote percentages for Luwu (still including current Tana Toraja) for the major parties in the 1955 elections: PARKINDO: 56.49; Masyumi: 17.55; PSII: 6.32; PNI: 5.44 (see Bigalke 1981, 432).

⁴² Conversions in the boundary areas of Luwu and Tana Toraja showed a similar trend in the DI/TII period (Bigalke, 1981; van den End, 1985; Plaisier, 1993; Sarira, 1975).

⁴³ Sose’s presence in the same area as the Javanese troops, associated with social upheaval and communism, was supported by the traditional elites of the puang states and the Islamic community in the southern Sa’dan highlands; these were united in their anti-Javanese, anti-colonial and anti-missionary sentiments, while for

oppressive way of dealing with the population led to his expulsion by Toraja defense units in 1953. The situation exploded after rumours had spread about his involvement in forced conversions and plans to build a mosque at the location of a sacred pool in the town of Makale in the southern highlands. For the 1953 action, Tambing and Lethe mobilized many Toraja policemen and other officials stationed in Luwu, with active support of the Toraja population. Sose's expulsion from Tana Toraja was explained by the Christian leaders 'as an outpouring of ethnic consciousness' (Bigalke, 1981: 416). As not only Toraja in the region, but even those working in far-away places on other islands had taken leave and came to Sulawesi, this demonstration of ethnic sentiment is said to have made an enormous impression indeed.⁴⁴ At the same time, and here I return to Luwu, it meant a confirmation of growing Toraja power and freedom of movement in lowland Luwu. Planned and executed mainly from lowland Luwu, this action reflected the new relationships that were emerging under rapidly changing socio-political conditions.⁴⁵

Returning to refugee settlement in Luwu: how could it be realized under such difficult political circumstances and in a lowland area swept by DI/TII attacks? Resettlement of highland refugees should be seen in the light of the developments in the region described above and the new constellation of power emerging from them. The kingdom of Luwu was seriously weakened. In its anti DI/TII mission to protect the unitary republic against regionalism, and the threatened population - not in the last place those of the Javanese colonizations - against attacks, the national army had more or less taken over. The increasingly assertive Toraja administrative apparatus, fiercely anti-DI/TII, found itself in a strong position to negotiate with the main political actors about the political situation and about solutions for the regional refugee problem. Organized in PARKINDO, occupying strategic administrative positions, and maintaining cordial relations with members of the nobility of the Luwu kingdom⁴⁶, the Toraja leaders had become important actors in the political arena of lowland Luwu. Making maximal use of the coalition of interests that had developed with the army divisions stationed in Luwu, they were able to push forward their plans for large-scale refugee resettlement under army protection in an area in lowland Luwu that had formed an important base of DI/TII operations.

Such plans had their roots in changing views of Toraja identity, of relationships with lowland polities like Luwu, and of the socio-economic and political future of 'the Toraja' within southern Sulawesi. Toraja political leaders tended to refer to these views and the accompanying political agenda as a Toraja search for 'Lebensraum'.⁴⁷ The core ideas behind it were the following: first, a low population density and under-utilization of land resources in Luwu provided an opportunity for solving social conflict and widespread poverty in the densely populated Sa'dan highlands. It was, in fact, widely regarded as the only way to avert violent social conflict. Therefore, access to those resources should be created for the Toraja population. These ideas were closely related to others that were the product of the emergence of Toraja identity. Thus, Toraja leaders felt that post-colonial political-administrative relations between highland and lowland should be based on

the elites the fear of revolution played an important role. The Javanese troops, in their turn, gave silent support to the 1953 Toraja action (Bigalke, 1981).

⁴⁴ Interview J.K. Tumakaka, Jakarta.

⁴⁵ Aware of growing Toraja political ambitions, in a letter to the governor dated 28-5-1953, district head Pattaropura of Luwu pleaded the transfer of Lethe and Tambing to positions where they could be more easily controlled. In the same letter mention is made of the fact that most leading administrative positions in Luwu are in the hands of Toraja, 'yang masih merupakan "een doorn in het oog" dikalangan angkatan muda di Palopo' ('which is a thorn in the flesh of the young generation in Palopo') (ANUP-APS 285).

⁴⁶ Such as, for instance, with Andi Pangerang, Opu Pa'bicara of the Luwu kingdom, and later with Andi Makkulau (interview Andi Antong Pangerang, Palopo).

⁴⁷ Possibly people like Tambing, Lethe, and Sampe began using it. Interviews P.S. Gasong, Seriti; F. Lande, Rantepao; F. Ratu, Palopo; J. Sarira, Rantepao; L. Sombolinggi, Madandan; S.D. Tallulembang, Rantepao.

equality rather than on inferiority of the Toraja population to the Bugis Islamic lowland. Toraja expansion to Luwu through migration, supported by a growing sense of identity, was expected to increase Toraja social and political influence in the lowland and redress old political imbalances. Third, - and directly deriving from the Dutch blueprint for Greater Toraja - there was the wish to see this new identity reflected in the political-administrative status of the highlands and Luwu within future administrative arrangements in southern and central Sulawesi, separating the highlands and Luwu from direct Bugis-Makassarese influence. These objectives presupposed increasingly radical rearrangements of the political-administrative map of the region, ranging from gaining access to land and political influence in lowland Luwu to struggling for a new administrative set-up for large parts of Sulawesi. The outbreak of DI/TII in the early fifties gave such ideas a more prominent place in Toraja politics, resulting in a further politicization, radicalization, and ethnicization of highland-lowland relationships.⁴⁸

4. Politics of identity: the struggle for new political-administrative boundaries

Regional autonomy of Tana Toraja

Radicalization of highland-lowland relationships in the fifties led to the Toraja strive for separation from Luwu and attainment of district-level autonomy. Earlier, the status of the Sa'dan highlands (Makale-Rantepao, in colonial times) had been swung back and forth between incorporation into, and separation from Luwu (see chapter 2). In May 1953, shortly after the DI/TII raids and action against Andi Sose, regional autonomy was played up by a resolution issued by the PARKINDO branch of Makale-Rantepao.⁴⁹ Later, in a public statement dated 9 October 1954 twenty-four political parties and organizations, as well as the PARKINDO fraction that represented Makale-Rantepao in the Luwu parliament, demanded autonomy. In the same statement, the formation of a Committee for the Demand of Autonomy was announced.⁵⁰ One of its foremen was W.L. Tambing.⁵¹ Later, the coordinating Council of PARKINDO in Luwu supported this statement. The statement found broad support among the Toraja heads of government-administrative agencies in Luwu, and generated a stream of declarations of support from political parties and social organizations.⁵² On 14 March 1955 political parties, social organizations, heads of agencies and administration, and other leading persons in Makale-Rantepao decided that they no longer recognized representation by the Luwu parliament, and repeated the demand for autonomy.⁵³ Autonomy was finally granted in 1957: Luwu was divided into Luwu and Tana Toraja. In 1959

⁴⁸ There was no unity of opinion on this issue among Toraja leaders. A major rift existed between those aspiring for Toraja 'Lebensraum' and the more explicitly revolutionary nationalist oriented, in favour of good relations between Tana Toraja and Luwu. For the latter, the ultimate criterion was the dividing line between themselves, the *pejuang* (revolutionaries), and those seen as cooperating with the Dutch. Judged by that criterion, people like Tambing and Lethe were felt to be on the 'wrong' side. This distinction was also expressed in a difference in party affiliation, the former associating with PARKINDO and the latter with (revolutionary) Partai Kedaulatan Rakyat (interview L. Sombolinggi, Madandan; W. Sombolinggi, Sangalla).

⁴⁹ ANUP-Tator 587.

⁵⁰ (Ind.) Panitia Penuntut Otonomi Makale-Rantepao.

⁵¹ Another was Sarungallo. ANUP-APS 244.

⁵² Statement dated January 20, 1955. Islamic Masyumi and PSII, and communist PKI were against it (ANUP-APS 244).

⁵³ ANUP-Tator 587.

both areas formally gained the district (*kabupaten*) status (see also Bigalke, 1981).⁵⁴ The long-term impact of the major events in this period must have been enormous: for politics, for the church, for Toraja relations with Luwu, and for Toraja self-image and self-identification:

‘The Dutch had given room for regional nationalism to emerge, but at the same time kept an eye on its development. In the early fifties, the pressure from outside in the form of DI/TII actions against the highland communities boosted Toraja ethnic identity, including the strife for autonomy from Luwu. Developments in the church strengthened that process as well. Under pressure of enforced Islamization that accompanied DI/TII actions, animist Toraja had massively embraced Christianity, not so much because they consciously accepted its message but rather because it left more room for the expression of Toraja cultural identity than Islam. I am a product of the pre-war situation, including acceptance of the fact that we were *minder* (inferior; D.R.). I was in the Netherlands for education between 1947 and 1961. When I returned to Tana Toraja, I was amazed to see the extent to which Toraja ethnic identity had developed. Autonomy, Andi Sose, the events of the fifties had generated among Toraja an awareness that gave people an attitude like “what they can do we can do as well. We are no longer inferior, we are the same as they are”.’⁵⁵

This was symptomatic of the general atmosphere of radicalization and escalation along mainly religious lines, and reflected the wish of Toraja leaders to become politically independent of the Bugis-Islamic lowland. It must have come like a shock to what remained of the Luwu kingdom, and was regarded by some as disloyalty to the *datu*. However, leading Toraja politicians felt that, in the power struggle accompanying the process of formation of new administrative units, they should not let this opportunity pass. Again, Toraja identity played an important role. When autonomy became a political issue, only a small minority of Toraja leaders was against it. There was no doubt among leading Toraja politicians that, once separated from Luwu, Tana Toraja would be better off.⁵⁶ One former politician:

‘I remember a meeting in Rantepao, chaired by Tambing and Sarungallo. All people present but one agreed with the demand for autonomy. This one man said: “If we separate ourselves off from Luwu, you will repent it. First, our road down to Luwu will be closed off, so we will lose our opportunity for filling up Luwu with local transmigrants. Second, we will lose our position in Luwu in other respects as well.” But all others laughed at the man. They said “we must separate off, we need a strong basis: Tana Toraja. For that reason we are pro”. But, in a way, this man was put in the right by later developments.’⁵⁷

Struggling for autonomy, Toraja leaders had not considered its later consequences. They massively headed for a district with a name that reflected their identity. It was only later that many leading politicians came to have second thoughts. They realized that there were serious disadvantages as well, that something had been lost. For those who had put their bets on the ultimate creation of Toraja Raya, separation from Luwu was seen as an important first step. However, at the same time it was regressive in moving away from the very definition of ‘Toraja’ basic to the Toraja Raya ideal. It should be remembered that part of the population of highland Luwu identified socio-culturally with Tana Toraja rather than with lowland Luwu. Here follows the analysis of one former politician of highland Luwu

⁵⁴ Emergency Act No. 3, 1957 (16-1-1957). Tana Toraja was established on 31-8-1957 (ANUP-Tator 590). Formation of Luwu was regulated in Law no. 29, 1959 (4-07-1959), which replaced Emergency Law No. 3 (ANUP-Tator 587 and 590; ANUP-APS 244).

⁵⁵ Interview Th. Kobong, Jakarta.

⁵⁶ Interview L. Sombolinggi, Madandan; S.D. Tallulembang, Rantepao.

⁵⁷ Interview S.D. Tallulembang, Rantepao.

origin, who supported the trend towards growing Toraja political self-esteem, but was also aware of the arbitrariness of the new administrative boundaries they were striving for:⁵⁸

‘The idea of autonomy stemmed from an overpowering feeling that Makale-Rantepao should be able to manage its own affairs. As the head of a section of a government agency I joined the provincial delegation that took part in the ceremony held in Tana Toraja to celebrate its autonomy. I remember that there were Javanese and people from other areas saying “This is stupid. Why should the Toraja separate themselves off from Luwu. If they continue to be part of Luwu, they will certainly occupy the whole area within twenty-five years”. The Toraja were so preoccupied with the wish to split off that they did not think ahead, consider the potential of lowland Luwu and see future Luwu-Toraja relationships in the light of such potential. There was little consistency in this policy, which was most fanatically propagated by the same people who had in mind the administrative unification of an area much larger than Makale-Rantepao only. In discussions I used to say: “there is a Toraja word *diserekki*, meaning being excluded from a common bond. Seized by emotion, proponents of autonomy put their bets on Makale-Rantepao, which they called Tana Toraja. But the area that is thus being thrown out of the common bond is much larger than Tana Toraja itself.” I said: “I would have fully agreed if we had used the name Tana Toraja Tengah (Middle Tana Toraja; D.R.), which would mean that the areas to the South, the North, the East and the West still belong to Tana Toraja.” But Tana Toraja District, as it is called now, means that only this is their place, and the rest is migration. Used in this manner, “Toraja” is actually a restrictive concept. Let me ask you: is there a Tana Bugis District, is there a Tana Jawa District? No! But still there are people who take pride in the existence of Tana Toraja. They regard it as a victory, something worth defending.’⁵⁹

This interpretation of ‘Tana Toraja’ as a restrictive concept rather than a political achievement is widespread. Its use ran contrary to the ideals of Toraja Raya or other expressions of socio-cultural bonds connecting the inhabitants of the highlands. It excluded population groups that identified socio-culturally with Tana Toraja, like the population of highland Luwu, from being ‘Toraja’.

One of the people who did *not* support the strive for regional autonomy was J.K. Tumakaka, a republican of Central Sulawesi origin stationed at the Luwu court of justice in the early fifties. What he *did* support was the creation of a larger administrative unit comprising all groups categorized as ‘Toraja’ in colonial classifications (in the fifties, having become one of the few Sulawesi politicians who had entered the arena of national politics, he was generally seen as one of the representatives of the political strive for Toraja Raya).⁶⁰ His negative opinion on Toraja autonomy was based on an analysis of ongoing social struggle in Tana Toraja, the demographic picture of Tana Toraja and lowland Luwu, and the natural resource potential of the latter (and of Central Sulawesi):

‘Working in Luwu I saw that a solution should be found to the problems of Tana Toraja. As a Christian I rejected a violent social revolutionary course taken elsewhere in Indonesia. In my view the problems should be solved through local transmigration rather than land seizures and other violent actions. Migration to Luwu with its unutilized land, but also to Poso and Mori. My support to Toraja Raya was based on the following considerations: first, from an economic perspective, there were the mutually supportive conditions of need for human labour power in Luwu and the other areas, and for land, for Lebensraum, in Tana Toraja. Second, the Toraja region should become an important and stabilizing political factor, both regionally and nationally. The

⁵⁸ Especially the population of areas like Bastem in highland Luwu was in a difficult position. Culturally they identified with Tana Toraja rather than with lowland Luwu; historically they belonged to the political sphere of influence of Luwu. Competition between Christian mission and Islam added to this complexity.

⁵⁹ A distinction is sometimes made between Tana Toraja which refers to the current district, and Tanah Toraja which refers to ‘the areas inhabited by the Toraja people, in particular the Districts of Tana Toraja and Luwu’ (Sarira, 1975; see also Kobong, 1989).

⁶⁰ With W.L. Taming (see above, and Departemen Pendidikan dan Kebudayaan, 1984).

national interests coincided here with the regional interests. Especially in 1957, when PERMESTA⁶¹ broke out, I was convinced that the Toraja people could play an important role in fighting DI/TII and PERMESTA. Third, the Toraja people had been ethnically, linguistically and culturally classified as one. Therefore I agreed with the Toraja Raya concept as long as it would remain loyal to the republic. However, Toraja Raya sounded as a threat to other regions. Therefore, I used it with great care. According to specialists in the fields of adat and linguistics, the whole area had been classified as one *rechtskring* (adat law circle; D.R.). There was quite general agreement in those days that Sulawesi should be administratively subdivided into a number of provinces. One of the options for formation of a new province was to join Central Sulawesi with Tana Toraja and Luwu into what became known as Toraja Raya. However, Bugis politicians from South Sulawesi, who regarded loss of Tana Toraja and Luwu as a major threat to their interests, fiercely rejected this idea. Returning to the issue of autonomy in 1953: in view of all these considerations, what was the use of it? I really could not see the point of the Toraja locking themselves up within the narrow confines of Tana Toraja, while in Luwu important governmental and administrative positions were in their hands, and land was still largely unused. This also explains why Luwu did not resist the Toraja movement for autonomy. With the presence of so many Toraja officials, people in Luwu felt themselves overruled by Toraja. All offices and other government institutions in Palopo were filled with educated Toraja people. So when the demand for autonomy was aired, it was seen as a good opportunity to get rid of them. And indeed, the outcome proved that the decision to separate off from Luwu was wrong. Though fiercely in search of Lebensraum, they ended up isolated within their district. Opportunities became restricted, both for the educated in search of administrative functions as well as for the poor in search of land.’⁶²

Again, there is a direct link with the main theme of this chapter: access to the land resources of lowland Luwu through migration, and its close relation to issues of identity and the redrawing of political-administrative boundaries. After Tana Toraja had been granted autonomy, ‘migration’ became more of an issue than it had ever been before. Transfers of population between the areas had never been conceptualized in such terms before. In political parties it had hardly been an issue. As long as the Sa’dan area had been part of Luwu, migration had been regarded by many as something like a natural process that would happen anyway under the demographic, social and resource conditions prevailing in the highlands and lowland Luwu. Members of the highland and lowland elites, influenced by colonial conceptions of efficient resource use and economic growth, came to see migration as an object for planning and policy-making, something to be actively organized as the key to regional development. The Committee for Local Transmigration was a first attempt to regulate such population movements, to organize them on a large scale and gain access to government funding for them. At the same time, it was a token of emergent Toraja identity and ambition, and of a trend towards a greater outward orientation of the highland population.

Though at least the roots of a more comprehensive Toraja political agenda were present, initially the issue was hardly regarded as sensitive by lowland politicians. They even actively stimulated it. The political developments in Southern Sulawesi in the fifties, the vacuum of power in lowland Luwu, the way it was filled up by new political actors, and the politicization of highland-lowland relationships put migration in a different light. After Tana Toraja had gained its autonomy, people from Tana Toraja in Luwu were increasingly regarded as strangers encroaching upon the land of

⁶¹ PERMESTA (Perjuangan Semesta Alam; Inclusive Struggle) was another regionalist movement in Sulawesi. It began with the issue of a charter on March 2, 1957 in Makassar. Main demands against the central government concerned provincial autonomy for Sulawesi, a greater say in military and political-administrative affairs, development of Sulawesi, and a more equitable distribution of economic benefits. From 1958, in northern Sulawesi the movement developed into a full-fledged armed rebellion, affiliated with the PRRI (Pemerintah Revolusioner Republik Indonesia) rebellion proclaimed in West-Sumatra in 1958; hence it is often referred to as PRRI / PERMESTA (Harvey, 1977; Bigalke, 1981).

⁶² Interview J.K. Tumakaka, Jakarta.

Luwu.⁶³ Autonomy also marked the beginning of the gradual disappearance of (Christian) Toraja government administrative personnel from leading functions in Luwu, and their replacement with lowland Luwu and Bugis personnel.⁶⁴ Initially, Toraja politicians had been enthusiastic about Toraja autonomy. Later, when they saw their influence in lowland governmental and administrative affairs fade away, they realized what was happening. Since many years there are no Toraja officials on leading positions in government agencies and administrative positions in Luwu.⁶⁵

Politicization of highland-lowland relationships: the spectre of Toraja Raya

The political situation in Sulawesi was complicated in 1957 by the outbreak of PERMESTA (Departemen Pendidikan dan Kebudayaan, 1984; Harvey, 1977; Schrauwers, 1995; see above). PERMESTA, proclaimed in Makassar and actually turning into armed struggle in northern Sulawesi in 1958, rapidly spread to Central Sulawesi. If, as was generally feared, PERMESTA would somehow join up with DI/TII, regional separatism would tear Sulawesi apart.⁶⁶ In July 1957, PERMESTA leaders had proclaimed the Province of North Sulawesi, independent from Makassar and including the central part of the island. In reaction to encroachment of PERMESTA into central Sulawesi, all kinds of local resistance movements emerged. These were ready to fight PERMESTA (and DI/TII) but also had their own autonomy demands in their negotiations with the central government. One of these movements in central Sulawesi was GPST, established in Poso in December 1957 by a group of local leaders.⁶⁷ GPST received material support for its struggle from the government in Jakarta. It had also been allowed by the military command in Sulawesi to plead with the central authorities the formation of Central Sulawesi Province, as long as this would not include Tana Toraja and Luwu. In the same way, various local defense groups in Tana Toraja were materially supported by the central government and the national army for their struggle against DI/TII. Hence, the situation in Luwu was very unstable as well in the course of the fifties.⁶⁸ In this turbulent period Toraja Raya also became an issue again. The following account throws more light on Toraja Raya during the

⁶³ Interviews L. Sombolinggi, Madandan; S.D. Tallulembang, Rantepao; Andi Baso Rachim, Makassar; S. Lumeno, Palopo; D. Rantetullung, Palopo; F. Ratu, Palopo.

⁶⁴ The consequences of this can clearly be seen in the way such biases may influence allocation of resources in a much later 'development' setting; see the chapters on PIADP.

⁶⁵ Interviews P.S. Gasong, Seriti; L. Sombolinggi, Madandan; S.D. Tallulembang, Rantepao; Andi Baso Rachim, Makassar; S. Lumeno, Palopo; D. Rantetullung, Palopo; F. Ratu, Palopo.

⁶⁶ In the horns' nest of Sulawesi politics, few coalitions were discarded as impossible beforehand. Thus, according to Bigalke (1981, 436), Toraja PARKINDO leaders explored the possibility of cooperating with PERMESTA leaders in North Sulawesi, many among whom were Christians. Therefore, it is not clear why the author states that the notion of Greater Toraja, of which the plans of northern PERMESTA leaders to separate the largely Christian Northern and Central regions of Sulawesi off from the mainly Islamic (Bugis) Southern region were a variation, had been dismissed by Toraja leaders since the thirties. On the contrary, there is evidence of continued attempts to establish it.

⁶⁷ Gerakan Pemuda Sulawesi Tengah (Central Sulawesi Youth Movement). In a declaration issued on 5 December 1957, GPST formally affirmed its support to the central government, stated its goal of freeing central Sulawesi from intrusions by PERMESTA, and applied for the formation of a Province of Central Sulawesi. Early the next year GPST leaders went to Java to report their activities to the president, to apply for formal recognition, for material (firearms) support, and to lobby for the formation of a Province of Central Sulawesi (which was established in the early sixties); interview Herman Parimo, Kasintuwu (see also Pendidikan dan Kebudayaan, 1984; Schrauwers, 1995).

⁶⁸ The more so, when in 1958 PERMESTA troops had entered North Luwu and joined up with DI/TII forces. This coalition resulted in new attacks on towns in North Luwu.

second half of the fifties, when it was felt to be a political and military threat. According to J.K. Tumakaka, who represented the Toraja Raya political ideal in the capital:

‘In the late fifties the impression was often given in the press that Sulawesi was already in the hands of PERMESTA. I always denied this by pointing out that the Toraja people in the central part of Sulawesi - in Makale and Rantepao, in Poso, in Mori - formed the largest ethnic group in Sulawesi and were still loyal to the republic. In fact, Toraja groups were already fighting PERMESTA and DI/TII then. If Toraja forces could be united against PERMESTA and DI/TII, that would be a major support to the central government. This was fiercely resisted by the Bugis adversaries of such plans, who spread the rumour that it was a separatist movement. In this period, the political strategies and objectives of the national government coincided with regional interests, in this case the formation of Toraja Raya. In many respects the idea could be justified. Perhaps because of my experiences in national politics I approached these issues from another perspective than Tambing, the Southern Toraja representative in national politics, and local Toraja politicians. While he still attempted to solve regional problems regionally, I preferred to solve them nationally. I did not consider the local situation from a local perspective only. I did not only see Lebensraum, Toraja autonomy and the like. Rather, I saw the Toraja people as a whole as an enormous human potential in the first place. It was also in the national interest that I decided to support GPST. It could really contribute to the defeat of regionalist movements. It was also a way of channelling the military aspirations and heroism of all those local military groups. In those days, the army was still idealized and thought of as something terrific. Therefore, I introduced the GPST leaders and intellectuals from Poso to the president and made sure they would receive some military training and support. In the national interest, to prevent Sulawesi from falling into the hands of DI/TII in the South and PERMESTA in the North. The Toraja were in between, and I happened to be here as their representative.’

Much had depended on the position taken by the (Toraja) troops under another Toraja leader associated with ‘Toraja Raya’, Frans Karangan, based in Palu in central Sulawesi. He had long been sitting on a fence, but in the course of 1957 decided to remain loyal to the central government rather than linking up with PERMESTA. Thus, the direct danger of the two forces uniting into a military movement for Toraja Raya Province, covering parts of southern, central and northern Sulawesi had receded.⁶⁹ However, the scarce sources on Luwu show that the issue still played a role there in 1958. From early 1958 rumours were circulating in Luwu and Tana Toraja to the effect that Javanese troops would soon be replaced with units belonging to the battalion commanded by Andi Sose. After Toraja protests against this plan had proved in vain, Toraja military and defense forces - possibly with Javanese army support - started preparing themselves for a new confrontation with Sose. From May to July in that year a long struggle evolved, as a result of which Sose’s troops were, again, expelled from Tana Toraja.⁷⁰ In the aftermath of this struggle, the relationship between

⁶⁹ Bigalke (1981: 437) writes that Karangan and another military leader, Gerungan, ‘began to collaborate on organizing a Greater Toraja movement in Central Sulawesi that would associate with PERMESTA.’ However, after a short period of cooperation they went apart again, the former joining TNI and the latter PERMESTA and later DI/TII. With reference to Toraja Raya, Bigalke concludes: ‘Frans Karangan’s decision to remain loyal to the TNI meant the end of Greater Toraja as anything more than a dream. Without the support of the only Torajan battalion in the TNI, PARKINDO leaders pulled back from joining the poorly planned and equipped PERMESTA rebellion. Their quarrel, unlike that of PERMESTA leaders, was not with Jakarta but with DI/TII. To challenge Jakarta was to jeopardize their only reliable outside support against these guerrillas in exchange for an uncertain alliance of Christian highland peoples.’

⁷⁰ Bigalke notes that PARKINDO played a crucial role in the affair, not only because it was the main political actor in Tana Toraja but, rather, because of ‘its ability to articulate its role as the guardian of Torajan ethnicity’ (1981, 441). For the 1958 affair, see also Harvey, 1989: 291. In New Order Indonesia, Andi Sose became a successful businessman, reinvesting part of his considerable business profits in regional (Bugis-Islamic) prestige in South Sulawesi (see Gatra Info Services 29/III, 7-6-1997).

Tana Toraja and Luwu was put to test again. The Javanese troops were accused of supporting the Toraja military units that had attacked Andi Sose and, hence, of supporting Toraja Raya. In Palopo, the whole issue was presented as a *perang suku* (ethnic war), the first step towards the establishment of Toraja Raya by military force. A letter written by Andi Jemma, last datu and first district head of Luwu, to the Governor of Sulawesi in October 1958, makes clear that operations by Toraja defense groups were seen as a first step towards the establishment of Toraja Raya. Javanese troops were accused of supporting Toraja military units operating in Luwu and Tana Toraja.:

‘Luwu has become a basis of retreat of the Toraja Raya movement, and actually the leadership of the regional military command ... gives moral and material support to that movement, as evidenced by the fact that Luwu society has witnessed members of the Toraja Raya movement running around with firearms, brutally intimidating the people of Luwu. However, we could convince the people not to undertake anything that could worsen the situation and bring more damage Then, in the beginning of 1958, in view of the fact that this situation should not be allowed to continue as it was dangerous to Luwu and its population, at the initiative of the chairman of the Luwu DPRDP (district parliament; D.R.), a secret meeting was held in which it was decided to immediately delegate Andi Achmad to Makassar as representative of the district head to report this affair to the government. It was also decided that he should continue to Jakarta to plead for full government attention in view of the fact that Luwu has become an object of the Toraja Raya movement, which is rejected by its population.’

According to the letter, the Luwu administration reported these incidents to the military command in Makassar through two of its members, one of whom is mentioned above. After threats to these people from the side of the military, the letter continues, the District Representative Council finally decided to discharge them from their function. It is this last move which is fiercely protested in the letter:

‘It is clear, therefore, that this decision was taken solely to realize the plans of the Toraja Raya movement through the PARKINDO fraction in the district parliament of Luwu; for this, W.L. Tambing came to Palopo under the protection of Brawijaya (that is: Javanese; D.R.) troops to arrange it all, dividing the Luwu leadership by using violence. This time Tambing, who holds the presidium of the movement for Toraja Raya Province, will not succeed in reaching his objectives through violence and dividing our leadership, as long as the Luwu leadership remains firm in place Recently the Luwu representative council has clearly become the channel for the wish to reach the objective of Toraja Raya, to which the majority of the people of Luwu is opposed because it does not want to break away from the union of South Sulawesi....’⁷¹

These incidents clearly reflect the general conditions prevailing in Luwu in this period, and point to one of the major obsessions of Toraja politicians and fears of lowland politicians in those days: breaking away from the Bugis lowland, in the process dragging along Luwu. Toraja leaders banking on Toraja Raya, more or less following the blueprint left by the Dutch, never lost sight of Luwu. They considered increasing access to, and control over Luwu an absolute precondition for creating more or less stable political relations in the region. Thus, Toraja Raya still played a role in regional politics, both as a political ideal and as part of the image of Toraja in the eyes of lowland politicians: as bent on expanding into Luwu and establishing Toraja Raya - including Luwu - by force of arms.⁷² In later years, Toraja Raya died in internal distrust, power struggle and conflict. However, even in the sixties issues of identity, complexity of historical ties and administrative boundaries, and large-scale migration continued to play a role in regional politics.

⁷¹ Letter written by Andi Jemma to the governor of Sulawesi, 28-10-1958, ANUP-APS 198.

⁷² In Luwu, Toraja Raya was sometimes deprecatorily referred to as *Menunggu Belanda Datang* (waiting for the Dutch to come; rumours circulated that one day the Dutch, still in New Guinea, would come to the aid of Christians in Sulawesi; clearly a make-believe story). It shows that the ideal was directly associated with colonialism and Dutch influence, further adding to its sensitivity (Interview L. Sombolinggi, Madandan).

5. The Makula agreement and LUTAT affair

The Makula agreement

Migration from Tana Toraja continued to influence the relationship between Luwu and Tana Toraja. In the early sixties, an agreement between the districts was concluded that should make regulated and controlled migration from Tana Toraja to, and settlement in Luwu possible. This agreement is locally known as the Makula agreement.⁷³ With reference to migration, ‘Makula’ is still widely remembered among members of the older generation having had administrative functions or been active in political parties in the sixties. However, it is not documented in the archives of the Luwu or Tana Toraja administrations any longer. In fact, the agreement was not only about migration. It was typically also a statement about boundaries and identities. The agreement is remarkable not only for its stress on large-scale local transmigration, which was regarded as beneficial for both areas, but also for the general context in which local migration was placed again: of the basic socio-cultural unity of the two districts, notwithstanding their recent administrative separation. In the absence of written documents, the exact scope of the agreement, the year in which it was held, who were the district heads representing Luwu and Tana Toraja, and other details remain unclear. Probably, several conferences were held and agreements concluded on this issue in the first years of the sixties, representing either related or separate ‘projects’ for local transmigration.⁷⁴ One of the persons from Luwu who attended the Makula meeting remembers:

‘Point of departure of the conference was that the two areas are like brothers. In the official statement of the agreement it was stressed that Luwu and Tana Toraja are two areas that cannot be separated from one another either in a geographical, socio-economic or political sense; they are inseparable. So in developing these regions, local transmigration built upon this special relationship was needed. That was basic to the agreement. It was even stressed that, though the areas have formally separated, though there are two district administrations for two areas separated by an administrative boundary, the areas are in fact still one in a socio-economic, geographical and cultural sense. I very much agreed with the message of Luwu and Tana Toraja being one. This conceptualization of relations between the two areas moved one step away again from the earlier restrictive concept of Tana Toraja.’

Thus, local transmigration was explicitly placed in the context of the historical relationship between Luwu and Tana Toraja. The two areas have a common history and socio-cultural bond that cannot be broken by the creation of new administrative boundaries. Further, the agreement made clear that migration from Tana Toraja to Luwu still had the support of leading members of the

⁷³ Named after the place where a conference on the issue was held: Makula, a village in Tana Toraja now known among tourists for its hot springs. I searched in vain for further evidence in regional offices and archives. Some people I interviewed had been searching themselves, as a proof against allegations that there was no legal basis for Toraja settlements established in lowland Luwu in the sixties.

⁷⁴ Most people interviewed associate ‘Makula’ with the names of Andi Makkulau in Luwu and H.L. Lethe in Tana Toraja. Andi Makkulau, child of Andi Jemma by his first wife, was Bupati of Luwu between 1964 and 1966. Two people mentioned ‘Makula’ as an agreement between Andi Makkulau (1964-1966) and Bupati D.S. Rantesalu (1964-1966). The first combination is impossible, because H.L. Lethe was Bupati of Tana Toraja between 1960 and 1962, when he was shot in an ambush. Most probably, decisions on local transmigration have been taken both in the 1960-1963 period (probably in 1962; between Bupati Andi Kasim of Luwu and Bupati Lethe of Tana Toraja) and in 1964 (between Andi Makkulau of Luwu and Bupati D.S. Rantesalu of Tana Toraja), each of the meetings focusing on different settlements in Luwu. It seems that ‘Makula’ refers to the latter (1964) meeting.

Luwu nobility. They were in favour of such settlement on locations where agricultural activities of the migrants could be expected to have a stimulating effect on the local Luwu population. They expected local transmigrants to serve as an example to the lowland Luwu population, to teach the latter how to engage in sedentary irrigated agriculture. Like their Dutch-educated contemporaries from Tana Toraja, members of the Luwu nobility tended to regard shifting cultivation or sago production as something belonging to the past, associating it with laziness, backwardness and lack of dynamism of rural society, an obstacle to the promises of progress and development of the post-colonial world. There was a general feeling that development of Luwu required a higher population density, preferably provided by Toraja farmers (see below). Their settlement in Luwu, then, was not seen as problematic, but rather as a stimulus for the development of relatively isolated Luwu. It was primarily the uncontrollable character of settlement that was seen as a problem. In those days, Toraja officials were still prominently present in the Luwu government offices and, through their administrative positions, formed a strong power block in favour of local transmigration.

There were two sides to 'Makula': on the one hand there was the migration and settlement officially recognized and regulated by the Luwu and Toraja administrations. On the other hand, to an increasing extent migration and settlement took place outside the scope of the formal agreement; unregulated and uncontrollable. According to the formal procedures of the agreements, the settlers should have left for Luwu under government guidance, after having registered in their area of origin. However, the practice was different: migrant farmers just entered Luwu without having registered at all, looked for suitable land, settled and finally registered with the local administration in order to formalize their presence and claims on land. In the final years of DI/TII, with peace and order almost restored, this unregulated migration and settlement rapidly increased.⁷⁵ Makula, then, was not only intended to initiate and stimulate migration under responsibility of the district administrations, but also to restrict existing, uncontrolled, practices of highland-lowland migration.

The agreement did not only contain general statements about close relationships between the two districts, but it actually set the agenda for new local transmigration from Tana Toraja to the Luwu plain. Several settlements in lowland Luwu are directly or indirectly associated with the Makula agreement. Some of these were clearly a direct outcome of the agreement. Thus, hundreds of settlers moved to Kapipe and Kariango in North Luwu. While Luwu provided land for settlement and agriculture, Tana Toraja was responsible for selection, settlement, guidance and material support (transport, living allowances, housing) of the settlers. Initially, it was not easy to find candidate settlers, as the fear of DI/TII among the highland population was still considerable.⁷⁶ Both settlements were soon attacked by DI/TII. Most Kapipe settlers returned to their villages of origin in Tana Toraja. After the attacks, the remaining settlement of Kariango was brought under army protection against further disturbances.⁷⁷ Another settlement often associated with Makula is Padangsappa, located South of Palopo. Settlement took place there from 1964 onwards, probably in the framework of Makula. Luwu agencies were responsible for implementation and monitoring of settlement. Like the other settlements, Padangsappa was attacked in the sixties. In the seventies, problems about this settlement continued. It has remained a sensitive issue until now.

⁷⁵ The refugee settlements in lowland Luwu, for instance, attracted many migrants from southern and highland Luwu, and Tana Toraja. See chapter 4 on PIADP.

⁷⁶ In addition, migration was still seen by many as a sign of poverty and a low social position. If decisions about migration had to be taken, low-status Toraja people still looked to their leaders. Leaving the area of origin without leading people joining was out of the question. Therefore, what did the trick was to lure high-status, well-to-do Toraja into registering for local transmigration, to mix the various status groups. This is what often happened (Interview S. Sampe, Rantepao).

⁷⁷ Interviews Y. Duma, Makale; D. Palamba, Makale; J. Salubongga, Rantepao; U. Salurapa, Rantepao; S. Sampe, Rantepao.

The same goes for settlement in Salu Ampak, some thirty kilometres North of Palopo. This is one of the most conflictive areas in North Luwu, swept by several waves of mass violence along the dividing lines of religion and area of origin. From the sixties, large-scale settlement took place under various arrangements, varying from local transmigration related to Makula to the kind of migration and settlement totally uncontrolled by the Luwu administration. 'Official' migration and settlement attracted other migrants who came on their own initiative and rapidly filled up the area. Additional distribution of land seems to have taken place largely through networks of Toraja officials and heads of government agencies in Luwu. Whoever wanted land, whether newly arrived migrants, Toraja policemen, military personnel, or officials stationed in Luwu, could get it through this network of Toraja officials who were in control of government agencies for land registry, forestry and agriculture. Settlement was not restricted to smallholder migration and settlement, but also involved the acquisition of larger areas of land by Toraja leaders and strongmen bringing their own followers. In this way, not only part of the Toraja population but also its social hierarchy and land tenure relationships were exported to the Luwu plain. The location also attracted many Toraja settlers who came entirely on their own initiative.⁷⁸

Other settlements seem to have been a more indirect spin-off from Makula. An example is Rantetiku, located in the Kalaena area in North Luwu (see also chapter 7). This initiative originated from the Catholic Church in Tana Toraja. In contrast to the Protestant Toraja Church, which was closely affiliated to PARKINDO and therefore had become an important political actor, the Catholic Church, numerically much smaller than the Protestant Church and keeping discrete distance from regional political issues anyway, lacked such a strong political basis. Hence, it also lacked the kind of political agenda in relation to Luwu characteristic of Toraja Church and PARKINDO. The Catholic Church became interested in migration to Luwu only in the sixties. According to a Dutch priest, then stationed in Tana Toraja:

'For the Toraja Church the objective of concentrating the Toraja population as much as possible in lowland Luwu, of creating Protestant settlements and areas, was at least a complementary objective to the goal of giving people a better future in Luwu. It was only the latter objective which played a role with us I remember a priests' meeting in 1963 or 1964, when local transmigration became an issue for the first time in the Catholic church. A Dutch pastor, who was stationed in Palopo, came to the meeting. He said that, if we wanted to give Catholic Toraja farmers the chance of improving their life, as the Protestants were doing for their people, we should start with local transmigration now, for in a few years' time there would certainly be no more land left for them.'⁷⁹

Initiatives for the organization of local transmigration to Luwu by the Catholic Church coincided with the political tensions associated with the growth of PKI throughout Indonesia. Leaders of the Catholic Church in Indonesia began to organize their members against PKI. This also happened in Tana Toraja in about 1964, when members of the Catholic Church were organized, among others, in the Ikatan Petani Pancasila (IPP).⁸⁰ One of the tasks of IPP in Tana Toraja became the organization of local transmigration of poor Catholic farmers, selected by the Catholic Church. IPP received a

⁷⁸ Much land is also owned by YPKT (Yayasan Perguruan Kristen Toraja; Foundation for Christian Toraja Missionaries). In the sixties, this foundation established gardens, the proceeds of which were to be used by the cooperative enterprise for paying the old age pensions of its missionaries. It is said to cover some 500 hectares, but it is not clear what remains after land seizures and internal conflicts.

⁷⁹ Interview J. Van Schie, Leiden.

⁸⁰ Pancasila Farmers' Union. Its formation is said to have been based on a decision taken by the Bishops conference in Java, probably in close cooperation with national political parties (interview J. van Schie, Leiden). Ikatan Petani Pancasila was, in fact, a political party, represented in the district-level parliament (interview M. Palentek, Rantepao).

recommendation from the Tana Toraja administration to apply to the Luwu administration for land. After permission had been given, resettlement of the first group of farmers had been planned for 1965 but was postponed because of the political turmoil in that year. Finally, early 1966, local transmigration under responsibility of Ikatan Petani Pancasila began, with funding from the Catholic Church (see also chapter 7).⁸¹

Towards a 'silent strategy'

From the end of 1964 onwards, a number of settlements with a highland population were threatened by operations of remaining DI/TII units roaming around in North Luwu. Local leaders strongly affiliated with DI/TII were not prepared to accept the presence of these settlements as part of the new post-DI/TII order. After 1965, the year in which DI/TII had been beaten, these tensions remained. The changing attitude towards migration on the part of the district administration is said to have caused these tensions. The district administration had come under increasingly strong political pressure to withdraw its support from local transmigration. This change of attitude to migration enraged PARKINDO leaders in Luwu and set off a new wave of politicization of the issue. These incidents, as well as the disagreement between political parties in Luwu on local transmigration seem to have marked the end of the Makula agreement. Though it was never formally terminated, it lost its relevance in an atmosphere of fierce political opposition against organized migration to Luwu. In the next years, organized migration stopped while unregistered and uncontrolled migration to Luwu increased. According to one politician involved:

'PARKINDO politicians in Luwu, had fully agreed with plans for formal regulation of local transmigration through the Makula agreement. Many people in Luwu were in favour of such settlement, but political parties were divided on the subject. Islamic parties tended to be against it and sometimes actively blocked it. See what happened to the settlements that had been formally approved of. These were still made a fuss about and even threatened by violence. The open and official character of agreements about local transmigration did not work, and caused their failure. Establishing committees or creating regulations for local transmigration were like awakening a sleeping tiger.'

After the attacks on settlements in Luwu and the changed attitude of the district administration towards local transmigration, PARKINDO politicians in Luwu embarked on another strategy. At meetings, PARKINDO politicians in Luwu stated that the party no longer supported local transmigration. However, migration to Luwu continued to be propagated among the population of Tana Toraja by the local and regional administrations of Tana Toraja, the Toraja Church and PARKINDO. Through the network of relations between Toraja Church, PARKINDO and administrative apparatus, propaganda for migration to Luwu spread among the population. Not, this time, through official regulation and with material support provided by the regional authorities but by making use of existing social, political and kinship networks in Luwu and Tana Toraja. This 'silent strategy', as one politician calls it, proved very successful during the years that followed.⁸² As another former PARKINDO politician and Luwu official of Tana Toraja origin remembers:

'Indeed there was a change of strategy after the incidents with the settlements in Luwu. Rather than continuing to depend on formal regulation, it proved much more effective if people came by themselves or in

⁸¹ Interview M. Palentek, Rantepao.

⁸² This 'spontaneous' migration, apparently without organization but actually with several agents behind it, continued into the seventies and eighties.

small groups and silently bought land. In the church or by their political party they were only told “come on, go, search land and clear or buy it, there is enough land in Luwu. The people there do not work it and are willing to sell land. So whoever has the money, go there and buy land”. In those years I worked at the Land Registry Office. Sometimes, Toraja people who had bought land came to me to report and have it registered. So I know that many people came to Luwu in those days. This silent strategy - just pretending not to know what was going on - was very effective.’⁸³

After the Makula agreement had been mothballed, this kind of migration and settlement was clearly on the increase. Luwu was flooded with what was called *transmigrasi gelap* (illicit transmigration), a process that could not be regulated, even less stopped. Increasingly, people from Tana Toraja came to Luwu on their own initiative. After having sold a parcel of land, buffaloes or other possessions in Tana Toraja, they carried the proceeds to the Luwu plain and invested in cheap and widely available land. Migration has remained an extremely sensitive issue from the sixties until now. It seems to have reached its peak in terms of numbers of settlers in the seventies and eighties. Later, destinations like Southeast Sulawesi and Central Sulawesi, became increasingly important for migrants in search of agricultural land.⁸⁴ Influenced by the Sulawesi cocoa boom, recent destinations of Toraja migration involve other agro-ecological zones, suitable for cocoa gardening rather than for irrigated agriculture.

Local transmigration and national transmigration

Was there any relationship between the Makula agreement and the prospect of Luwu being filled up with state-sponsored transmigrants from other islands, once the national government would have succeeded in establishing total control over South Sulawesi? If only in view of the widespread anti-Javanese sentiments in South Sulawesi, it is almost impossible that this factor did not play a role (see Harvey, 1977: 40). Indeed, being ahead of the national transmigration programme in obtaining access to land in lowland Luwu was a consideration in stimulating local transmigration. The issue of local transmigration in relation to national transmigration seems to have been a topic of discussion on a meeting in the beginning of the sixties:

‘Makula was the outcome of a conference initiated by the governor and held in Buton (southeastern Sulawesi; D.R.) early in the sixties, when southern and southeastern Sulawesi were still one province. All district heads gathered to discuss regional development. One of the issues discussed was the wish of the Luwu administration to bring in part of the population of Tana Toraja by local transmigration. Andi Kasim, who was then Bupati of Luwu (1960-1964; D.R.) asked my opinion about it. I was in favour of opening up Luwu for local transmigration, because I was convinced that we would never be able to develop Luwu without considerably increasing its population. We would be rich in name only, but in fact remain as poor as ever before Many people in Luwu were against any form of migration and settlement, whether by Javanese or Toraja. But anti-Javanese feelings were strongest by far. In the end, many Luwu people reasoned that it would be better if the Toraja, our own neighbours, came to Luwu rather than *orang lain* (strangers; D.R.). Tana Toraja politicians themselves had also directed their strategy towards local transmigration.’⁸⁵

According to a Toraja administrator who attended the Makula meeting, the prospect of national transmigration also played a role in its organization. Even during the Makula meeting itself it was stressed that Luwu had already received transmigrants through the Dutch colonization programme,

⁸³ Interview S.D. Tallulembang, Rantepao.

⁸⁴ Interview L. Sombolinggi, Madandan.

⁸⁵ Interview Andi Baso Rachim, Makassar.

and that hence it would not take long before transmigration to Luwu would be resumed. Therefore, it was important to give farmers from Tana Toraja the opportunity to obtain land in Luwu before it would be filled up with national transmigrants. There was a strong *anak daerah* (lit. ‘children of the region’) feeling. Rather than seeing the benefits of land development in Luwu accrue to Javanese, it would be better if the people of Sulawesi could profit. Therefore, people in Luwu easily accepted plans for organized local transmigration. One former official present at the meeting recalls:

‘One of the people behind the Makula agreement had been Andi Makkulau from Luwu. It was his purpose to bring together Luwu and Tana Toraja again through the conference. He could not understand or accept that Toraja people were regarded as strangers who did not have the right to settle and live in Luwu. Therefore, his first objective was to give priority to local transmigration from Tana Toraja, to give them a chance to settle in Luwu and use its land He more or less worded it in terms of the competitive interests between national transmigration and local transmigration, like “if we even are going to receive Javanese transmigrants here, why don’t we want to receive our own brothers?” In the conference, in fact, a priority was expressed for Toraja farmers, for “anak daerah”.’⁸⁶

In the following account, the same issue of competition between national transmigration and local interests is mentioned:

‘The Makula agreement was concluded for local transmigration, especially to Padangsappa. It was initiated by Andi Makkulau who, out of sympathy for his Toraja neighbours, donated the land for settlement. It was, in fact, a programme to fill up locations in the Luwu plain that were still empty. It was expected that the national transmigration would be coming to Luwu, once peace and order would have been restored. As people from Tana Toraja were bent on getting access to land in Luwu as well, an agreement was concluded by the district heads of Tana Toraja and Luwu about local transmigration, to fill up all empty spaces in lowland Luwu with people from Tana Toraja.’⁸⁷

Though they prioritized local transmigration, PARKINDO politicians in Luwu were not anti-transmigration. Rather, they tended to see it as a stabilizing factor in a region torn by conflict. In the course of the sixties, under the New Order regime, important changes became manifest on the national scene. ‘Development’ was on the agenda, and foreign donor countries and institutions were ready to finance Indonesia’s rural development strategy based on development of infrastructure in combination with transmigration. But development was not to be had for free: it was exchanged for regional loyalty to the centre. Allowing transmigration into Luwu would be the only way to get access to national funding for the construction of irrigation works and other infrastructure needed for developing the Luwu plain. As one former politician states it:

‘We realized that funds would primarily be allocated to those areas that were willing to receive transmigrants. Therefore, and because we had received transmigration during the colonial period, we held the opinion that the Luwu administration had better be open about its willingness to receive national transmigrants, rather than being ambivalent about it or opposing it. That would be the only way to attract funding for infrastructure. That attitude, in fact, marked the beginning of the Luwu Irrigation Project, meant to prepare settlement areas and the infrastructure needed for transmigration.’

Transmigration also found support among members of the Luwu elites. One of the first to speak out in support of transmigration was Andi Hamid Opu Onang, member of the local nobility in the Luwu

⁸⁶ Interview S.D. Tallulembang, Rantepao. Andi Makkulau was one of the members of the Luwu royal elites often mentioned as a tolerant person aware of the socio-cultural ties between Luwu and Tana Toraja.

⁸⁷ Interview L. Sombolinggi, Madandan.

plain.⁸⁸ Another supporter was Andi Achmad, one of Andi Jemma's sons, district head of Luwu from 1968 to 1972, and datu of Luwu from the mid-nineties:

'By the end of the sixties, national transmigration was still a very sensitive issue, influenced by party politics, strained relations between centre and periphery, and anti-Javanese sentiments. Many local people were against transmigration, but in my opinion it was possible and necessary. Luwu was an underdeveloped area with much unused land. Javanese and Balinese are known to be not very troublesome. Their diligence in developing land into irrigated fields was expected to provide a positive example to our population. At the provincial level there were also many opponents of transmigration. Yet, we managed to open up Luwu for transmigration. In 1968 we received a request for resettlement of the victims of the volcanic eruption of mount Kidul near Yogyakarta. Those people were badly in need of land, while we could use their labour power to develop Luwu. First, a delegation from Java came to Luwu to discuss the possibility of transmigration. I happened to know the official in Jakarta responsible for the *Transmigrasi Bencana Alam* programme.⁸⁹ After initial discussions in Luwu we went on a mission to Yogyakarta, where the details of the plans for resettlement were discussed with Sultan Hamengkobuwono. In 1969 the transmigrants arrived in Luwu. Local transmigration turned out to be a problem then. When the transmigrants from Java arrived, Toraja local transmigrants had already secretly entered part of the location planned for the Javanese, settled there and cleared the land. I complained to the administration of Tana Toraja, saying that things could not go on like that, that the migration of people from Tana Toraja should be checked, and that Luwu can only accept those who have formally registered before leaving Tana Toraja.'⁹⁰

The 'LUTAT affair'

Before the political and administrative map became frozen under the influence of the New Order regime, the issue of relations between Luwu and Tana Toraja surfaced once more in regional politics. It did so in a period when tensions in national politics were rising, while DI/TII had not yet been suppressed. This final - and failed - attempt at creating an administrative unit at the level of a province comprising at least Luwu and Tana Toraja is locally referred to as 'LUTAT' (Luwu-Toraja Province).⁹¹ The LUTAT concept developed in Java in the late fifties and early sixties, mainly among Java-based young intellectuals from Luwu and Tana Toraja. The plans show both similarities and differences with earlier political lobbying for Toraja Raya. LUTAT was characterized by the same political objective of breaking loose from Bugis-Makassarese South Sulawesi and becoming a province. There was the same awareness of the mutually supportive and complementary resources of Luwu (land) and Tana Toraja (people), of the common socio-cultural and historical ties, and the artificiality of existing administrative boundaries. However, the Jakarta-based group belonged to a younger generation than those did who had propagated Toraja Raya, and did not like the latter's flavour of colonial missionary politics and Toraja expansionism.

With government control in South Sulawesi almost restored, it was more difficult for regional leaders to negotiate demands for administrative rearrangements with the centre than in the fifties. There was the need now to make the ideal come true through lobbying in the national political arena rather than on the regional battlefield. In the fifties, political representatives of many regions had

⁸⁸ See Charras 1982 who discusses Andi Hamid's role in attracting national transmigration to the Bone-bone area. A Dutch-educated member of the local nobility, much influenced by colonial ideas on efficiency of land use, intensification of agriculture and the exemplary function of Javanese irrigators, he was openly in favour of Javanese transmigration rather than seeing it in terms of Javanese domination (Charras, 1982: 107).

⁸⁹ The transmigration programme for the victims of natural disasters.

⁹⁰ Interview Andi Achmad, Palopo. Meant are probably the Toraja settlers in Patengko (see chapter 7).

⁹¹ The 'Tat' in LUTAT stands for Tator (which again is short for Tana Toraja).

come to Java to plead the case for recognition of their region as a separate administrative unit, often in exchange for support to the national government in its struggle against one of the regionalist movements of Sulawesi. Central Sulawesi was well on the way of being recognized as a separate province. This made the original concept of Toraja Raya (the ‘Tumakaka-Tambing concept’) more difficult to accomplish than ever before. Gradually the fusion of Luwu and Tana Toraja into one province was emerging as another option for disconnecting Luwu and Tana Toraja from South Sulawesi. If the people and resources of both areas could be pooled into one province, this area would have more freedom directly to decide on its own development issues and attract the necessary resources without being dependent on the intermediate administrative level of South Sulawesi. LUTAT brought within view the administrative separation from Makassar, and pooled the potentials of Luwu (its land resources) and Tana Toraja (its people) into one administrative unit.

Though LUTAT had been developed in Java, it enjoyed broad support from the elites and political leaders of Luwu and Tana Toraja. In the early sixties, political support in South Sulawesi was actively mobilized. Resolutions in support of the formation of a province comprising Luwu and Tana Toraja were prepared in Luwu and Tana Toraja and sent to Jakarta in order to be presented to the Ministry of the Interior. There is evidence that this lobbying for the province continued into the period immediately following after the 1965 coup. In order to keep distance from the political sensitivities caused by the regionalism of the fifties, a trump card of great respectability was needed: Andi Jemma, last datu of Luwu and widely recognized as *pejuang* (hero) in the anti-colonial struggle.⁹² The plans were based on the assumption that making a strategic use of his merits in the revolution would guarantee compliance with their request. The group also planned a visit by Andi Jemma to the presidential palace, to plead the case of LUTAT directly with the president.⁹³ Andi Jemma had been informed about the plans and had discussed them with some of the members of the Java-based group when he was in Jakarta. It is said that he fully supported the demand for the province, and regarded his role in making it materialize as his final contribution to the development of Luwu. President Soekarno had no objections against the request, and expressed his support to it on 23 February 1963.⁹⁴ In the end, LUTAT did not materialize. Fierce objections on the part of the Bugis-Makassarese elites to the plans for provincial autonomy of Luwu and Tana Toraja are widely believed to have been the main cause of the failure of LUTAT. As one person formerly involved in the movement relates:

‘Our main objective was to be able to rule ourselves, independent from Makassar. That was a very sensitive issue, especially in our relationship with South Sulawesi. Andi Jemma had discussed these matters with our group and the idea, including separation from South Sulawesi, was acceptable to him. In fact, our action came too late. When we started our lobbying for a Luwu-Toraja province, Andi Jemma was already ill. Had he demanded a province just after independence, he would certainly have been given it. But with the regional troubles in the fifties and all changes in the kingdom, other options were propagated. Andi Jemma was no longer the influential national revolutionary hero. His influence had declined, and he had become increasingly dependent on higher-level politics in Makassar. The Bugis rejected a future South Sulawesi without Luwu and Tana Toraja. We even had the impression that Southeast Sulawesi Province was established with the objective of blocking formation of yet another province, that of Luwu-Toraja.’

⁹² Later, when the district structure was already in place, the last datu’s widow took over the title of Datu Luwu until her death in the nineties. Andi Achmad, current datu of Luwu, has the title Opu To’ Addiluwu.

⁹³ There were plans to make Andi Jemma governor of the province (interview L. Sombolinggi, Madandan).

⁹⁴ Andi Jemma died two years later, in 1965.

However, for Luwu that was not the end of the story. LUTAT continued to buzz around in the region, even after the 1965 coup. In 1966, the then district head of Luwu was fired after he had expressed his open support to the movement. He had signed a petition demanding the provincial status for LUTAT and personally presented it to the Minister of the Interior during the latter's visit to Luwu. So shortly after the coup and DI/TII, any allusion to political-administrative changes, even less the actual promotion of such changes by a regional administrative head, had become absolutely anathema to Indonesian politics. That marked the end of LUTAT. Many odd stories and conspiracy theories continue to surround the LUTAT affair, but what exactly happened remains unclear.⁹⁵

LUTAT reinvented? Post-New Order developments

In the New Order period, there was no place for further political action for administrative change. Luwu and Tana Toraja remained separate districts of South Sulawesi. In the course of the sixties, migration from Tana Toraja to Luwu rapidly increased to a level higher than ever before. Irrigation development in the framework of the Luwu Irrigation Project added to the attractiveness of lowland Luwu for Toraja farmers in search of land. It became an important pull factor for regional migration and settlement. This regional migration sometimes competed for settlement space with the national transmigration programme. As it turned out, in some planned irrigation areas initially reserved for transmigrants part of the land was already claimed by other settlers, usually of Tana Toraja or highland Luwu origin.⁹⁶

To this day, Toraja migration and settlement in the Luwu plain have remained an extremely sensitive issue. Though conflicts have occurred between the local population and transmigrants from Java and Bali, the most massive, destructive and violent conflicts in North Luwu have been those between the (Islamic) lowland Luwu population and (Christian) settlers from Tana Toraja. In some areas tensions have been building up along the ethno-religious dividing line of 'indigenous' Islamic lowland Luwu versus migrant Christian Toraja sections of the population. The conflicts often seem to have their roots in socio-economic rather than ethnic or religious differences between the population groups involved. They are in some way related to the differential pace of economic development of local and immigrant groups, and to rights over land. However, such tensions are primarily expressed along communalistic and religious lines, both before the crisis and after. Xenophobic reactions among the lowland population, almost certainly stirred up for political motives rather than emerging spontaneously, thrive on the different degrees to which locals and migrants have been able to profit economically from the rapid developments in Luwu during the last decades. Pretexts leading to mass violence along ethno-religious lines can easily be found in sensitive issues related to religion, such as pigs, consumption of alcohol, or gambling (see also chapter 11).

At this point I return to the introductory part of this chapter: the meltdown of established administrative structures in post-Suharto South Sulawesi. The crisis and the vacuum of power in the centre meant a shift of balance from the centre towards the regions. This proved a sound basis for regional politicians to explore new political agendas or revitalize old ones, and pose their demands to the crisis-ridden centre. Early 1999 I interviewed a former leading figure of the LUTAT movement in Jakarta. He told me that he had just met one of his former LUTAT comrades on the golf course. The man had told him: 'now that Suharto is gone, the struggle for LUTAT province can

⁹⁵ Some people interviewed maintained that the district head had been tricked by PARKINDO into signing the petition in support of LUTAT. This party was indeed bent on getting rid of the district head because of his change in attitude towards Toraja migration and settlement in the Luwu plain (see above).

⁹⁶ See, for instance, the PIADP case (chapters 4-6), and the cases of Patengko and Rantetiku in chapter 7.

continue'. He was right: not much later, a Committee for Luwu Raya Province had been established and publicly expressed its demands for provincial autonomy for Luwu and Tana Toraja. The main legitimizing arguments were basically about resources (land and people), identity and boundaries.

The above account shows that there is a high degree of continuity between developments in the fifties and sixties (Greater Toraja and LUTAT) and recent demands for Luwu Raya Province. There is another parallel between the current political demand for Luwu Raya and lobbying for LUTAT in the sixties: South Sulawesi does not seem to be really enthusiastic about it. One of the proponents of Luwu Raya even suggested that formation of the new province is intentionally hampered at the provincial level of South Sulawesi, out of fear for the loss of Luwu and North Luwu as districts rich in natural resources and main sources of provincial income. Internally, according to this article, discussions are still going on about the relationship between Luwu and Tana Toraja and the tensions and conflicts between the two groups in lowland Luwu. However, one spokesman of the movements leaves no doubts about his ambitions of establishing Luwu Raya: 'what we demand is the geographic area of the former kingdom. That is the basis of the struggle for formation of Luwu Raya.'⁹⁷ Contrary to this firm statement, the recent proclamation of a Luwu Raya *excluding* Tana Toraja (see chapters 2 and 11) shows that the regional political scenarios are extremely flexible and volatile, and not based on a broader regional consensus about future political arrangements.

6. Luwu and Tana Toraja: emergent identity, migration and access to land

Luwu and Tana Toraja: a sensitive history

In this chapter I have traced one dimension of the recent history of land use in lowland Luwu: the migration to lowland Luwu of farmers from Tana Toraja and highland Luwu. I have analyzed this history of migration in the context of socio-political and administrative change, and emergence of Toraja identity among the highland population. I traced the interrelated elements of emergent Toraja identity, a resource-driven search for 'Lebensraum' through migration to lowland Luwu, and the struggle for the creation of political-administrative boundaries felt to represent this new Toraja identity. As to the first, following earlier work on Sulawesi (e.g. Bigalke, 1981; Schrauwers, 1995) I have shown that Toraja identity is closely related to the establishment of colonial rule and mission. Missionary and anthropological classifications of the population groups of southern and central Sulawesi became the basis of the construction of 'the Toraja'. These also inspired visions of, and formed the source of legitimation for scenarios of directed administrative change along the dividing lines of religion: a future cultural-religious and political-administrative order in terms of the ideal of Greater Toraja. Greater Toraja was a normative construct, an ideal image of the regional political-administrative future disguised as ethnological knowledge. In the Sa'dan Highlands of southern Sulawesi and its surroundings, both colonial classifications and the related political ideal caught on. From the thirties, a strong sense of Toraja identity emerged among the Dutch-educated, Christian section of the population that became politically active and formed the basis of the colonial and early post-colonial administrative system. The Greater Toraja ideal did not die out with the demise of colonial rule. Based on the same fiction of ethnic unity of highland populations that had guided the colonial-missionary concept of Greater Toraja, its post-colonial successor Toraja Raya continued to be meaningful in the fifties.

⁹⁷ See Kompas Cyber Media 7-6-2002.

Toraja identity was also related to the emergence of migration strategies oriented to lowland Luwu. In the colonial period, the potential of this area for irrigated agriculture and settlement began to be systematically exploited. Plans for large-scale migration of Toraja farmer families to lowland Luwu became part of colonial regional development plans. Dutch policies had been rooted in negative valuations of existing resource use and agricultural practices in Luwu, especially sago cultivation. Resettlement of Javanese and introduction of irrigated agriculture were to replace laziness with diligence, stagnation with growth of agricultural production, and backwardness with modernity. The regional impact of this development strategy of irrigation and colonization in Luwu was considerable. The Dutch model remained in vogue in Indonesia and became the model for New Order rural development. It was also the first initiative for large-scale state-initiated resettlement in the region. However, the Dutch did not regard colonization by Javanese as the only way to increase population and change (agri-)cultural practices in Luwu. As I have shown, similar plans were under consideration for organized migration from Tana Toraja to Luwu, and resettlement in the latter area in the forties of last century, a few years before the end of the colonial period.

The establishment of the Committee for Local Transmigration in the early fifties shows that the Dutch development model had been taken to heart by political elites in Luwu and Tana Toraja. They had taken over the Dutch approach to natural resources, including its focus on economic rationality, efficiency, and danger of resource degradation under the influence of traditional agricultural practices. The post-colonial plans for resettlement of Toraja farmers in lowland Luwu came to nothing, due to the growing political unrest. However, establishment of the Committee and its development policy agenda of migration and resettlement shows that migration and resettlement as a field of systematic planning and social engineering had been taken over from the Dutch by regional political actors, and came to be actively applied to bring about societal change. Both among highland and lowland political elites, the seeds of development thinking had been sown.

The political tensions of the next years marked a period of growing Toraja political assertiveness. In 1952, Toraja political leaders and administrators were able to negotiate with the main political and military actors in the region their plans for large-scale refugee settlement in the Luwu plain. 'Lebensraum' and 'Toraja Raya' were the guiding concepts of a generation of Toraja politicians that had to adapt to changing political conditions and envisage a political-administrative and socio-economic future for 'the Toraja people' in Bugis-dominated southern Sulawesi. They realized that Luwu, with its abundant land resources, was the place to look to. Helped by party politics, mass settlement of farmers with a distinctive and increasingly strong Toraja identity in Luwu would change the position of Toraja people as well as the power relations between the areas, and put highland-lowland relationships on a completely different footing. Thus, Luwu had become part of a more encompassing struggle for Toraja Raya. In the turbulent fifties, Toraja Raya continued to be a political issue. However, the Bugis-Makassarese interests in southern Sulawesi effectively blocked secession of Luwu and Tana Toraja as a province. Both remained districts of South Sulawesi.

Issues of identity, migration in search of access to land, and the drawing of new administrative boundaries continued to play a role in the sixties. The Makula agreement, concluded in the early sixties between the administrations of Luwu and Tana Toraja, made possible migration and land settlement of Tana Toraja farmers in lowland Luwu. Only a few years after Tana Toraja had gained its hard-won autonomy, the Makula agreement stressed again the basic socio-cultural unity of the two areas, and formed the foundation on which large-scale local transmigration from Tana Toraja to Luwu was to be built. However, soon after its inception, local transmigration based on Makula was stopped short due to political conflicts in Luwu. Aware of the pitfalls and dangers of a formal policy of migration, proponents of massive local transmigration shifted to a 'silent strategy': stimulating the Tana Toraja population to settle in Luwu without advertizing it as a politically inspired Toraja policy of migration and settlement. It is difficult to estimate the direct impact of this silent strategy,

but one thing is clear: the final years of the sixties marked the beginning of a period of increasingly high rates of uncontrolled migration from Tana Toraja to Luwu. A period in which attempts to formalize and administratively regulate and control migration and settlement had been given up.

On the political-administrative front, LUTAT was a last attempt - too late and with too little political support - to bring about administrative changes to sever Luwu and Tana Toraja from South Sulawesi as a separate province. The Toraja Raya option had been too closely associated with colonialism, and had become impossible anyway. LUTAT, developed by a younger generation of Luwu and Toraja people less influenced by colonialism, gave a more balanced role to Luwu and Toraja political elites. Based on the anti-colonial struggle in Luwu under its last king, Andi Jemma, it was supposed to stand a greater chance of being acceptable to national politics. But it came too late and in a period that was politically too sensitive. It clashed with the same southern Sulawesi interests against provincial autonomy for Luwu and Tana Toraja that had played a role in the fifties. In the mid-sixties, under the New Order regime, the struggle for LUTAT was given up. More than thirty years later, in the crisis years, it re-emerged as a new movement for the attainment of provincial autonomy for Luwu, North-Luwu and Tana Toraja. After administrative separation in the fifties, earlier LUTAT and the current demands for Luwu Raya aim at some form of re-integration and repair of political-administrative and other ties between these areas, broken in the processes of administrative change and redefinition of the relationships mainly along lines of ethno-religious identity in the twentieth century.

Other conclusions can be drawn from the case about broader processes of land resources development in lowland Luwu. First, it makes clear that various political actors played a role in creating or co-determining access to land: the national state, the regional administration, the army, elites related to the former kingdom, political parties, churches, etc. Most actors were fully aware of these opportunities in Luwu, the political vacuum created after independence, and the emerging Javanese ambitions for rural development through a package of transmigration and investments in infrastructure. Strengthening its grip on the region was a priority for the Javanese-dominated state. Transmigration was one of the instruments for reaching the political objective of strengthening Javanese control. In South Sulawesi, including Luwu, it had taken many years before central political-administrative control was firmly established. As a consequence, transmigration, and development of land and water resources in Luwu could only start in the course of the sixties. However, since many years Luwu had become an arena in which other actors attempted to strengthen their grip on land. Regional plans for the development of Luwu, embedded in and shaped by wider processes of social and political struggle, competed with the ambitions and plans of the central government. Regional development along the lines initiated by the Dutch appealed to the regional elites, many of whom had embraced the new world view of planned progress towards modernity. On the one hand, it was clear that only development by the national state in the framework of the transmigration programme would yield the financial and other resources needed for development. On the other hand, regional elites had their own priorities and, to some extent, discretionary powers to discuss and stimulate highland-lowland migration as a way to fill up land in Luwu with 'anak daerah' instead of Javanese. There was the feeling that people of the region had to be given a chance to profit from the land resources in Luwu as well. The various 'development projects' emerging from this feeling and preceding the start of transmigration in Luwu, often competed for land with the latter programme: several areas selected for national transmigration had already been (partly) settled and cleared by groups of settlers from Tana Toraja.

Finally, this regional history of migration also provides a general historical context for the three chapters on intervention in land tenure in the PIADP project in lowland Luwu that follow. First, it gives historical depth to the sensitive character of settlement in the area, and presents a background against which existing land tenure and settlement patterns in areas with a high migrant population

like the area of PIADP can be historically explained. The largely uncontrolled and hidden character of migration, settlement and land development is one factor (though not the only one) behind the almost total absence of formal registration of land claims in the area, even at the local level. Second, and very important for the PIADP land reform case, it provides an explanatory background for the continued importance of the factor of area of origin in the staff composition of regional (district-level) government agencies in the day-to-day functioning of such agencies, as well as in the networks through which access to land resources or political support can be created.

The ambivalence of identity

At a more theoretical level, the analysis shows the complex and messy character of the relations between identity, access to land, and political-administrative boundaries. Recent work on the region has shifted its focus from identity defined in terms of 'traditional culture' (e.g. Nooy-Palm, 1979, 1986) to conceptions of identity as socially constructed (see chapter 1) Stressing the dynamics of production, reproduction, and transformation of identities under the influence of socio-political change, the latter represent a concern with processes of identification rather than with fixed identity (Smith Kipp, 1993; Smith Kipp and Rogers, 1987; for Tana Toraja: Adams, 1995, 1997; Bigalke, 1981; Volkman, 1985). However, essentialist images of 'the Toraja' as a discrete 'tribal minority' living in a distinct geographical space with boundaries that coincide with those of the administrative space granted by the national state, can still be found in excellent accounts of the ethnic politics of the New Order (e.g. Persoon, 1994). Such approaches isolate Toraja identity from its dynamic socio-political context rather than inquiring into its inherently ambivalent and disorderly character.

My account has shown that there is no clear and unambiguous relationship between identity, geographical space and administrative boundaries that enclose the Toraja as 'ethnic minority'. In their struggle for recognition, Toraja political leaders were torn between two images of Toraja identity and related political-administrative ideals and options. They felt affinity and associated themselves with the colonial construction of 'Toraja'. However, changing socio-political conditions rapidly drew them towards the post-colonial administrative definition as a district. The former, epitomized in the concept of Greater Toraja, proved to be too loose-fitting in the reality of Sulawesi politics. The latter one, resulting in Tana Toraja District, was increasingly felt to be a straitjacket that does not represent 'real' Toraja identity either, as it excludes highland groups that identify socio-culturally with the population of Tana Toraja. Initially, Tana Toraja was regarded as a major political achievement, later increasingly as an administrative prison. Toraja identity had proven so elusive, that political leaders had let it slip through their hands. Both Greater Toraja and Tana Toraja were 'invented', ideological constructions of discrete and unambiguous relationships between people, their collective identity and territoriality. The case shows that such identities, and the way they are incorporated into the national state, are far from neatly fitting, tailor-made, static structures in which the boundaries of administrative unit and identity coincide. These relationships are inherently problematic. This lack of fit between identities and boundaries in real life is a continuous source of tension and conflict.

There is not much 'primordial' in Toraja identity. It was imagined, embedded in regional social and political processes, but no less real in the ambitions and ideals, opportunities and setbacks, tensions and struggles it created. My reconstruction of the role of identity in processes of migration, settlement and access to land in lowland Luwu may serve as an example of an 'imagined, but not imaginary' (Jenkins, 2002) identity and its relationship to issues of resource use.

The Pompengan Implementation Project: from civil - to socio-legal engineering

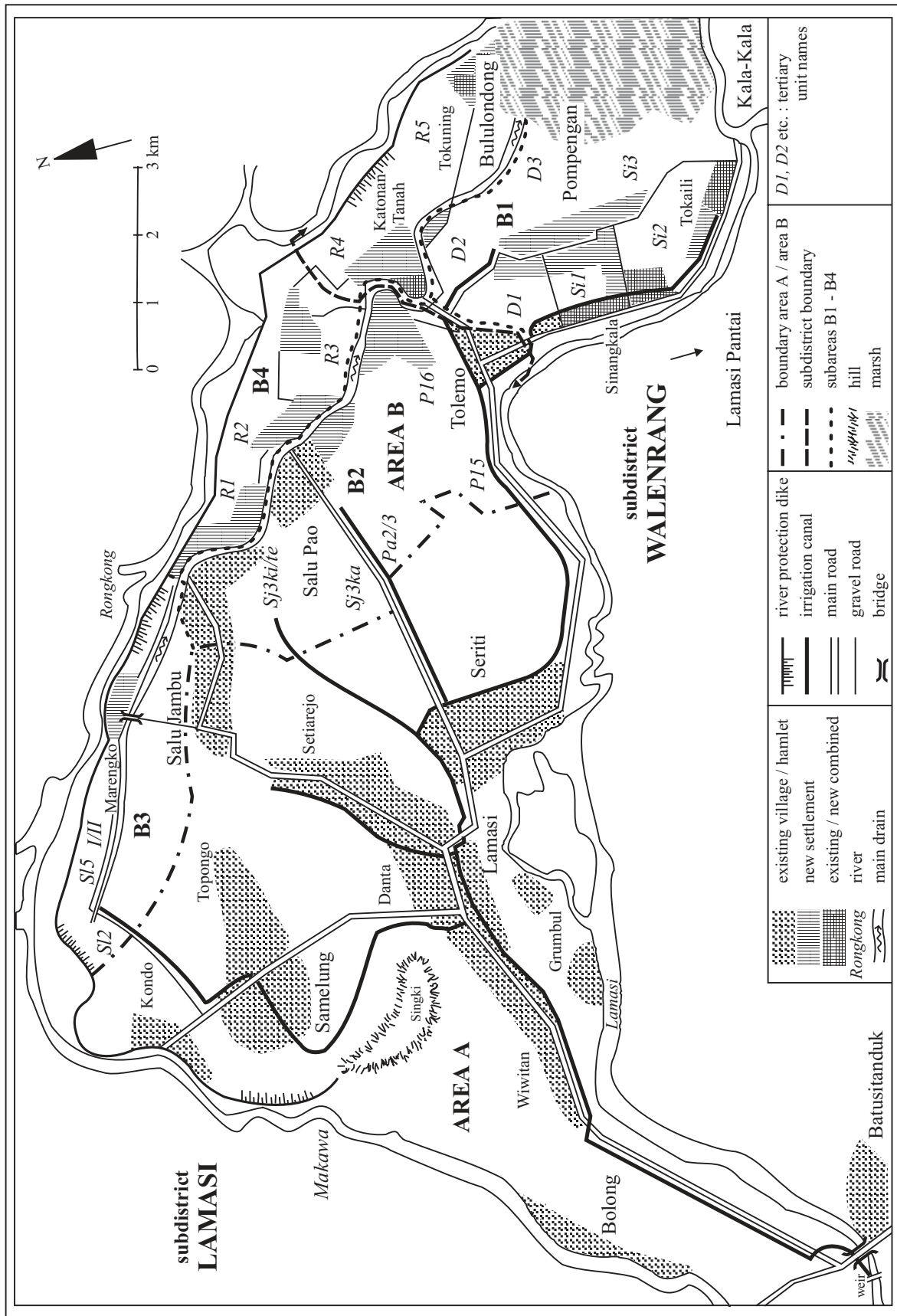
1. PIP: an irrigation project in the North Luwu Plain

Twenty kilometres North of Palopo, the main road into North Luwu crosses River Lamasi in the town of Batusitanduk. Upstream of the bridge, a weir diverts river water into the main canals of the Lamasi Left Bank (*Lamasi Kiri*) and Lamasi Right Bank (*Lamasi Kanan*) irrigation areas. Turning right after crossing the river, one enters Lamasi Kiri, a 9,000 hectare area enclosed by the rivers Lamasi, Makawa, Rongkong and Kala-kala (see map 3). The area is also known as ‘the Pompengan area’ (*Daerah Pompengan*), after a village located in the lower part. From 1980, this was the setting of a Dutch-Indonesian irrigation project, the Pompengan Implementation Project (PIP). From 1986 until its termination in 1992, the project was called Pompengan Integrated Area Development Project (PIADP). PIP was a project for upgrading and expansion of irrigation, drainage and roads, and construction of flood protection dikes in an area of 9,000 hectares, 4,450 of which with an irrigation potential. Apart from the ‘non-physical component’ - establishment and guidance of WUAs for the new TUs - attention to social aspects of irrigation was minimal. It was restricted to minimizing the negative impact of construction, organizing construction and irrigation management in a way acceptable to the farmers, and preparing for expansion into the lower project area.¹ Before 1983, the Netherlands Agency for Development Cooperation (DGIS) carried out the donor contribution to implementation. Later it was contracted out to Dutch consultancy firms.

From 1986, project activities shifted from the densely populated and intensively cultivated upstream part to the sparsely populated and less intensively cultivated downstream part of Lamasi Kiri. By that time, new definitions, objectives, and priorities of development were influencing the donor world: ‘participation’, ‘reaching the poorest’, and ‘integrated development’. These changes were reflected in new plans for the Pompengan area. In addition to ongoing construction of dikes, roads and infrastructure for irrigation and drainage, and a programme for land reform and (re)settlement of farmers, including a housing and sanitation programme, agricultural development and extension, and guidance of WUAs for the new TUs became part of an ‘integrated area development’ approach for the downstream part of the area. To stress the break with a technically biased, multi-sectoral past and transition to an ‘integrated’ future, PIP had become PIADP.²

¹ The criteria for implementation were: irrigating a maximal area, technically acceptable implementation, and implementation in a way acceptable from a socio-economic point of view (PIP, 1981a; PIADP, 1991a).

² For other work on PIP/PIADP, see Quarles van Ufford and Roth (2003) (critical reflection on optimism of planning in development projects like PIADP); Schrevel (1993) (for irrigation and rural development in PIADP); Vos (2001) (for PIADP as one of the projects discontinued after political conflicts between the Netherlands and Indonesia); Roth (1994) (critical analysis of the ‘integrated’ character of PIADP).



Map 3: the area of PIP and PIADP

The shift from PIP with its physical objectives towards ‘integrated’ PIADP was also a transition from a civil engineering approach towards one based on socio-legal engineering, in which land redistribution and settlement became the core elements. Making inventories of land claims and weighing their validity, devising rules for inclusion and exclusion, decision-making on land and project goods to be distributed to the farmers required a legal framework at project level. This project law (see chapter 1) became the basis for allocation of land and other project resources in the framework of implementation of PIADP. This chapter and the two following ones are about the attempts at such legal regulation of land tenure in the socially, legally and otherwise complex environment of PIADP. The case illustrates the limitations of socio-legal engineering approaches to land titling, and puts into perspective generalizing statements and a-priori assumptions about its added value in terms of security of land tenure. I analyze how active intervention in land tenure gradually came to be seen as a ‘solution’ to existing project problems; how complex problems gave rise to even far more complex solutions. This chapter is structured as follows: the second section provides a general description of the project area and its major characteristics, with a focus on settlement and land tenure, and the ways these developed. In the third section I give an account of the growing awareness of the importance of land tenure. It shows how uncertainty about tenure conditions, in relation to changing views of development and differences in approach between the ‘technical’ and the ‘social’ consultants led to active intervention in land tenure. In the fourth section I describe the shift towards the ‘integrated’ project, with a focus on its key components of land reform and settlement. The final section adds a short conclusion to this chapter.

2. The Pompengan area: a short history of land tenure, land use and settlement

Changing land tenure

The upstream part of the Pompengan area, between the weir and the small rural town of Lamasi (see map 3), is perfectly suited for intensive rice cultivation. The gently sloping landscape is almost entirely covered with intensively worked irrigated rice fields. Land prices in this part of the area have soared in the last two decades as a result of the further improvement of infrastructure by PIP. Harvest yields are high here. For the Agricultural Service, this is an area of experimentation with new rice varieties and agricultural technology. Lamasi is a busy rural centre with a market, rice mills, a cinema, shops, small industries, repair shops for cars and tractors, and a bus connection to Makassar. The houses with tiled roofs, the people, the food served in the stalls around the market, all are Javanese. Continuing downstream into a southeast direction, the landscape flattens out into a plain. Almost all land is used for irrigated rice cultivation, as far as the eye can see. Many farmers who own land here live in the village of Seriti. The style of house building is characteristic of highland Luwu and Tana Toraja. The walls of some houses boast traditional Toraja wood carving or beautifully roofed rice barns that form a major tourist attraction in the highlands. Further downstream, near Rongkong River, the land use pattern changes visibly. Irrigated rice fields are no longer omnipresent here. The land is more extensively used or even fallow. Remaining pockets of land show the last traces of the vegetation that used to be characteristic of this area before project intervention: a mixture of grassland, bush, marshland and forest. Other parts are used for the cultivation of cash crops like cocoa and oranges. At the southeast end of this so-called Rongkong area of the former project, drainage problems predominate. The low elevation of this area, less than a meter above sea level, impedes drainage. The styles of house building in the small and relatively poor settlements in this part of the area are a mixture of Luwu and Toraja influences.

Little is known about the exact historical development of land tenure conditions and relationships in the Pompengan area. Even until far into the twentieth century, lowland Luwu land was only sparsely populated; land was not a particularly scarce resource. The majority of the local lowland population, especially near the seashore, subsisted on a combination of sago harvesting and fishing rather than on sedentary irrigated or rain-fed agriculture. Shifting cultivation was common, especially in the transitional zone between the marshy lowland and the foothills of the Luwu Plain, and further inland. Local settlements in the foothills of the Lamasi and Makawa catchments controlled the surrounding land, including the northwest part of the later project area. Much of this was claimed as customary or hereditary land by local elites. The forested parts were cleared and used for shifting cultivation, and the other parts as grazing land for cattle. Users originated from the foothills, as well as from a number of small settlements in and around the later project area. Part of the area, as well as land located closer to the coast, is said to have been claimed in earlier times by the king of Luwu (*ongko Datu*) and used for deer hunting. Any use for shifting cultivation or other purposes required permission from the Luwu elites, which was given as long as the land was used productively (PIADP, 1989a). Thus, property rights to land and other resources were mainly mediated by residence, social (kinship) networks and relations of status and power.

Apart from registration of inhabitants and introduction of a head tax, colonial influence on land tenure was limited until the thirties. From the late thirties, national colonial policies influenced the area more directly: it was selected as a site for the settlement of Javanese farmers in combination with irrigation development (see chapter 2). From then, the potential of the area for irrigation development became a key determinant of later changes. Processes of migration and settlement brought about radical changes in land tenure, farming practices, population density, village structure, and general socio-economic development in the area. These processes have also deeply influenced later project activities in the area. A heterogeneous population, the different population densities between the upstream and downstream parts, differences in land tenure, and the limited degree to which land registration and titling had taken place in the lower part in the past became crucial factors in the implementation of PIP and PIADP.

A history of migration and settlement

Javanese colonists

As mentioned above, in the thirties of last century the Dutch had started making plans for irrigation development and farmer settlement through colonization.³ In 1940-1941 these plans became reality: some 250 Javanese families were resettled in the Lamasi colonization area, consisting of the hamlets of Lamasi, Wiwitan, Purworejo (current Setiarejo; map 3). In 1940, the first settler group arrived, some 150 families from Java. One year later, the second group of 150 families arrived. Settlers received 0.25 hectares of home yard and 0.5 *bau* of agricultural land, and other facilities needed for pioneer settlement.⁴ The settlers provided labour for the construction of an irrigation canal. Though the Japanese occupation from 1942 to 1945 made life difficult, some years after arrival the settlers had constructed the canal that was to become their main source of irrigation water. After 1945, life in the area was relatively peaceful. However, from 1951 DI/TII spread across the area (see chapters 2 and 3). Its anti-Javanese sentiments became a threat to the Javanese settlers in Lamasi. Hence, the settlement received army protection against DI/TII attacks.

³ This section is based on a combination of interviews with inhabitants of the various settler groups in the project area, as well as on a number of project files and documents, primarily PIADP, 1989a.

⁴ One *bau* is 7,500m² (0.75 hectare).

Highland refugees

From 1952, violent actions against inhabitants of highland Luwu increased. Violence was often targeted against settlements with Christian populations in highland Luwu, especially the Bastem and Rongkong areas (see map 1). Many villages were threatened or plundered, and the inhabitants forced to convert to Islam. Many people fled to Tana Toraja or one of the towns in lowland Luwu protected by the army. Leaders and political representatives of the refugee groups made plans with the local administration and members of the Luwu royal elite for resettlement of Christian refugees (see chapter 3). As a result, two refugee settlements were planned in and around the later project area: Seriti on the left bank of River Lamasi, and Rantedamai on its right bank (outside the later project area). In the course of 1952 the refugees were taken to their locations for resettlement under army protection. While the settlers were clearing the land, the settlement location was surveyed and measured by Public Works. The refugee population in Seriti was a mixed bag of people originating from various parts of highland South Sulawesi: Bastem in highland Luwu, South Luwu, and Tana Toraja. The situation around Seriti remained unstable until 1965. In the sixties, village defence units still protected the settlement against DI/TII attacks. The final turning point was the death of DI/TII leader Kahar Muzakkar and the defeat of the movement.

Land around the settlement was coarsely surveyed and staked out. The settlers had been given the right to clear two hectares per household. However, as there was still a strong DI/TII presence in the forests around Seriti, initial land clearing was restricted to one hectare per household. In this way, agricultural activities at great distance from the settlement could be avoided. Around 1960 all land up to about one kilometre had been cleared and was claimed by Seriti farmers. While the settlement leaders had initially controlled the land clearing process, uncontrolled clearing gradually increased. Formally, permission for clearing and settlement in the area was needed from the village and subdistrict administrations. However, this path of formal registration was seldom followed, especially from the sixties onwards. The same problem existed with land transactions (inheritance, buying and selling): these were hardly registered by the local administration.

Land distribution at the initiative of the subdistrict administration

In the early sixties, DI/TII influence in the area waned. However, it still had support among local elites in the region. Conflicts arose about the land that had been allocated to the refugee settlers. Local communities in and around the later project area claimed customary rights over the land used for settlement or agriculture by the settlers. Farmers who had cultivated land there before the outbreak of DI/TII sometimes reclaimed their rights when the area was safe (PIADP, 1989a). Others, who had joined DI/TII 'into the forest', also reclaimed land they had worked before. Sometimes such tensions even led to threats or attacks on new settlements in lowland Luwu. At the district level, the issue of settlement became increasingly sensitive (see chapter 3). However, the local administration of the Subdistrict of Walenrang, in which the settlements were located, decided that the settlers were entitled to the land and their land rights should be protected against claims by the local population. After several threats and attacks, the local administration decided to give permanent protection to the settlements by police and armed forces (PIADP, 1989a). At the same time, the local administration initiated a policy of land distributions. Main objectives were to increase population density in the area, to give former DI/TII members an opportunity to return to a settled life outside 'the forest', to give groups uprooted and displaced by the violence of the fifties and early sixties a chance to gain access to land in the area, and to reduce population pressure and agricultural activities in the catchment areas of Lamasi and Makawa. This was the next step in processes of settlement, land clearing, and development of land rights in the area. Initially, new settlements were given the status of hamlets of existing administrative villages. In a few decades time, these became independent villages and were sometimes even split up into new villages again.

Several of such land distributions took place around 1962-1963. Land between Lamasi and what was to become the village of Samelung (see map 3) was distributed to landless Javanese from Lamasi. Even in the fifties other groups, especially highland Luwu refugees and landless Javanese settlers, had used the location for settlement. However, some years later they had left the place because of DI/TII attacks. During the land allocation of the early sixties, the Javanese massively returned. They received home yards in Samelung, and the right to clear fallow land in the surroundings. Landless Toraja and highland Luwu households, for whom there had been no place in Seriti, also settled here. The new settlement was designed by Public Works. Initially, it had to be protected by the army against further attacks. After settlement, conflicts arose with the local elites from a nearby village, who claimed rights to the land while the government had declared it to be state land on the basis of BAL. As a consequence, many settlers had to pay compensation (*ganti rugi*) to local claimants for the land they had cleared.

In the same period, and based on the same land distribution policy of the local administration, the land between current Tolemo and Sinangkala was distributed to various groups. The location of Tolemo had been a small settlement of local Luwu inhabitants, who made a living from shifting cultivation in the forested area. When the area became safer, migrants from Tana Toraja who had often stayed temporarily with their relatives in Seriti, received land through the land distribution or acquired it by paying compensation to local claimants. Locals, who had already been living there before the first Toraja settlers arrived under protection of the Seriti village administration, also received land. The settlement plan for Tolemo was also made by Public Works. As this part of the area still belonged to Seriti then, settlement in Tolemo was initiated, coordinated and protected by leaders of this village. Agricultural land allocated to the Tolemo settlers was located North of the new settlement, primarily in the current TUs P15, P16 and P17 (see map 3). Part of the land could hardly be worked due to regular flooding of River Rongkong and River Lamasi. The village leaders also distributed land to members of the civil defence units against DI/TII, informal village leaders, civil servants, village administrators, and army members. It is not always clear which land allocations belonged to this category of *tanah penghargaan* (honorary land). In some cases there is no doubt about either land or claimant. Other cases were contested and the subject of much debate and conflict in the PIADP land reform programme (see chapters 5 and 6).

Sinangkala (and the nearby hamlets of Bululondong, Tokaili and Tokuning) was another product of land distribution organized by the local authorities between 1962 and 1967. Farmers from the coastal village of Lamasi Pantai, as well as from the catchments of Lamasi and Makawa received land here. Settlers received a home yard along the road from Tolemo to the South and two hectares of agricultural land per family. Due to increased flooding of River Rongkong from around 1980, many settlers returned to their villages of origin. Toraja settlers often bought land claims left behind by these farmers later. Land allocation was also implemented in a settlement called Salu Jambu, including settlement of lowland Luwu people who practiced shifting cultivation in addition to fishing and sago production. Salu Jambu experienced rapid growth after 1961, when DI/TII power in the area was waning. During DI/TII, many inhabitants had left the area. In the early sixties many of them returned. The settlement also attracted Luwu farmers from outside the later project area. The local government organized a land distribution for home yards in Salu Jambu. People were free to clear and develop as much land for agricultural production as they liked.

Massive spontaneous settlement

The restoration of safety in the sixties marked the beginning of massive migration into the area. Spontaneous migration became an important factor in the settlement and land tenure history of the area. Most migrants originated from Tana Toraja (see chapter 3). The opportunities in lowland Luwu for land-seeking farmers from the highlands had become well known there through kinship

relations with earlier refugee settlers and by the way in which migration to Luwu was stimulated by church and political party networks (see chapter 3). Often, a male family member came ahead, leaving others behind in Tana Toraja. Through relatives in Seriti or Tolemo, they were usually able to obtain land by clearing unclaimed land, by paying compensation for land used by the local population, by buying from earlier settlers who left or were in need of money, by exchanging goods or animals against land, or by entering into sharecropping or land sharing arrangements with local landowners. As one former Seriti village functionary remembers:

‘At a certain moment, migration became so massive that the subdistrict head of Walenrang forbade Toraja farmers to enter the area. I asked him not to be too strict, and to interpret it in a lenient manner. Thus, many more Toraja farmers could enter the area in search of land. Initially, new migrant farmers, who nearly always entered the area through their kin in Seriti, were registered by the Seriti village administration and instructed how to find land. However, in the end, when the number of migrants rapidly increased and became more independent of family ties in Seriti, all control was lost. The village administration no longer knew who were entering the area and clearing land, and totally lost its grip on settlement, which had been a controlled process in the early years.’

These processes had a great impact on existing settlements, and led to the establishment of new ones. Population increase in Seriti could partly be accommodated by expansion of agricultural land. However, migration into the area also induced the Seriti village leaders to stimulate expansion to new settlements. Current Salu Pao was the product of massive migration into the area by settlers from Tana Toraja from the early sixties. It is an almost all-Christian Toraja settlement. Around 1980, some 200 families lived there, mostly resource-poor farmers who had heard through church or local administration of the opportunities for land clearing in Luwu. They bought land from Seriti farmers or paid compensation to locals claiming land along River Rongkong. Sometimes land was taken over from former DI/TII members. As far as agriculture was possible, it was mainly rain-fed. Many inhabitants of the flood-prone areas made a living from timber and sago production, and fishing.

The settlement of Sinangkala also attracted Toraja and highland Luwu migrants in search of land. In the sixties, massive Toraja migration into the Sinangkala area led to conflicts between the village leaders of Seriti and Lamasi Pantai, the village to which Sinangkala belonged then.⁵ To avoid escalation, a boundary between the two villages was fixed. It was decided that Toraja settlement South of Tolemo was forbidden. Along the boundary between the two areas, land was allocated to policemen who had to maintain peace and order. However, local farmers in need of money continued to sell land in the southern area to Toraja migrants. Similar processes were at work in Salu Jambu. Toraja settlers massively moved into the area, thus creating opportunities for locals to demand compensation for land transferred to the settlers. Local inhabitants and absentee landowners living in other villages started selling land to Toraja migrants and civil servants. The latter often had the land developed into irrigated fields and worked by Toraja tenants. Local claims were often based on earlier use of the land for shifting cultivation or sago production. Before construction of the Rongkong protection dike, Salu Jambu had been one of the settlements heavily affected by flooding. This has also affected the history of land claims. An inhabitant: ‘in 1967, Rongkong was still far away. Many people bought land around Salu Jambu. But around 1973 it changed its course again. Much land was affected, and people left their land. In the eighties, when the dike was built, people realized the value of their claims and returned to their land’.

⁵ Lamasi Pantai is a coastal village outside the later project area. Hence, it is not on the map. Its village leaders, many of whom had direct or indirect interests in land in the Pompengan area, were strongly opposed to the PIADP land reform programme.

Project-induced land speculation

In the eighties, the expectation of project intervention and its impact on land use and land value became a major pull factor. Expectations and assumptions pertaining to future developments in the area attracted three 'types' of settlers or new claimants. First, those who saw the combination of relatively low land prices and the prospect of irrigation development as an opportunity for investment in land with the objective of future use and ownership by themselves or their kin. Second, those who saw it as an opportunity for investment in land with the objective of having it sharecropped by tenants. Third, those who saw the opportunity of investing in land in a context of low but rapidly rising prices, that is: with purely speculative ambitions. Generally, the first actually became settlers in the area, while those belonging to the second and third groups were absentee claimants. Especially during project implementation, the number of civil servants claiming land in the project area increased. Locally and among project staff they became known as *petani berdasi* (farmers wearing a tie). Prevention of speculation had been one of the motives behind the PIADP land policy. However, as I will show, PIADP actually stimulated speculation by putting a premium on claiming land: recognized land claims gave access to a variety of additional project facilities.

Land tenure in the early and mid-eighties

Before Dutch colonization, population density in the whole area had been very low. The upstream part was covered with forest, bush and *alang-alang* (grass; *imperata cylindrica*) fields while the downstream part, almost at sea level and heavily affected by river flooding, was marshy and covered with forest and sago palms. Forested land in the upstream area was used for shifting cultivation and hunting, while grassy and bush-covered parts were suitable for buffalo herding. Livelihood of the inhabitants of the few small settlements in the lower parts of the area was based on a combination of sago production, fishing and shifting cultivation. The first radical changes came with the settlement of Javanese farmers, who introduced the cultivation of irrigated rice and of rain-fed seasonal crops. Refugee settlement in the fifties caused an expansion of land clearing and settlement in a southeast direction, bringing demographic changes and new agricultural practices. In the sixties, when DI/TII was waning and the local administration opened up new opportunities for farmers in search of land to settle in the downstream area, further southeast expansion of settlement and agricultural activity occurred.

By the early eighties, expansion of settlement, sedentary agriculture and irrigated double-cropped rice farming had made most headway in the northwest part. The western part of the area was most densely populated. Most land could be irrigated from village irrigation systems taking water mainly from River Lamasi. At the other extreme, in the inundation-prone and badly drained downstream part, agriculture was hardly possible, with the exception of elevations and ridges in the landscape used for rain-fed agriculture. In this zone, fishing, sago production and logging were crucial economic activities for the sparse population. Between these two extremes, a transitional zone existed in which farming was based on one (often rain-fed) rice crop a year, with additional seasonal crops like maize and soybeans, as well as perennials. Livestock formed an important element of farming in all zones discerned above. To a large extent, this pattern continued to exist until the mid-eighties.⁶

What did this all mean for the ways in which rights to land developed before project intervention? The radical changes in the twentieth century led to the gradual breakdown and disappearance of

⁶ Hartveld (PIADP, 1989a) describes the mixed cropping system with livestock as the dominant farming system, with rice, secondary crops, perennial crops and livestock as main components. The farming system in Seriti and Salu Jambu was rice-based; in Pompengan it was based on the cultivation of soybeans.

customary forms of tenure in the area. After the enactment of BAL, land in the later project area was classified as state land (see chapter 2).⁷ On such land, claims by local or royal elites on the basis of customary uses were no longer recognized. Thus, BAL established formal state control over land resources. However, actual state intervention in the area through land registration and titling on a larger scale is only of quite recent date. Around 1974, parts of the area were registered for the purpose of land use tax collection (Ind. *Pajak Penghasilan*; PP). Data collection was mainly based on the area reported by the claimant.⁸ Registration for the IPEDA land tax started around 1977.⁹ Cultivated land in the upper and lower parts of the area was surveyed and mapped. Later, additional surveys and land registration were executed on a small scale. While IPEDA surveys and registration in the upper area were quite complete, those in the lower parts of the area were incomplete and generally did not include the land that was regularly flooded (DHV/ILACO, 1979; PIADP, 1989a).¹⁰ Thus, when IPEDA was replaced by PBB in 1990, tax collection in those parts that had been inundated during IPEDA surveys in the seventies was still based on the earlier PP system.

Cadastral land registration and titling was the responsibility of the Land Registry Agency AGRARIA.¹¹ In the upstream part of the area, a small number of farmers had found their way to AGRARIA to apply for an ownership title. In the downstream area, land titling started in 1981. From that year, the PRONA programme was implemented in the area, to bring land titling within reach of poor farmers and increase the percentage of land under a state title (see chapter 2). In the upper part of the area, 1,810 ownership titles were distributed to farmers for home yards and agricultural land in 1981.¹² In the downstream area, PRONA was primarily implemented in the Sinangkala area, where ninety-seven farmers had received a title in the eighties (PIADP, 1986c). Before implementation of PIADP, no other land titling took place here. According to BAL, landownership formally recognized by the state must be supported by a land title document (*sertifikat hak milik*). This means that, apart from the few downstream farmers with a PRONA land title, formally the tenure status of all farmers working land in the area was that of claimants on state land.

The social reality of land tenure was quite different, and hardly influenced by such formal definitions of rights to land. Local land rights had been based on customary tenure associated with a small number of settlements in and around the area. Colonization and refugee settlement entailed the establishment of new types of rights, authorized by the regional administration. Settlers in the early sixties cleared and developed land on the basis of initiatives taken and clearing permits issued by the local and subdistrict administrations. As land became scarcer in the course of the sixties, new ways of getting access to land emerged. The increasing scarcity of land brought settlers into contact

⁷ Thus, in a letter of the Head of the district Land Registry Office to the provincial Land Registry Office and the Governor of the Province of South Sulawesi dated 22-9-1984, the land in the lower project area is characterized as 'free state land' (*tanah negara bebas*); see chapter 5. My use of 'claims' and 'claimants' in the PIADP chapters, admittedly with a slight bias to state-recognized titles, is based on the consideration that the use of 'ownership' would lead to even greater confusion here. However, it is important to stress that, in local conceptualizations of land rights, such claims more or less amounted to full ownership.

⁸ Farmers often underreported for registration of their claims for tax payment purposes.

⁹ Iuran Pembangunan Daerah; Regional Development Tax: replaced the earlier PP tax. In 1990, IPEDA was replaced by PBB (Pajak Bumi dan Bangunan; Land and Building Tax).

¹⁰ This goes for part of the later TUs SI5I/II (area B3), P15, P16, Pa2 (area B2), R4, R5 (area B4), and (parts of) D2, D3ki, D3ka, Si2ki, Si3(area B1) (PIADP, 1989a); see map 3.

¹¹ In the course of the eighties, AGRARIA was transferred into a 'government body' named BPN (Badan Pertanahan Nasional; National Body of Land Affairs).

¹² This total is mentioned in a letter of the Head of the district Land Registry Office to the provincial Land Registry Office and the Governor of South Sulawesi dated 22-9-1984.

with the local population that claimed land rights on the basis of customary rights, earlier use and inheritance. Payment of compensation to local claimants became the way to gain control of land.¹³

Processes of commoditization of land were gradually emerging in the lower project area. In the upper area, land transactions had since long taken on an exclusively monetary form. In the lower part, transactions in kind were important, and continued to exist throughout the project period into the nineties. Especially among farmers with a Toraja socio-cultural background, exchanges of land for buffaloes were (and are) common.¹⁴ From the seventies, land prices rapidly increased.¹⁵ Emergence of a land market was given a new impetus by the plans for irrigation development in the seventies, and actual implementation of PIP and PIADP in the eighties. Persons living and working outside the area - often officials from Luwu or Tana Toraja - started investing in land for either speculative (profit on the land market) or social security purposes (investing wage earnings in land as an old-age pension; buying land for children). For new settlers, buying (*beli*) became the primary way of acquiring land on a more permanent basis (that is: aside from sharecropping and pawning).

Notwithstanding this trend of commoditization, land tenure in the area was legally complex. Local understandings and practices related to land tenure point to the existence of a plurality of norms influencing the behaviour of farmers and their attitude towards later land redistribution and titling in PIADP. As I have stressed above, formally the state definition of land rights is clear: with the exception of those owning a state-issued land title, all farmers in the area were users (claimants) of state land. Whether such claims are recognized as valid and eligible for state titling was to be determined by the responsible agency (AGRARIA) in cooperation with local authorities. Processes of commoditization increasingly influenced elements of customary tenure among the local population and migrant groups from the highlands. However, one element that farmers strongly adhered to was the high status of property rights accorded to land cleared and developed by the users of the land themselves (Ind. *buka sendiri*). Labour and other investments in land clearing and development create a property right close to 'full ownership' (see chapter 2). Accounts of farmers who settled in the fifties and sixties show that there was quite some awareness of the importance of such investments. Thus, the Seriti village leaders in the fifties and sixties instructed settlers to respect the boundaries created in this way and to look for evidence of such investments (e.g. bunds, fences or other boundary markers, drains, presence of perennial crops). In such cases, compensation had to be paid for labour and other investments.

Customary systems of tenure, including those in lowland Luwu, generally contained provisions for the reversal of land to the adat community, if it was left fallow during a certain period. However, these elements of customary tenure and the institutions to enforce them had since long crumbled and been superseded by more private conceptions of land rights. The distinction between payment of compensation for labour and capital invested in land on which (strong) use rights were exerted, and a purchase transaction pertaining to the land itself perceived as a transfer of ownership rights was no longer relevant in a society in which land had become a marketable commodity. While the perception of the importance of labour and other investments in land as a basis for claiming rights to it remained firmly in place, rights to land were increasingly regarded by locals and migrants alike as a transferable individual ownership right rather than a strong use right circumscribed by customary rules.

However, state definitions of the legal status of land were not a relevant point of orientation in land tenure issues, and the state agency responsible for administering land tenure was, generally

¹³ Settlers could also obtain land by other means: gifts by relatives or family living in the area, inheritance, or land development contracts with landowners who rewarded them with rights to part of the land.

¹⁴ Such transactions are related to Toraja death ceremonies, on which buffaloes have to be slaughtered.

¹⁵ Location-specific differences between the upper and lower area, and between secure and flood-prone locations in the latter, continued to exist.

speaking, not seen as an important actor in such issues. Local ways of dealing with land issues, conceptions of land rights, and perceptions of tenure security continued to play a major role. The responsible state agency was not only geographically and culturally distant, but also associated with unwanted intrusion, high costs and lots of bureaucracy rather than with the attainment of secure ownership. Land transfers through payment of compensation or purchases, inheritance or otherwise were seldom registered. Transactions were either not registered at all, or written down in a simple statement of transfer authorized by village or hamlet leader or only between the parties involved. For the registration of land tax payment, the picture is slightly different. If land had been surveyed, mapped and registered for payment of land tax, usually the selling party would make sure that the land transaction was registered in the village administration. Later, implementation of PIADP was to make all claimants of land in the area keenly aware of the importance of state regulations.

Due to river flooding, migration and settlement waves, and the emergence of a land market, land tenure was rather volatile: farmers cleared land and tried to make a living from it, until flooding forced them to move again. Later, such land was reclaimed again by the same farmer, transferred to other farmers by payment of compensation or occupied by new migrant farmers. PIP and PIADP made many earlier users return to reclaim their land. Conflicts between competing claimants were common. Such conflicts also influenced the later land reform programme. Due to the increasingly massive inflow of settlers, the local (village and subdistrict) authorities had gradually lost control over processes of land clearing and settlement. In the early seventies attempts were made to solve this problem through the so-called 'SK 6 procedure', an ex-post administration of claimants and recognition of (uncontested) claims in the area for whoever applied to the local administration.¹⁶

It will not come as a surprise that the few data on land tenure available for the downstream area were incomplete and outdated when PIP started in 1980. Village and subdistrict administrations had been actively involved in devising settlement plans and creating opportunities for new settlers to clear and work agricultural land. However, the capacity for, and involvement of, the Land Registry Agency in registration and titling had been very weak, and the demand for it among farmers very low. The few attempts at land registration and titling in the area yielded incomplete data that did not reflect the dynamic character of land tenure and the impact of land transfers and transactions. As far as land registration had taken place at all, it had created a static picture of land tenure at the time of the surveys rather than an up-to-date data basis of land claims and claimants in the area.

3. A project without beneficiaries

Uncertainty about land tenure

Above I have sketched the land tenure and settlement situation prevailing in the early eighties, when the Pompengan area became a 'project'. For the purpose of policy-making and implementation, in project documents of PIP and PIADP the complex (and gradual) differences between the upper and lower parts of the project area were expressed as a distinction between area A and area B (see map 3). According to the project documents, area A covered 5,700 hectares (of which 2,614 hectares irrigable) and was inhabited by 4,118 households (1.4 hectares per household; 0.6 hectare irrigable per household). Area B covered about 3,300 hectares (1,960 of which were regarded as irrigable), and was inhabited by 705 households (4.7 hectares per household; 2.8 hectare irrigable per household) (PIADP, 1986c). PIP focused on irrigation development in area A, and land clearing and

¹⁶ That is: recognition of the right of use. SK is an abbreviation of Ind. *Surat Keputusan* (Letter of Decision).

initial construction works in area B. When PIP was turned into PIADP, the focus of development shifted towards area B. From 1984, extension of the irrigation system to the downstream part of the Pompengan area had been seriously considered.¹⁷ In most parts of area A, with its history of irrigated agriculture, project returns would be limited to greater (technical) water control, more secure water supply, and better management by the linking of village systems to the new main canal and introducing TUs and WUAs. Production increase would be limited to slightly higher yields, and an additional (second) irrigated crop in part of the area. In case of expansion to area B, project benefits in terms of production increase would be much higher. The existing land tenure pattern in this part was characterized by extensive dry-land farming with lower per-hectare productivity. Introduction of irrigated agriculture was regarded as decisive in determining the ultimate balance between costs and benefits (PIADP, 1987b).¹⁸ Construction of the flood protection system was also expected to add several hundreds of hectares to the total area suitable for (irrigated) agriculture.

After the first years of project implementation in the upstream part, construction reached the lower parts of the project area. Gradually, the shortcomings of a technically biased irrigation development approach became manifest. The system was rapidly expanding and soon to provide the downstream part with irrigation water. But whom was it all meant for? Who were to become the users of the system and members of the WUAs for the new TUs? Who were the future 'target groups' of the agricultural extension programmes? A new irrigation system was about to be built for users largely unknown. Continuation of construction without addressing these issues could become a serious threat to the long-term sustainability of the investments in infrastructure and the benefits of irrigation development. Therefore, as construction reached the downstream part, it became clear that more attention to land tenure was badly needed. Uncertainty about land tenure, the number of families living in the area and the total area of land claimed made such a shift in focus urgent indeed. Though knowledge of land tenure and population density was limited, the latter was generally assumed to be far too low for efficient irrigated agriculture and sustainable operation and maintenance of the TUs of the future irrigation system. Indonesian agency and project staff, and Dutch consultants tended to regard the downstream area as 'underpopulated' or even 'empty', leaving room for the settlement of between 1,000 and 2,000 farmer families.¹⁹ Even before the start of PIP, the Indonesian authorities had considered settlement in the framework of the transmigration programme, but quickly dismissed the idea in view of the fact that much land seemed to be claimed and settlement of more Javanese families could lead to conflicts with the local Luwu population.

Several reports had pointed out the importance of attention to land tenure. Even before PIP had started, the final report of the Luwu Irrigation Project (Luwu Irrigation Project, 1980) stated that 'an adequate registration of landownership is essential for a smooth execution of the works, for the planned resettlement activities and for a quick start of the full utilization of the new system' (1980: 16). An earlier report (Agro-Economic Survey, 1979) had mentioned the possibility of a land reform and consolidation programme, with better land utilization, equity, and efficiency of land use as major objectives. In a number of project reports, the social-scientific consultancy firm involved in PIP also pleaded for intervention in land tenure (PIP, 1981c, 1983b, 1983c, 1983d, 1984a).

There were also serious doubts about intervention in land tenure and the need for farmer settlement. However, these doubts were based on calculations and comparisons of the man-land

¹⁷ The decision to continue into area B was taken on the basis of budgetary considerations. While activities in area B had still been cut from the plans in 1983, one year later the devaluation of the Rupiah made implementation possible. This led to the decision to continue project activities in area B (PIADP, 1991a).

¹⁸ As is stated in the Farmers and Settlers Guidance Programme (FSGP): 'the productivity of the land in area B is crucial in order to reach an acceptable rate of return for the whole investment made' (PIADP, 1987b: 2).

¹⁹ In the Administrative Arrangements for PIP (1981a) 'provision of adequate facilities and support, allowing a resettlement programme which involves around a thousand families' is mentioned as a key activity.

ratio in area A and area B, which suggested the desirability of internal resettlement of farmers from the former to the latter area rather than settlement of farmers from outside the project area. Doubts were *not* based on a critical estimation of the state capacity to intervene in land tenure in area B. A 1981 report concluded: ‘resettlement of farming families presently living outside the Pompengan area should be disadvised’ (PIP, 1981b: 2).²⁰ Another report stated that ‘vacant land in the Pompengan Area is no longer available, the exception being parts of the forest and swampy areas It seems logical, therefore, to conclude that the resettlement of 1,000 families as proposed in the “Administrative Arrangement” into the Pompengan Area is not advisable’ (PIP, 1981c: 14, 17). In case land would be available, the report advised internal resettlement from area A to area B.

Some reports showed a degree of awareness of the problem of limited state capabilities. A report discussing options for intervention in area B states: ‘this presupposes ... that the Government is still in the fortunate position of being able to control the process of land allocation. This does not seem to be the case in the Pompengan Implementation Project. Even the presently unirrigated parts are said to be claimed fully by families, both inside and outside the project area’ (PIP, 1983c). Another report pointed out that project control over land would probably be very limited, in view of the earlier absence of active state intervention in land tenure (PIP, 1983b). Contrary to such doubts, options for resettlement into the project area continued to be considered. Resettlement of farmers practicing shifting cultivation in the catchment area of River Lamasi, source of water for the irrigation system, was often discussed. This practice was seen as destructive to the forest cover and a threat to the long-term sustainability of the irrigation systems in the North Luwu Plain.²¹

The reports made one thing clear: there was no consistent view on existing land tenure or on the role and possible impact of intervention in land tenure and implementation of farmer settlement. The 1981 report cited above states that ‘it is regrettable that people who are developing farms in the water catchment area of the Rongkong and Lamasi rivers by cutting part of the forest cover, cannot be resettled in the Pompengan area Clearly, the search for solutions is beyond the scope of the Project’ (PIP, 1981c: 24). However, a later report states again that shifting cultivators should get priority for resettlement in the area, which should get the status of a settlement area (PIP, 1983b). In yet another report, the need for preliminary specification of a target group is stressed, including needy villagers living around the project area and in the Lamasi river catchment (PIP, 1984a).

Towards a land policy for the Pompengan area

Changing and contradictory views of development

Notwithstanding the many doubts and uncertainties about the course of action to be taken in area B, so much talk about farmer resettlement in area B had been going on that it had become more or less unavoidable. Apart from the fear of the negative consequences of unclear land tenure, the need to adapt tenure to the boundaries and units created by the new infrastructure, and the problem of ‘underpopulation’, another factor played a role as well. Approaches in the donor world were changing from crude and top-down modernization towards more participative, ‘bottom-up’, beneficiary-oriented approaches. The Dutch development agency was increasingly critical of the

²⁰ The report concluded that, to realize allocation of one hectare of irrigated land per family, resettlement *within* the project area (from area A to area B) would be necessary.

²¹ Shifting cultivation had been an issue in Luwu since colonial times. It had already led to attempts at legal restriction of shifting cultivation by the Dutch. PIP attention to shifting cultivation in the Lamasi catchment dates from 1983. A PIP report recommended two measures: inventorying the ‘ladang squatters’ and giving them priority in the selection of settlers for PIP, and determining the boundaries of the ‘restricted forest areas’ and having this policy enforced by local authorities (PIP, 1983b).

engineering-biased approach to irrigation development in PIP, lacking a clear target group or 'beneficiary' orientation. Without paying due attention to land tenure, PIP was destined to become a project without clear beneficiary group, failing against the measuring stick of new donor priorities. This required a shift in project attention from 'hardware' to 'software'. Intervention in land tenure and implementation of project-controlled settlement, land development and farmer extension brought these new developmental priorities within view.

Differing views of development also existed in the project itself: as a permanent field of tension between the 'hardware' of civil engineers and the 'software' of a more social orientation. Engineers and social scientists, belonging to different Dutch consultancy firms, were continually competing for scarce project resources by claiming superiority in opening the gates to 'real' development. The civil engineering company was the main contractor with final responsibility for the project towards the Dutch authorities. The social-scientific consultant in PIP played second fiddle to the engineers. However, as problems in the lower project area became visible, the tide was turning in favour of a more substantial social engineering contribution. In the course of PIP, the path was cleared for the social engineers to claim a distinct social-scientific professional input, which was increasingly held to represent a surplus value over, or at least to be an indispensable addition to, civil engineering.

Irrigation engineers and social engineers, then, were more or less condemned to each other. The engineers, confronted with the threat of a negative outcome of a cost-benefit analysis, had to face the problems in the downstream area but did not have the necessary social-scientific expertise. A physically biased approach was out of vogue, and had to be complemented by inputs catering to new policy priorities of the donor country like 'reaching the poor', 'participation' and 'integrated development'. These were the capital of the social scientists. The latter, in their turn, could not do without the engineers. In the end, it was all about irrigation development and a positive outcome of the final cost-benefit analysis. As will be seen, there turned out not to be much difference between the approaches to development of civil engineers and social engineers. The social engineers had (rightly) been very critical of civil engineering inputs and their social consequences. However, once they could claim their own niche of professional input in the project, they seemed to have rapidly lost their capacity to critically reflect on the sense and nonsense of their own development approaches, objectives and planning. For the plans of the social engineers, the sky became the limit.

Further issues of intervention in land tenure

There were also real and important differences between civil and social engineers. For the former, as for the Indonesians, intervention in land tenure and implementation of settlement was just an additional activity in support of the main objective of production increase through efficient use of land, water and infrastructure, with a focus on maximization of the irrigated area. The target group was a vague aggregate of (potential) rice farmers assumed to be positively affected. The social engineers took a more comprehensive approach to irrigation development, paying greater attention to the socio-economic dimensions of intervention. For the social engineers, irrigation development was also a socio-economic and political process, involving winners and losers, people included and excluded, rich and poor farmers. Social-scientific reports on PIP stressed the pressure on land in area A, absentee landownership and landlessness, fragmentation and marginalization (PIP, 1981c, 1983c, 1984a). The analysis of area B identified problems of encroachment, speculation, illegal land transactions and settlement, and the steep rise of land prices. A land policy for area B was seen as a valuable instrument for tackling these and other problems in irrigation development.

Thus, rather than as a mere support activity to the engineering works, the land reform and settlement option took shape as an activity with its own social and developmental objectives. Among the social engineers, there was a serious commitment to give shape to the general policy intentions of making irrigation development meaningful to the poorest strata of society. An

approach based on BAL made land registration and titling possible, while its sections on land redistribution could be used to benefit poor sections of the farmer population rather than speculators and absentee landowners. It could also contribute to the creation of viable farm holdings and egalitarian ownership, preventing marginalization, fragmentation and concentration, and stimulating efficient resource use (PIADP, 1986c, 1987a, 1987b). This approach to rural development was also a way of giving the unknown beneficiary of PIP a face. A land reform and settlement policy was to turn the diffuse category of land claimants and future water users into a known and controlled group of beneficiaries fulfilling specific developmental requirements that fitted in with the general moral and normative frameworks of Dutch development policy.

This commitment was accompanied by a firm belief in the state as a guarantor of tenure security. Implicitly or explicitly, a positive correlation was assumed between land registration and titling on the one hand, and tenure security, farmer motivation and land productivity on the other (PIP, 1983c). A 1981 report states that ‘the security of ownership of ... landholdings is a vital factor in the development process’ (PIP, 1981c: 2). Another report stresses that ‘insecurity and unclarity of land titles and title deeds may account for the fact that productive sawah land is not used at all or underutilized’ (PIP, 1984a: 1). Project reports tended to assume that farmers in the project area shared this belief in the primary importance of state-recognized landownership and land titles. Thus, the latter report pleaded for ‘the careful manipulation of the land titles to be granted’ (idem: 7). It regarded land titling as a crucial instrument in preventing new cycles of land transactions and transfers. Therefore, it pleaded for a ‘... “carrot and the stick” approach, with the stress on the stick and selective rewards for good performance’ (idem: 8).

It is remarkable that the basic uncertainty about land tenure in area B had never led to more in-depth social research into local perceptions of existing land tenure and plans for intervention through land redistribution and resettlement. In a 1984 survey of social and agro-economic conditions in the project area, the issue of land tenure had been covered in a very superficial way only. In interviews with farmers working land in area B, the issue of land redistribution had not even been mentioned. In the survey, the respondents had only been asked whether they would be willing to sacrifice part of their land to the construction of infrastructure. The report concluded that active intervention in area B was possible, in view of the fact that the number of ‘early adopters’ among the farmer population formed a sufficiently strong basis for implementation (PIP, 1984e).

4. Turning problems into promises: PIADP

Towards ‘integrated area development’

A 1984 evaluation report had recommended a land inventory, determination of the farm size to be created, and planning of a pilot project of 400 to 500 hectares for land redistribution and settlement in the Sinangkala area (area B1; see map 3) (PIP, 1984b). After the donor and the Indonesian authorities had reached consensus about this course of action, in the same year the first steps towards ‘integrated’ development in area B were taken. The authorities reconfirmed the status of land in the pilot area as state land, and forbade land transactions and the planting of perennial crops. The policy for the pilot project comprised an inventory, redistribution and titling of land in combination with a settlement programme. The farm size to be allocated to farmers fulfilling project criteria was determined at one hectare of irrigated land and 0.25 hectare of home yard. The regional authorities had been in favour of creating farm units of two hectares (1.75 hectare of agricultural land and 0.25 hectare of home yard). However, the Dutch consultants proposed a

stricter policy: allocation of one-hectare irrigated plots and 0.25-hectare home yard. First, one hectare was considered the maximum size that could be efficiently worked by a farmer household. Second, the predicted five harvests per two years were expected to yield a viable farm income. Third, prevention of illegal settlement and land transactions required that area B would become fully populated in a short time. Fourth, one hectare was considered the optimal size for efficient land use and irrigation management. Larger sizes were assumed to lead to transactions, splitting-up, tenancy, and the use of landless labour, at the cost of efficiency. Allocation of small units was assumed to make land tenure more stable.²² Finally, under a one-hectare allocation policy more farmer families could be resettled. After the Indonesian authorities had approved the Dutch proposal, an upper limit of allocation of one hectare of irrigated land per household became the basis of the land policy document.²³

The land reform status initially given to the pilot project was soon extended to the whole downstream part of PIP (area B), covering 4,465 hectare.²⁴ Notwithstanding notes of caution in earlier reports, the draft settlement plan for area B stated that 'at the core of the approach is the redistribution of large areas of potential sawah land. Apart from the present population, also a large number of newcomers will be among the beneficiaries of the land redistribution' (PIADP, 1985a). Land reform and settlement were now definitively seen as one 'package' for development of the lower project area. In 1986, land transactions (buying and selling, inheritance, etc.) in the whole of area B were forbidden, as were settlement and the planting of perennial crops. In the same decision, the distinction between areas A and B was formalized for the purpose of project implementation. The Land Registry Agency was empowered to determine the boundary between these areas.²⁵ In the same year, a definitive settlement plan was issued. The document stated that 'although still about 700 families seem to make a living in Area B, all investigations lead to the conclusion that once the irrigation, drainage and flood protection system will be completed, the area will be under-populated' (PIADP, 1986c: 10). On the basis of this estimation, the plan concluded that - assuming one hectare of irrigated land per household - 1,255 hectares (the difference between the irrigable area and the number of households assumed to claim land in area B) of irrigated land would be available for the same number of settler households to be brought in from outside.

From the end of 1986, Dutch involvement with the Pompengan area continued in PIADP. Next to ongoing construction, land reform and farmer settlement, agricultural development and extension became key activities. The new project objectives and activities planned for area B required a new organizational set-up. The shift in focus from engineering towards a more comprehensive approach required the involvement of new agencies. While PIP had been dominated organizationally by the Ministry of Public Works (PU), joint responsibility for PIADP rested with the Ministry of Public Works (PU) and the Directorate General for Regional Development of the Ministry of Home Affairs (BANGDA).²⁶ The agencies involved were related in a far more complex way than had been

²² Discussions on land tenure were excessively optimistic about the degree to which human behaviour could be engineered into patterns conducive to 'efficient' land tenure. One of the project reports by the social-scientific consultancy firm even suggested that the need for unfragmented land tenure required adaptation by project regulation of the bilateral inheritance practices prevailing among farmers in the project area.

²³ The assumption seems to have been that households were nuclear families with little need for expansion of farmland. Assumptions about land productivity in area B have proven to be over-optimistic, at least for the formerly flooded zones. As to cropping intensity, two harvests a year was the maximum reached.

²⁴ At the request of the Dutch consultants, the Letter of Decision which gave area B the land reform status, extended the 1.25 hectare farm size to this area as well (PIP, 1985c).

²⁵ Decree of the Bupati 21 Mei 1986 No.115/v/1986.

²⁶ BANGDA was responsible for integrated rural development. Project responsibility rested with the province, day-to-day responsibility for implementation with the district administration (see PIADP, 1991a).

the case in (mono-sectoral) PIP. The 'integrated' character of PIADP was an expression of the intention to implement the various and interdependent project elements in a mutually attuned, coherent and controlled way. It also reflected the increased attention in Indonesia to regional planning, the expansion of the regional planning board down to the district level, and the increased importance of formulation of 'integrated' rural development plans at this level (see Roth, 1994).

Making project law: the PIADP land and settlement policy

This reorientation cannot hide a high degree of continuity in priorities and objectives between PIP and PIADP. The component of land reform and settlement was described as 'a complementary program in order to provide part B of the project area within a reasonable time with sufficient farmers with farming plots and enjoying public amenities' (PIADP, 1986a, 1991a). Yet, it is important to note the crucial shift towards a socio-legal engineering approach. The social engineering part was covered by planning documents for project-guided settlement, organization of settlers, construction of housing and other facilities, agricultural development and farmer extension (PIADP, 1986c, 1987b). The land policy document was crucial as 'project law', stating the legal basis of land redistribution and settlement as well as project regulations tied to land policy: rules and procedures for land allocation and settlement, and for the provision of additional facilities to project beneficiaries (PIADP, 1987a).²⁷ BAL was the primary legal basis of the land policy.²⁸ Further, it was based on two Letters of Instruction by the Directorate-General of AGRARIA on behalf of the Ministry of the Interior. The first demanded preparations to be made for a land inventory in the Sinangkala area, and declared the land to be state land with a land reform status (*tanah negara obyek land reform*).²⁹ The second gave the land reform status to all project land in the Subdistricts of Walenrang and Lamasi (the whole of area B), and commanded its redistribution with special reference to Government Regulation 224, 1961 about land redistribution 'to the tillers' (Departmen Dalam Negeri, 1981: 307).³⁰ Area B was declared closed for land transactions, transfers of rights and other activities that might hinder project implementation.³¹ The second decision was to play an important role in later conflicts over land in area B. It had granted the land reform status to area B as far as no prior legal rights were resting on this land (PIADP, 1987a). The opponents of land reform argued that the government, in its eagerness to implement the donor-funded project, had disregarded existing rights to land in area B (see chapter 5) (PIADP, 1987a).³²

²⁷ Objectives stated were rapid development of area B in accordance with the settlement plan, efficient land and water use, land tenure adapted to the new infrastructure, an equitable development process, creation of a healthy agrarian structure, and improvement of land administration and increase of tenure security.

²⁸ In particular articles 2 (right of the state to control the natural resources of the nation), 3 (relationship between state law and customary rights), 6 (the social function of land rights), 12 (common and national interests as a basis of agrarian economic activities), 13 (land use for the benefit of the people and for increased social security), 14 (use of natural resources in the framework of Indonesian socialism).

²⁹ No. 5926/5381/Agraria, 16 August 1984.

³⁰ Letter of decision of the Ministry of the Interior dated 19 December 1984, No. SK.305/DJA/1984.

³¹ Decision of the Bupati No. 115, 21 May 1986.

³² Government Regulation No. 41, 1964, an addition to Government Regulation No. 224, 1961 (restriction of absentee ownership and ownership outside the subdistrict of residence of the owner); Instruction of the Ministry of the Interior No. 12, 1985, with guidelines for rural development programmes. It was also based on a number of other laws and government instructions, primarily Government Instruction no. 224, 1961, in which rules for redistribution of land exceeding the maximum limit of ownership and payment of compensation are specified.

Box 1: criteria for the selection of beneficiaries of PIADP***General rules for beneficiaries:***

A household becoming beneficiary of the programme is entitled to one hectare of sawah. Claims exceeding one hectare will be reduced, smaller claims will be enlarged to this standard size. The total size of land owned, both within and outside the project area, by a beneficiary of the project area should not exceed two hectares. The following beneficiaries of the redistribution programme are *in principle* entitled to a home yard:

1. those who have to move their house for the programme;
2. those farmers who do not yet own a home yard in either area A or area B;
3. those farmers who own a home yard at a distance of more than five kilometres from the land allocated to them by the project, and who are willing to move.

Criteria for selection:***A. General criteria:***

Beneficiaries of the project should be:

- farmers (those who own and work their land, or do not own their land but derive their living mainly from farming);
- inhabitants of one of the Subdistricts of Lamasi or Walenrang in which the project is located, or of the catchment areas of Lamasi or Rongkong;
- able to work intensively the land allocated to them by the project.

B. Special criteria:

Beneficiaries will be selected from those candidates who fulfil the general criteria, using the following order of priority:

- owners / operators who already worked their land before 1985 and possess official land documents, with first priority for those farmers holding a PRONA certificate;
- sharecroppers or leaseholders who work the land of an owner in area B and have been living in this area from before 1985;
- farmers who live in or close to the project area and who have become victims of the construction of irrigation canals, roads, flood protection dikes or flood plains;
- landless farmers who work as agricultural labourers, and have been living in or close to area B from before 1985;
- farmers from area A whose land was taken for the construction of irrigation canals, roads or dikes, on the condition that they are ready to hand over to the authorities the remainder of their land in area A, and are willing to move to a new village in the integrated project area (area B);
- landless labourers who already lived in the Subdistricts of Lamasi or Walenrang before 1985 and live outside area B of the project;
- shifting cultivators who live in the Lamasi or Rongkong catchment areas and have no permit from the Forestry Department.

In case the number of candidates in a category exceeds the number of available plots, a choice will have to be made based upon the following criteria:

- those who do not yet possess other land;
- those with a large family;
- those who have worked land in area B for the longest period;
- those who have lived in area B for the longest time.

In 1986, provincial and district-level steering committees were formed. The provincial committee was responsible for monitoring; the district committee for day-to-day decision-making and guidance of implementation. The latter was chaired by the District Development Planning Board (BAPPEDA). Membership consisted of representatives of the administrative units and agencies involved in the project. Selection teams were formed for selection of beneficiaries in accordance with the rules of the land policy document.³³ BAPPEDA headed the selection teams, working under the general responsibility of the Bupati.³⁴ Members of the selection teams were functionaries of the agencies involved, like the Land Registry Agency (AGRARIA / BPN), the Village Development Agency (BANGDES), the Agricultural Service (PERTANIAN), Public Works (PU), the subdistrict administration, the villages involved, army and police. The Dutch consultant for the land reform and settlement component of the project attended the meetings of the selection team as an adviser to the selection and land allocation process. Implementation involved a formal division of labour and responsibilities between administrative units and agencies involved. Thus, AGRARIA was formally responsible for the inventories of claimants (*inventarisasi subyek*) and claims (*inventarisasi obyek*) on the basis of which selection was to take place, for administration of the selection process, surveying, measuring, drawing and staking out the plots, and distribution of the temporary land working permits (SIM) and land titles. Subdistrict and village authorities were responsible for inventorying landless and other 'social claimants' entitled to land in the project area, and also headed the selection meetings. BANGDES was responsible for making an inventory of inhabitants of, and houses in the project area.

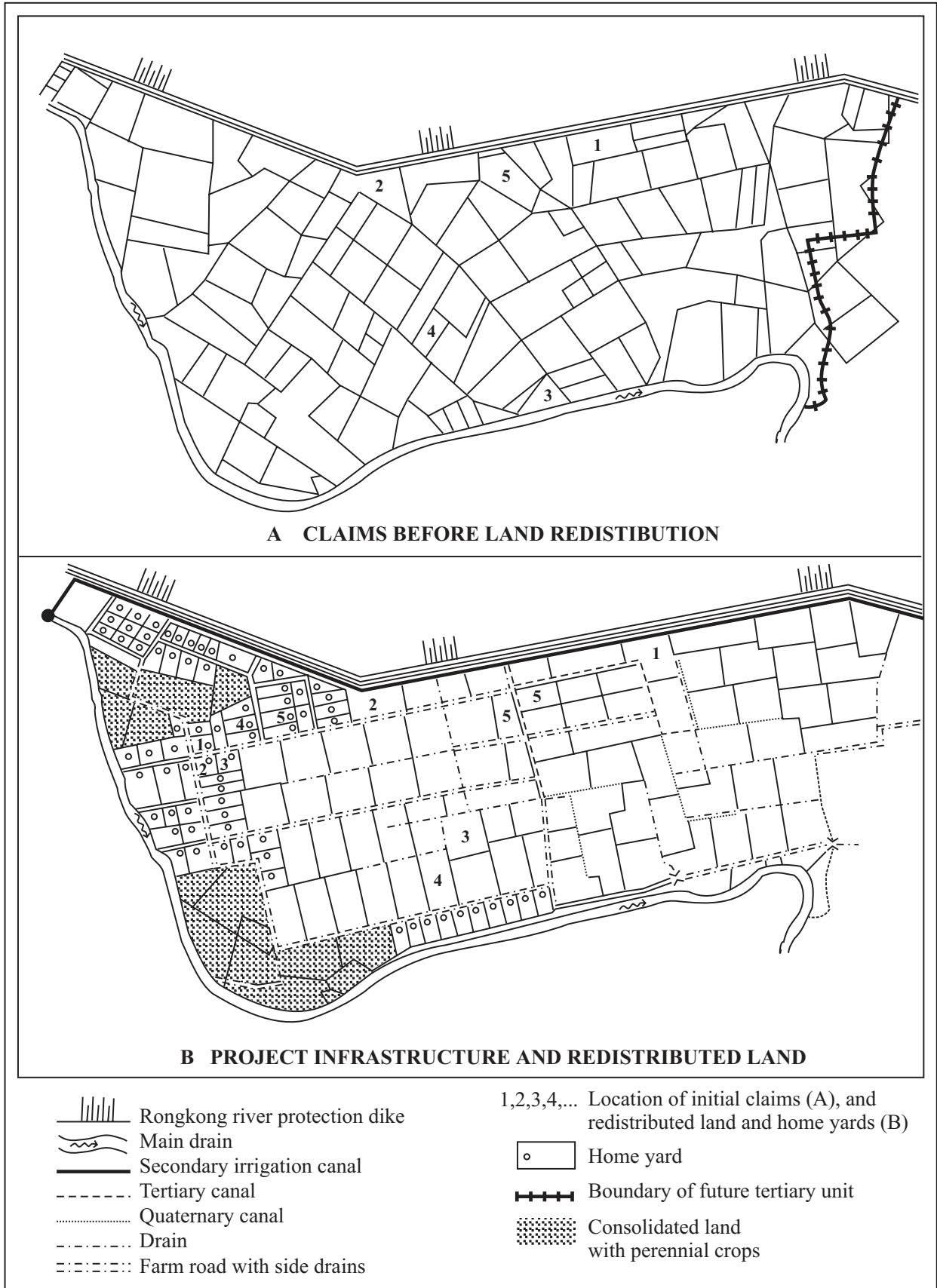
Rules for farmer selection and allocation of project facilities

The land reform and settlement programme provided selected farmers with various project goods and facilities. Main point of entry for selection was land tenure. The selection teams had to weigh the strength of existing claims to land of the various claimants. Data gathered by AGRARIA in the subject- and object inventories, describing and mapping claims and providing basic information on claimants, were a crucial input for this process. Farmers could also enter the selection as 'social claimants': on the basis of socio-economic position (e.g. landless farmers, farmers who lost their land to construction activities, shifting cultivators etc.). Farmers selected as beneficiaries of the project would in principle be entitled to one hectare of irrigated land (see above). Claims larger than one hectare were to be reduced, those smaller than one hectare enlarged to this standard size. The land policy document also stipulated that claimants whose *total* landownership (within *and* outside the project area) exceeded two hectares were not entitled to project land. Selection made a farmer household in principle eligible for other project facilities: a one-year living allowance, housing and sanitary facilities, and participation in agricultural support and extension programmes. Allocation of such facilities depended on the living circumstances of the households involved. This strongly donative orientation of the project had been partly inspired by the wish to avoid the lengthy procedures expected to arise from the demands for compensation for land claims confiscated in the framework of land redistribution. Both Dutch consultants and Indonesian officials assumed that claimants would readily accept loss of part of their land claims if they were compensated with material project facilities.³⁵

³³ Among others decree of the Bupati no. 503/X/1987, 20 September 1987.

³⁴ A selection team was formed for each subdistrict in which PIADP was located: Lamasi and Walenrang.

³⁵ Government regulation No. 224, 1961 provides regulations for payment of compensation for land in excess of the maximum ownership boundary. In PIADP it had been decided not to pay compensation, except for loss of land to the main system irrigation infrastructure.



Map 4: land redistribution and settlement in PIADP for an example tertiary unit (TU R1)

Adaptation of project regulation to avoid conflicts

Land reform was an extremely sensitive issue in Indonesia (see chapter 2). Among the Indonesian agencies there was consensus about the need for a land and settlement policy in area B. However, for various reasons, neither the agencies nor the administration were in favour of the type of land redistribution proposed for area B by the Dutch consultants. AGRARIA, a key agency in the programme, was hesitant in asserting its role in the programme. Many persons within this agency would have preferred a land reform without redistribution and the social and political tensions caused by it. Officials at the district, subdistrict and village levels were not very enthusiastic about the strict enforcement of rules for selection of beneficiaries and access to facilities developed primarily by the Dutch consultants and formulated in the land policy document for PIADP.

The sensitive character of the programme led to a number of adaptations of project law that, at least initially, reduced the tensions, but also opened the door for multiple interpretations of project regulation. To avoid serious land conflicts, deviation from the 'one hectare per household' rule was possible in the case of farmers claiming a large area of land. If, for example, a farmer claimed three hectares of land, a household member or relative of the claimant could also become a candidate beneficiary (e.g. a spouse, a child, a brother or sister). Usually, this splitting-up of land claims took place during the inventory of claims in preparation of selection and redistribution. Another conflict-reducing measure was the exclusion from redistribution of land planted with perennial crops. Further, beneficiaries of the land redistribution were to receive land as close as possible to their initial claim. Finally, before ratification by the authorities and implementation in the field, discussion of the allocation plan with the affected farmers was to take place. The selection and allocation procedure also included a formal complaint procedure.

The distinction between area A and area B suggests a neat dividing line, clearly visible not only on maps but also in the field. This was not the case, of course. Much 'empty' land in area B had been turned into permanently cultivated fields. To cope with this variety in land tenure in area B, a distinction was made between three types of intervention: reconsolidation, consolidation and redistribution. The first referred to those parts of area B that were not given the status of land redistribution area, because a clear ownership situation existed and the land was intensively used. In these parts, the reconsolidation programme was planned, with the objective of adapting form and location of plots to the new project infrastructure, and of merging small scattered plots owned by the same farmer to increase efficiency of land-use and irrigation management. It had to be executed by the farmers themselves, under guidance of a PERTANIAN field team. Consolidation referred to land of which the status, location and area were not changed by the project. This was the case for land in area B on which perennials were grown before the project started. To avoid damage to crops and compensation demands, these areas were excluded from redistribution. The term redistribution was used for those claims in area B that were going to be redistributed as one-hectare irrigated (or, if the land could not be irrigated, rain-fed) plots to those whose initial claims had been accepted by the selection teams mentioned above, or to new beneficiaries from outside area B.

The land reform part of area B was divided into four sub-areas of implementation, each consisting of a number of (future) TUs (see map 3; B1-B4). Later, in view of land tenure realities in the field, boundaries of the redistribution area were adapted. The first area was Sinangkala (B1), also called 'the pilot project'. It consisted of the TUs D1, D2, D3ki, D3ka, Si1, Si2ki, Si2ka and Si3. All land in these TUs was planned for redistribution.³⁶ The second area, Seriti (area B2), consisted of the TUs P15, P16, Pa2, Pa3, Sj3ki, Sj3te, and Sj3ka. As large parts of these TUs were already under cultivation, it was decided to give part of these cultivated areas the status of reconsolidation area.

³⁶ Though a pilot project, the Sinangkala experience has never been critically evaluated. See chapter 5.

Thus, P16 and S3ki were entirely redistribution areas; P15, Pa2, Pa3 and S3te partly had a redistribution, partly a reconsolidation status; S3ka entirely became a reconsolidation TU. The third area, Salu Jambu (area B3) comprised the TUs S12ki, S15-I, S15-II. Initially, (parts of) other TUs had been included for redistribution. However, these plans were changed in view of the clear land tenure status in the area. TU S12ki partly entered the reconsolidation programme. Finally, Rongkong (area B4), comprised TUs R1, R2, R3, R4, and R5, all located directly behind the Rongkong flood protection dike; all were entirely included in the plans for land redistribution.

5. From PIP to PIADP: simple solutions for complex problems

The area of PIP / PIADP had a complex history of land tenure and settlement. Its physical characteristics and the specific history of government intervention in the lower part added to this complexity. While the local government had been actively involved in settlement initiatives in the area, land registration and titling were almost absent. Hence, little was known about land tenure. This uncertainty about land tenure came to be seen by consultants and implementing agencies as a threat to efficient irrigation development in this part of the area. Therefore, project consultants started exploring the option of farmer resettlement in combination with some kind of intervention in land tenure. There was no agreement on tenure conditions or on how to proceed under such uncertain tenure conditions. While some reports regarded the downstream area as more or less 'empty', other reports pointed out the dangers of intervening in an area where the land seemed to be almost fully claimed. Yet the outcome had more or less become unavoidable: a land redistribution and farmer settlement programme. In 1986, PIP continued as PIADP. Focusing on area B of the project, PIADP should provide the solution to the problems of tenure and lack of population. The complex conditions in area B and the changing priorities of development required other approaches, less technically biased and showing greater attention to socio-economic conditions. This, in its turn, required a more prominent role for the social engineers. In PIADP, then, a shift towards socio-legal engineering became visible. The land redistribution and settlement policy, and the project law created for it on the basis of Basic Agrarian Law, formed its core.

The programme was, of course, bound to generate tensions and conflicts during implementation. In addition, the programme itself was very complex, requiring a diversity of inputs from various agencies and administrative levels that had no experience with the technical, social or managerial dimensions of the programme. Various components of the project or steps in the implementation of activities, under responsibility of various government agencies, were highly dependent upon one another. Thus, selection and land allocation could only start once a definitive, high-quality map of the new infrastructure had become available. Similarly, the construction components for settlement (housing and sanitary units) could only start once land had been redistributed and allocated to the beneficiaries, and major conflicts about land and selection solved. PIADP, with its rules for land use, selection and allocation, its intricate relationships and dependencies between various components and responsible agencies, was far more complex than PIP had ever been. The growing awareness of the complexities of irrigation development in PIP had resulted in even more ambitious, diverse, mutually dependent and sometimes even mutually contradictory project activities and objectives for PIADP. The unclear land tenure situation in area B, defined as a problem and a hindrance to further development, had now been miraculously transformed into a set of optimistically formulated promises about participative and integrated development. In planning for PIADP, complex processes of land redistribution and settlement had been translated into a simple set of quantitative targets tied to a tight time schedule but abstracted from social reality.

Limits and limitations of socio-legal engineering: the PIADP land reform and settlement programme

1. First impressions of a project

In March 1989 I arrived in Luwu as an adviser on land reform and settlement in PIADP. After a first introduction by my predecessor I got acquainted with the PIADP project staff. Implementation of the programme had begun in the ‘pilot project’ Sinangkala (area B1; map 3) in 1987. One year before, AGRARIA had started inventorying land in this area as the basis for farmer selection. Soon after announcement of the selection results, complaint procedure, and definitive allocation of land and other project facilities, farmers voiced the first protests. Optimism still predominated among consultants and project officials then. They generally regarded the ‘pilot project’ as finalized, but requiring minor corrections in the Decree of the Bupati (SK) through which allocation of land and facilities were formalized.¹ Seriti (area B2), the second area of implementation, was regarded as unproblematic: selection results had already been formalized into a provisional decree. What remained was the allocation of home yards. In Salu Jambu, the third area (B3), preliminary selection had started. In Rongkong (B4), the first pre-selection meetings had been held in some TUs, but much remained to be done. At least according to the progress reports, that was the situation in PIADP when I arrived. Reality turned out to be different.

I soon learned from discussions with my counterpart BPN (former AGRARIA; see chapter 4) that the programme had completely stagnated during the last months. The BPN project representative, a sturdy elderly man from the Moluccas, was a newcomer like myself. His superiors in the provincial capital had added him to the district staff as project leader (PIMPRO) for BPN in PIADP. Laughing nervously, he mumbled that he did not have the financial means to send his personnel to the field on a regular basis. Almost fully dependent on the Dutch for transport to the project area, his staff had only sporadically been there the last few months.² He also told me that BPN was not strong enough relative to other agencies and administrators in the selection team to considerably influence the process or speed up things. I proposed to make a field visit to the project area together. The BPN project leader was eager to join me. On our way to the field we picked up the project representative for BANGDES (the agency responsible for settlement), two subdistrict staff members, and two

¹ Ind. Surat Keputusan Bupati.

² Implementation of PIADP leaned heavily on initiatives by the Dutch consultants. In 1988 and early 1989, staff changes in the Dutch team, different views about staff composition between the ‘technical’ and ‘social’ consultants and long procedures for staff changes in the Dutch Ministry resulted in a long period of stagnation as a consequence of this dependence on Dutch initiative.

other persons said to be indispensable members of any team visiting PIADP: the local police and military commanders, their eyes hidden behind mirroring sunglasses.

Our trip through area B2 led us primarily to people who seemed to belong to the network of friends, relatives, or clients of my company or of village administrators and elites. One wanted more land, another wanted a home yard, and a third asked for housing facilities. The few farmers we happened to meet on our way were not very willing to talk about their experiences with the project in the presence of representatives of law and order. The military commander asked the questions; the farmers had to answer. Any questions from the latter were shouted down by the commander who stressed that ‘these farmers should be grateful for being selected by the Dutch to become the beneficiaries of the only integrated project in the whole archipelago’. On our way back, he held a long monologue demanding Dutch financial support for his *tim keamanan* (security team) that had been formed in reaction to the protests against the outcome of the land reform in Sinangkala.

A little later, I attended my first meeting related to land allocation in the Seriti area. Some farmers, who had been reported as obstructing the project by sticking to their initial land claims, had been ordered to the meeting to explain their behaviour to the selection team. One of them complained that he had been shifted from his own land claim to a plot of much lower quality. Another one complained about the outcome of the selection procedure. The first farmer was told that he should simply work harder to develop his land, upon which he remained silent. The second farmer was told that, as a beneficiary of a development project, he should not complain and be satisfied with what he had received from the government. When the farmer tried to respond, he was immediately cut short by a member of the selection team and confronted with a salvo of questions and insinuations: ‘Are you now going to accept the decision of the selection team? Do you really want to obey the authorities?’ When the farmer ventured another ‘yes, but...’, he was cut short again, in a more aggressive manner: ‘are you a communist? These are communist methods. If you try to use communist methods, we know how to deal with you. We don’t want communists here.’³

These were useful first impressions of PIADP in its day-to-day functioning. Gradually, I gained a deeper insight in the complexity and sensitivity of the programme. As I did so, it became clear that PIADP was a mission impossible. In this chapter I present an account of this programme, with a focus on the interventions in land tenure based on PIADP ‘project law’. The next section describes the history of the ‘pilot project’. The third section extensively describes the experiences in the Seriti area; especially in TU P16, where a special team had investigated the many land conflicts. The fourth section continues with a shorter account of land reform in the Salu Jambu and Rongkong areas. It shows how implementation of land redistribution was increasingly driven by interests related to the settlement plan. In the fifth section I discuss the establishment and demise of a special team for conflict solution in the land reform areas. The sixth section of this chapter describes how all developmental ambitions are lost in a return to project routines, in which quantitative targets are definitively prioritized to the effects of PIADP in terms of tenure security for its ‘beneficiaries’.

2. The beginning: the Sinangkala pilot project

Experiences with the Sinangkala pilot project belied the naively optimistic initial conception and planning of land reform and settlement as an a-political, technical-administrative routine. What had been realized by some but was completely invisible in project planning, was the fact that intervention in land tenure is a sensitive political process, the dynamics of which cannot be reduced

³ In New Order Indonesia, associating a person with communism de facto outlawed the person concerned.

to technicalities and blueprinted schemes. Sinangkala largely set the tone for implementation in the other areas. PIADP had been conceptualized as a participatory project beneficial to the population, and hence representing its interests. However, the problems in Sinangkala showed that different views and interests were at stake. Such differences could be simply wished away by the 'facilities for land' approach of PIADP, but not made to disappear. From the onset, Sinangkala had been presented as the showpiece of PIADP. It covered about 670 hectares, some 480 hectares of which could be irrigated. On the basis of irrigation design criteria the total area had been subdivided into eight TUs (D1, D2, D3ka/ki, Si1, Si2ki/ka, Si3; see map 3). The time schedule for implementation was very tight: inventory, farmer selection, and allocation of land and facilities had been planned to take about ten months. It was, in fact, never finalized. Three revised SKs were produced in 1987, 1988 and 1989, to contain growing farmer dissatisfaction and cope administratively with the rapidly increasing number of deviations from the formal land allocation plan.

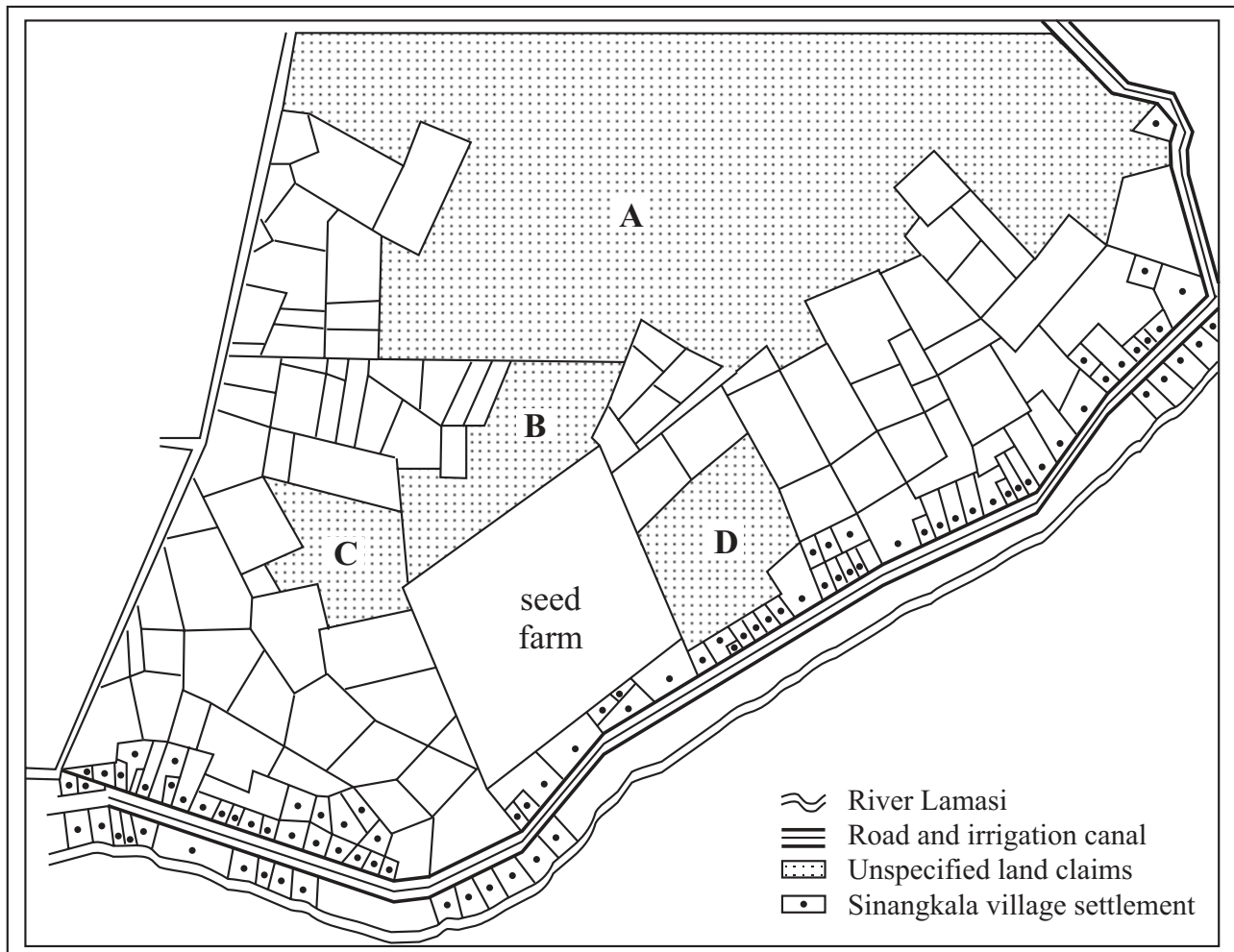
Introduction of the project plans to the local population had, to say the least, not been a very well considered one. In 1984, the inhabitants had been informed by their village head (of Lamasi Pantai) about government plans for irrigation development (*percetakan sawah*).⁴ In 1985, a district official gave more information. He stressed there was no need for the people to be afraid, as there were no plans to take (part of) their land and give it to others. In May 1985, the population had been gathered again by the village head. He told the people that he had been instructed by the Walenrang subdistrict head to collect all documents (tax receipts; PRONA land titles etc.) proving tenure relationship to land in the area. According to the village head, the documents were to be handed in for registration during a meeting with the bupati the next day. The farmers who worked land in the area massively complied. However, instead of being registered and returned to the owners, the papers were collected and put in a big bag, never to be returned again. After this had happened, the inhabitants were convinced that they were going to be cheated by the project. In 1986, another visit by district officials followed. This time, farmers were told that they would only receive one hectare of irrigated land and 0.25 hectare of home yard. In 1987, officials ordered them to stop working their land in order not to hamper the project. In that same year, the village head of the newly-formed Pompengan Village, split off from Lamasi Pantai and covering the land located in the project area, told the inhabitants in a meeting that all land in the village had the status of free and unclaimed state land (*tanah negara bebas*; see chapters 2 and 4) upon which no individual rights rested any longer.

The Indonesian agencies had never been enthusiastic about the Dutch plans for land reform. They swallowed it as a Dutch priority, which it was. Especially AGRARIA, responsible for land reform, had been hesitant in taking responsibility for the socially and politically sensitive process.⁵ The land inventory in Sinangkala had been problematic from the beginning: survey methods did not conform to the procedures laid down in the land policy document, and land claims were split up between relatives even before registration. Part of the land was only coarsely surveyed and mapped. Marshy sections in the area, parts of which were still unclaimed, were used to smuggle in fake claimants, especially members of the local administration and elites, and district government officials. A land inventory map used for part of the Sinangkala area illustrates this (see map 5). The land inventory in PIADP had been designed to link data about the land claim (the 'object') to data about the claimant

⁴ Until 1985, the Sinangkala area belonged to the administrative village of Lamasi Pantai. After 1985, it became part of the new village of Pompengan; see below.

⁵ This was before the reorganization of AGRARIA (under the Ministry of the Interior) into BPN (a separate and more independent 'government body'; see chapter 4). AGRARIA had been completely dependent in its operations on the regional and local administrations. This also played a role in Pompengan: AGRARIA was responsible for the land inventory, land allocation and titling, but had nothing to say about selection (it had the status of a member in the selection team). The local administration was responsible for the selection of 'social claimants' like landless farmers, a position that could easily be misused.

(the 'subject') and evidence on the claim. In this case, however, the relationship between land and claimant remained unspecified, leaving much room for speculation. While all land claims on map 5 below were specified by more or less clear boundaries and data about the claimant of the land concerned, the shaded parts (A, B, C and D) were not. The case of A became well known: with a total land area of ninety-eight hectares and one hundred names of claimants, it was used to smuggle in district and subdistrict officials, village administrators and elites.



Map 5: the use of land registration to manipulate selection for the land reform programme

The assumption that land claims could be objectively weighed against the fixed standards of PIADP project law on the basis of the data of the land inventory soon proved to be an illusion. 'Data' in the inventory had often been adapted to project regulations (PIADP, 1987c). Further, there were the problems related to the history of land tenure and land registration in the area. Even PRONA certificates, the strongest proof of landownership existing in the area, did not always provide exact information about the location of titled land. Land tax registration had never been updated for later transactions. Finally, it proved hard to apply the basic preconditions for selection as specified in the land policy document. Total landownership of claimants inside and outside the project area, for instance, could not be ascertained because there is no registration of aggregate landownership. Therefore, it was totally useless as a criterion for selection. It merely created an appearance of effective regulation and strict control.

The selection process was, of course, politically very sensitive. Members of the village, subdistrict and district administrations were directly involved as members of the selection team. The Dutch consultant for the land reform and settlement programme had an advisory position in the selection team. The majority of team members, usually for reasons of some kind of personal involvement, did not support a transparent selection procedure along the criteria of the land policy document. This would reduce their room for manoeuvre for having their own, private 'projects'. Selection was a top-down process. Those in power positions at the various levels of administration and agencies were the ones who had primary access to decision-making, and were able to determine who was to be granted access and who not. From the onset, the position of Dutch consultancy input had been difficult, ambivalent and dubious. It should guard the selection process to ensure that it would not deviate too far from the selection principles of the land policy document. However, it should do so without excessively interfering with what was, in the end, an Indonesian responsibility. Taking this Indonesian responsibility seriously would certainly have led to the erosion of Dutch priorities in the land redistribution programme. In practice, this meant that Dutch consultants rather than Indonesian project staff drew the selection process. Crucial tasks like administration of the selection and the making of an allocation plan were in the hands of the consultants. By taking over Indonesian responsibilities for the programme from the Indonesians, the Dutch had in fact made themselves co-responsible for a process the core of which they could, in the end, hardly influence.

Protests in Sinangkala: 'kelompok 88'

When BPN started marking the new plot boundaries in the field, farmer protests broke out. Toraja farmers who also claimed land in Seriti (area B2), protested against the fact that they had not been selected in Sinangkala. There were also protests against relocations away from the land people had worked before the programme started. Having to work land worked by others before the project made farmers feel insecure and damaged by the project. These feelings were the stronger, if farmers who had already fully developed their land were shifted towards land that had not yet been developed into irrigated fields, or in cases of considerable loss of quality of the land. Further, many farmers felt they fulfilled project conditions but had not made it through the selection, or were selected but felt they lost too much land.⁶ A large group of farmers who felt damaged by the project joined forces in the so-called *Kelompok 88* (Group of 88). Led by a small group of larger claimants and supported by a lawyer with kinship ties to some of these persons, the group decided not to accept the selection results. What brought this group together is their common rejection of, and resistance against the land allocation decisions in Sinangkala. Since long, rumours had circulated about so-called *petani berdasi* (farmers wearing a tie), officials and administrators without previous land claim who had been able to acquire land and project facilities, at the cost of farmers who felt they did have a strong right to land. Conflicts became visible in the field in many ways: farmers who were disturbed by other farmers when they tried to work the land allocated to them by the project; removal of the boundary markers placed by AGRARIA; assertion of control over either the initial claim or newly acquired land by planting it; destruction of crops and bunds of irrigated fields; threats, and in some cases the use of violence.⁷

⁶ Surprisingly, hardly any attention was paid to (considerable) differences in quality of the land. In some cases, farmers who had claimed and used land before implementation of PIADP received land in return that was located in marshy parts, while fake claimants received land located on the land of the former.

⁷ An extreme case of assertive behaviour found in PIADP was the following: the initial claimant of land in one of the settlement areas planted not only the home yard around the house, but also the open space under the house (the project houses were on stilts), saying to the new owner: 'you own the house, I own the land'.

The specific history of migration and settlement had brought together in the Sinangkala area population groups of various origins, notably settlers from Tana Toraja and highland Luwu (Bastem), and the local lowland Luwu population. By the end of 1985, just before the pilot programme started, the new village of Pompengan had split off from Lamasi Pantai. Pompengan covered the whole pilot area of Sinangkala, parts of the Rongkong area (TUs R4 and R5), and land outside the project boundaries. Elections for the position of village head had already pitted a lowland Luwu and a highland Luwu (Bastem) candidate against each other. The lowland Luwu candidate was a former local leader of DI/TII, and trustee of the local elites in the area. The Bastem candidate had worked for PIP as a local contractor for land clearing activities in area B, and had in the process become a land trader. In the eighties, many lowland Luwu inhabitants had sold land to settlers from Bastem. However, they did not want them to enter the local political arena and become their village head as well. Thus, the lowland Luwu candidate had beaten the Bastem candidate in the elections. With a big project about to start and lots of financial and other resources entering the area, the position of village head was a financially attractive one. But it was risky as well. As will become clear below, the struggle about land and project facilities interacted in unpredictable ways with the sensitive local political context. It was not exclusively a struggle about land and facilities, but also about local political power, support from inside and outside the village, and competition for leadership positions between the highland and lowland population groups.

The new village leader came to play a key role in implementation of the pilot project. His pivotal position between 'beneficiaries' and government bureaucracy made him play an ambiguous role. On the one hand he was a client of the district officials, usually of lowland Luwu or Bugis origin themselves. Being their client, he had to submit to their private appetite for project land and facilities while at the same time keeping in control and contributing to the 'success' image of the project. On the other hand, the district officials were fully dependent on him in reaching their project objectives and personal goals. Hence, he was left with sufficient discretionary power to pursue his own interests and those of his relatives, friends and clients. His knowledge, protection, and representation of the outside interests in project land guaranteed him backing from higher district administrators and officials.

No wonder that the pilot project generated a serious outburst of protest. The criticism increasingly raised against the outcome of selection was that it had been biased towards those with power in the local administration or selection committee but no legitimate claim to land. Actually, this bias had worked in two ways: first, a number of district and subdistrict officials, often using pseudonyms or the name of their wives or children, had managed to enter the selection procedure and receive land and other facilities (see map 5). Second, the selection, highly dependent on the Pompengan village administration cooperating with Bugis and lowland Luwu officials of the various agencies represented in the selection team, had been biased towards selection of lowland Luwu farmers at the cost of farmers from Tana Toraja or highland Luwu origin.⁸ Since the seventies, Toraja officials had gradually disappeared from higher-level functions in district government agencies, and also from many administrative functions. Thus, farmers of especially highland origin had the feeling that they had been damaged by the selection process, that they had been tricked for the benefit of greedy officials, administrators, local power holders or their relatives and friends.

The project leadership made one serious mistake in its reaction to the protests against PIADP: it had assumed that those who felt damaged would never have the courage to stir up trouble, nor possess the network required to bring their problem under public attention beyond the local arena. The project staff had not counted on massive protests. It had not expected this group to resist and

⁸ An internal report on the selection in Sinangkala states that 'the pre-selection team has slightly advantaged the candidates with a Luwu background over those with a Toraja background. It is no wonder, therefore, that resistance against the land reform comes from Toraja circles' (PIADP, 1987c).

defy the authorities by openly protesting the land reform results. On the contrary, it had believed that such discontent could be contained by a combination of donation of project facilities to farmers willing to give in, and threats to those who continued to protest. The attitude of the project officials, in particular the regional planning board BAPPEDA, towards the protests in Sinangkala had always been characterized by negation, underestimation, and downright disdain. The standard project staff reaction to pleas and requests for more serious attention to the land reform problems was 'all problems solved'. To keep up this appearance of efficient and unproblematic implementation, all methods were allowed: false promises, threats, and an utter disregard for existing land claims. At the same time, officials went out of their way to withhold the farmers knowledge and information about the programme, its rules and procedures. As a former consultant for the programme stated:

'Though the complaint procedure in Sinangkala had been formally held, it was actively boycotted by the village head and the officials Complaint forms were not handed out to farmers requesting one. Farmers who did not know how to fill up the forms were not assisted by the village administration. They were, in fact, actively discouraged from handing in their forms. Nor were farmers given the opportunity to vent their complaints through other channels. Any criticism of the project was seen as a threat to established positions of the village head, project officials, and representatives of the local and regional administration. Only when the leading persons of Kelompok 88 started organizing farmers and inciting them not to accept the new ownership boundaries, the awareness grew that implementation of a land redistribution programme generates conflicts of interest that, some way or another, have to be solved.'⁹

Initially the project staff did not pay much attention to the Sinangkala protests, until Kelompok 88 started its public protests. This took the project management completely by surprise. Publicly raising objections to the selection results, the group braved authorities, police and army. The highland Luwu leaders of Kelompok 88 played a key role in organizing these protests and making known their case to the outside world. The leaders acted mainly from their own interests as claimants of relatively large areas of land, using the large group of smaller farmers from Bastem and Tana Toraja who felt damaged by the project as an instrument for sabotaging the whole programme. Through their kinship network, they were even able to mobilize high-level support at the provincial level. Once the Pompengan case had attracted the attention of the provincial authorities, the movement had a greater room for manoeuvre for action. The outcome was a large protest manifestation at the Luwu District Representative Council (DPRD) in Palopo. The authorities promised serious inquiry into the complaints, but warned that project implementation should continue undisturbed and farmers should stick to the land allocation plan.¹⁰ The activities of Kelompok 88 also drew attention of the press. Reactions by project officials and administrators were telling. Thus, a high-level district administrator stated that 'the emergence of kelompok 88 in Pompengan is not the fault of the people They do not yet really understand the meaning and advantages of the presence of that multi-milliard Rupiah project. Their fantasy soars high, boosting their ambition to control as much land as possible. In the end, they are not willing to hand over their land for the sake of a smooth implementation of the project' (Fajar, 4-8-1988).

After the manifestation, a commission was formed to inquire into the protests and, if necessary, to work out adaptations of the SK. Though the commission did look into the claims by various farmers protesting the land allocation, above all it tried to 'buy off' the leading persons by giving them more land and project facilities and thus break resistance of the group as a whole. In April 1988, a revised

⁹ Personal communication A.J. Hartveld.

¹⁰ Later, in the same way (through relations of kinship and origin) the group also mobilized support from Jakarta. In 1990, the vice-secretary of the MPR (People's Representative Council) in Jakarta wrote a letter to the Bupati of Luwu in which he called for serious attention to the Pompengan affair.

SK was issued, incorporating the new decisions on Sinangkala.¹¹ The leaders, on their part, readily accepted all project land and facilities, but still refused to part with their initial land claims. As an act of vengeance on the part of the authorities, a bulldozer destroyed part of the land of one of the leaders. Escalation seemed unavoidable. Some members of the project staff threatened to use violence, to use the army in Sinangkala, and even to let the leaders of the protests ‘disappear’. However, the district head stressed that ‘starting a legal procedure is part of the Indonesian legal system’.¹² The leaders of the group readily took that remark to heart: in August 1988 their lawyer filed a court complaint against PIADP. In his complaint, the lawyer of the group mainly challenged the interpretation of the decision of the Ministry of the Interior dated 19-12-1984 (see chapter 4), which stated that ‘land which is not owned by private persons or a legal body can be turned into an object for land redistribution’. According to the complainant, this decision was wrongfully applied in PIADP, as rights like ownership (*hak milik*) and use (*hak garap*) rested on the land that had become the object of redistribution. This meant that any legal action in the framework of the project based on the Decision was to be considered legally invalid (*batal demi hukum*). The group demanded, among others, immediate recognition that the complaining party had rights to the land that was object of the charge, and a court rule that the defendant should immediately stop any form of disturbance of the land, including activities of PIADP on land to which rights were claimed by the charging party.

Especially in the early years of the conflict (1988-1990), leaders of the movement were arrested for short periods, convicted and detained, sometimes beaten and confronted with threats, and obliged to report frequently to the district authorities. Sinangkala continued to be haunted by conflicts caused by PIADP. Early 1989, a new SK had been issued, in another attempt to solve the conflicts. Some of the leaders gave up resistance once their wishes had been satisfied by the project. This proved to be one of the major weaknesses of the movement.¹³ On 8 January 1990, the Palopo district court pronounced verdict on the complaint by Kelompok 88. All claims were rejected, with a reference to the legal basis of land reform in PIADP (BAL) and the various Letters of Instruction and Decisions of the Bupati that comprised the project law for PIADP (see chapter four).¹⁴ An

¹¹ In the revised Decision, 36 farmers included in the first version were replaced with 36 new farmers. The rights of nine of these farmers were shifted to P16 or R4. One entered the consolidation programme. Further, there were considerable shifts due to plot exchanges: 74 families changed plots in their TU, 29 families moved to another TU. After the revised Decision, 74 out of 88 farmers of Kelompok 88 had received land in return, either through the revision or in the first decision. Four of them were promised land outside Sinangkala (TUs P16, R4). Another ten were not given land because they lived outside the Pompengan area.

¹² Personal communication A.J. Hartveld.

¹³ Personal communication D. Patanduk (former lawyer of Kelompok 88).

¹⁴ In his reply to the legal advisers of the defendants, the lawyer of Kelompok 88 pointed out that the rights to clear land (*hak buka*) and to use it productively (*hak garap*), important mechanisms for acquiring rights to land in customary law (*hukum adat*), are recognized in BAL. Measurement and registration by the state for the purpose of tax collection provide a further recognition of the continuous use of the land, which, ‘if seen from the perspective of adat law, in fact already is an ownership right’ (*ditinjau dari segi hukum adat, ini sebenarnya merupakan hak milik - tanah dibuka sendiri lalu dikuasai dan digarap secara nyata dan terus menerus, sebagai sumber nafkah hidup*). PRONA titling entailed a further recognition of rights on part of this land. Thus, the initial right of clearing developed into a right to work the land, and from there either into a state-recognized ownership (PRONA) or into rights under adat law (which is recognized in BAL). He concluded that rights rested upon the land (*tanah hak*), in sharp contrast to the image created by the Letter of Instruction, in which the land reform status was given to land upon which no rights rested. He also rejected the argument put forward by the defendants that a law suit is ‘an action that disturbs the process of development’ and that ‘the project cannot be stopped by anybody’ (on the New Order tendency to throw in ideological notions like ‘development’ to replace legally sound procedures, see Lindsey, 1999).

appeal in Makassar and cassation in Jakarta were to follow (see chapter 6). In the meantime, the authorities continued exerting pressure on the area. Early 1990, seventeen kilometres of field bunds were constructed under army supervision, in the framework of the so-called 'ABRI Masuk Desa' Programme.¹⁵ In the course of 1991 a small number of cases from Sinangkala entered court. Cases were decided in favour of those whose claim to land was supported by the revised SK.

3. Land redistribution in Seriti

More of the same: the established routines of land reform

While the situation in Sinangkala worsened, PIADP continued into Seriti (area B2).¹⁶ Initially, the land redistribution area in B2 had been much larger than it was when the programme started. As a result of the conflicts in Sinangkala, the scope of the programme in Seriti had been considerably but rather arbitrarily reduced. Parts that were already permanently worked attained the reconsolidation status (chapter 4). Initially, the redistribution programme had covered 680 hectares of agricultural land. After this reduction, only 329 hectares remained for redistribution.¹⁷ What remained proved problematic enough. The inventory was of low quality again. Maps of claims and lists of claimants were a very coarse and static representation of land tenure. In addition, village heads and other local leaders had clearly manipulated the inventories. Farmers were dependent on such people for representation of their interests in the selection meetings. Leaders had clearly misused their power positions as representatives of the population during the inventory, and later in the selection and allocation of land and other facilities. Cases emerged of farmers who literally had to buy themselves into registration and selection, whose claim had been intentionally made to disappear, or who had to pay for receiving their housing facilities.

As in Sinangkala, acceptance among farmers of selection results and land allocation was very low here as well. Some months after allocation, more than sixty percent of the farmers worked other plots than those specified in the allocation plan. The PERTANIAN field team, which had to give guidance to the farmers in the process of adapting their land tenure to the new ownership boundaries by making field bunds, turned out to be mere onlookers to a process they could neither steer nor even administratively keep up with. Over a longer period, their field reports showed a growing gap between SK and allocation plan on one hand, and field reality on the other. In mid-1989 the PERTANIAN field team reported that it was no longer able to perform its tasks in accordance with the objectives of PIADP, as a consequence of the growing number of land conflicts and plot changes. The 'beneficiaries' were not interested in such administrative problems. Most of them were primarily trying to get some degree of tenure security in the chaos caused by the land reform programme. Claimants preferred to stick to their original land claims, or to exchange plots in

¹⁵ 'ABRI enters the village'. In the New Order period, the Indonesian Armed Forces were called ABRI (Angkatan Bersenjata Republik Indonesia). The programme was based on the so-called 'double function' (*dwifungsi*) of the army: a defensive as well as a social function. It was used to extend New Order power and control down to the village level. The action was financially supported from (Dutch) PIADP resources.

¹⁶ In project planning these areas were seen as discrete 'stages', one neatly following upon the other in time. In reality, the picture is much more diffuse and chaotic. Until the end of PIADP, work continued in all areas, and none of these areas could ever be said to be 'ready' or 'implemented'.

¹⁷ Thus, TUs S3ki/te/ka consisted of 190 ha. for (re-)consolidation and 84 ha. for redistribution; in Pa2/3 these figures were 93 ha. and 83 ha. respectively; in P15 66 ha. and 28 ha. P16 was the only TU wholly defined as land for redistribution: 134 ha.

such a way as to be able to remain on their own land claim or on the claim of close kin. This gave them a degree of security the project could never offer. Those who had moved under pressure of the programme and seemed to accept the new plot boundaries, were loath to invest time and labour in the new land. In the course of time, such initial doubt and fear of conflict on the part of farmers was usually followed by a return to their original land claim.

Enforcement of land reform in Seriti was less strong than in Sinangkala. The latter had been a pilot project. Its successful implementation had to create the very legitimacy of PIADP as a project. Therefore, all attention of consultants, administrators, officials, army and police was focused on it. In Seriti, this pilot element was absent. Second, many officials and administrators had private interests in the pilot project or were bent on acquiring such interests through inventory, selection and allocation. In order to establish or defend such interests, close involvement in these processes was necessary. In Seriti, district-level officials and administrators were not so deeply involved in land speculation as in Sinangkala. Mainly of Bugis and lowland Luwu origin with an Islamic background, they had less access to the Christian majority of people of highland Luwu and Tana Toraja origin in Seriti than to local leaders in Sinangkala. After Sinangkala, then, signs of routine implementation and loss of interest became visible among project officials.

The attitude of project officials to farmers who were hesitant or unwilling to comply with the programme was the same as in Sinangkala: officials tended to regard these people as a nuisance. The behaviour of farmers was, in fact, a serious sign that they did not have much faith in the programme. Though on a smaller scale, the same stories circulated about certain people who had entered the selection on the basis of fake claims. The project management did nothing to create greater faith in the project. The farmers who had received land were called to a village meeting hall for 'information' about further procedures and their rights to facilities of the settlement programme. These mass meetings all had the same character: the project officials were sitting behind a table, the farmers on benches or on the floor. In long monologues the officials used to lecture the farmers on their duties and behaviour, which was regularly labelled *primitif* (primitive, backward), *belum moderen* (not yet modern), *kampungan* (rustic) or in like terms. Farmers making critical remarks or asking awkward questions were reproached and warned for the consequences of recalcitrant behaviour. There were no project-initiated attempts at serious communication or dialogue with farmers affected by the programme.

Land reconsolidation in Sj3ka

The low degree of acceptance of the programme certainly had to do with farmers' awareness of the problems in Sinangkala and their causes. However, experiences in Seriti also learned that there were other factors, such as for instance the specific culturally endowed norms pertaining to, and ways of changing boundaries of land claims. Experimenting with more dialogical ways of approaching farmers affected by the programme shortly after my arrival, a small field team of BPN and myself surveyed reconsolidation areas in Seriti to get a better understanding of the quality of the baseline material for the reconsolidation programme. Apart from doing the field surveys, we organized a meeting for which all claimants of land in TU Sj3ka had been invited to discuss plans for reconsolidation. The outcome of the surveys and the discussions was telling, and gave little reason for optimism about implementation even of reconsolidation. The surveys showed how big the gap was between the claim inventory map and field reality.

The meeting with the claimants in Sj3ka had been organized in a low-profile manner. As this was not a formal meeting of the selection team, project officials and representatives of army and police

were absent.¹⁸ First, a BPN surveyor explained the essentials of reconsolidation, stressing the fact that the programme, if implemented, would not affect the total area of land claimed (and, after the programme: owned) by farmers. Then the farmers asked questions, and a lively discussion about the advantages and disadvantages of the plans for reconsolidation followed. The farmers were very critical of the plans. Their first point of reference was the redistribution programme in Sinangkala and Seriti. They were afraid of the tensions and uncertainties caused by intervention in land tenure through, in their eyes, arbitrary changes of plot boundaries. One farmer even openly stressed that merging scattered plots and creating straight plot boundaries was a priority of project officials and consultants, but *not* of the farmers. They were especially afraid of the project practice of changing land boundaries in the redistribution area in a purely administrative way, without trying to reach prior agreement between, or even involving, the parties involved. One farmer argued:

‘In the land redistribution, the selection team determines whether your land claim is sufficiently strong for its owner to become a receiver of land. If you are selected, you have to make plot boundaries in accordance with the boundary markers placed by the project. But what if the people working land in the same place do not accept these changes? What if they, or we, have to move to a plot of land that is not the land we cleared or developed with our own labour? What if I have to leave my land and shift to a marshy or sandy place? What if I insist, upon which another farmer uses his *parang* (machete)? In Toraja language we call the change of boundaries between our land and other farmers’ land without prior agreement *pemali* (taboo; D.R.). Any changes in plot boundaries should be discussed and agreed upon in advance by the farmers whose land is involved. Only in that way conflicts can be avoided. In the redistribution area we can see the trouble created by moving people around in a haphazard way. So why not leaving the existing boundaries, which are all marked by clear bunds, as they are now and give us a title for our land? There is no need at all to disturb our plots in this way.’

These and other discussions with farmers in various TUs in the Seriti area clearly showed how important existing and locally recognized plot boundaries, established by labour investment in land clearing and development, were. It also showed the magnitude of the gap between the lifeworld of farmers and that of project officials. The mere suggestion that tenure security, safe plot boundaries and absence of land conflicts could be provided through a land reform programme like PIADP and its administrative procedures leading towards a state-issued land title was totally strange to farmers. On the contrary, this type of outside intervention was seen as a potential threat to tenure security. It was clear to most farmers that, in Sinangkala and Seriti, the project had been systematically messing things up and violating important norms pertaining to land tenure. The main lesson drawn from the meetings in this TU was that even the reconsolidation programme would never generate any significant degree of support from the farmers involved.

The case of TU P16

TU P16 is an all-redistribution TU in which part of the land was reserved for settlement (like TU R1; see map 4). Land allocation in P16 by the Seriti administration took place from 1962. Part of the land was allocated to members of village defence units, of army and police, and to formal and informal village leaders. Regular flooding of much land hampered agricultural production. Land was often left fallow after having been cleared and used for a few seasons or years. Land transactions and transfers were usually not reported to the village administration or otherwise

¹⁸ This was a basic dilemma: on the one hand, the presence of army and police representatives and other officials completely blocked a more open and dialogical approach; on the other, organizing field meetings without them could easily (and actually did) lead to accusations against the field team.

registered. In the eighties, when the area became safe from flooding, many claimants started cultivating their claims. The complex history of land use had led to a layering of, sometimes conflicting, land claims. Often, claimants who had sold their land wholly or partly many years ago, tried to reclaim it to get access to the expected benefits of PIADP.

The AGRARIA inventory in 1987 had identified 173 claimants for a (gross) land area of about 170 hectares. By the end of 1988, selection had resulted in a Decree of the Bupati in which 134 candidates were selected as beneficiaries of the land reform (and settlement) programme. Forty of them had been identified as living in Seriti itself, another eighty-four lived in Tolemo, and the remaining ten candidates in other places. Ninety-two candidates had a Tana Toraja background, the others came primarily from southern or highland Luwu, and in a few cases from other places. Redistribution in Seriti had caused many conflicts throughout this area, including in TU P16. Late 1990, at the initiative of the BPN project leader a special team had been formed to investigate and solve conflicts. BPN had come under pressure to start the routine distribution of ownership titles for land about which initial claimants and beneficiaries of the programme were still in conflict. P16 was the first TU in which this special team worked on conflict resolution. As will be related below, the activities of the team were obstructed by project officials, local administrators and others who had a great interest in finalizing PIADP without paying too much attention to the injustices and conflicts it had generated. TU P16 came to play a decisive role in the outcome of the programme as a whole. It was a test case for the special team, the work of which was closely followed by the bupati, who had given his support to the team in a last effort to solve the enormous problems of PIADP.¹⁹

Though differing from Sinangkala in the sense that large-scale speculation by officials and local elites was less important in P16, such speculation did play a role here. However, this was not the only problem. Many problems were related to the complex history and layered character of the claims, to long-standing conflicts between claimants about land transactions and transfers, attempts by village administrative elites to gain material profit from their pivotal local role in land reform and settlement, and to the low quality of the land inventories. The land claim inventory was a reflection of these distortions and complexities pertaining to land claims rather than a 'factual' representation of discrete and physically distinguishable land claims. The following cases of conflicts, emerging in the wake of implementation of PIADP and later tackled by the special team for conflict solution, give a more detailed picture of the complexity of the programme.

Speculative behaviour was not restricted to officials. Farmers themselves were often deeply involved in land cases involving speculation and cheating, often attempts to derive profit from the expectations raised by the project. Here follows a case of such farmer-style speculation:

As long as the area had been flooded, part of the TU could not be worked. In the eighties, when the area was protected against flooding, Petrus Tujuh, a farmer from Seriti, became interested in his claim again, which had remained fallow for many years. He made a land sharing agreement with Pither, who cleared and developed the land. In compensation for his labour, Pither was rewarded with half of the land. The land surrounding Tujuh's claim was claimed by other farmers, but not used. Around that time, Tujuh had to contribute to death ceremonies in Tana Toraja, for which he was badly in need of money and buffaloes. In a short period before the inventory was held, he managed to sell 'his' land three times. Each time he lured people with the prospect of benefiting from the project that was about to start saying that, once people held a claim, it would no doubt be recognized by the project. The first time he exchanged land for two buffaloes, the second time he received Rp. 350,000 in cash, and the third time he again sold land for Rp. 1.300,000.

¹⁹ Thus, in the P16 cases it is important to distinguish between the selection team and the special team. The former tended to cover up the backgrounds of conflicts, represented the interests of local elites or officials and treated land redistribution as a routine administrative affair. The latter attempted to take an approach in which reduction of speculation with claims, as well as conflict solution, negotiated reallocation of land, and a more serious attention to farmers' views of the process were crucial elements.

When the selection team had done its work, the buyers of land realized that they had been cheated. While Tujuh and Pither had become beneficiaries of the land reform programme, the three buyers had been told that they had not been selected. Confronted with this problem and its probable consequences, Tujuh started protesting the selection result. He argued that his original land claim had been much larger and that he wanted another hectare of land from the project. Later, this was one of the problems handled by the special team. The team called Tujuh to explain his case and make clear why he had started hindering other farmers in the field. The team made clear that there was no ground for honouring Tujuh's demand for more land, and that he should enter into negotiations with the cheated buyers about repayment of their money and buffaloes.

Village leaders and administrators were a primary source of 'data' that served as input for the land claim inventory. In many cases, these people used their pivotal role in a way detrimental to the interests of some while excessively advantaging others. Here follow some examples of the ways in which those in powerful positions influenced the land reform process:

Achmad, a farmer from Seriti, received one hectare of land through the redistribution programme. The plot allocated to him by the project was located on land claimed by Tato. When Achmad actually started preparing the land and making bunds for rice cultivation, Tato forbade him to enter the land. The case was discussed in various meetings organized by the selection team. During one of these meetings, Tato stated that he claimed the land, that he had been working it since a long time, and that Achmad had only recently arrived on the scene and never claimed land in P16 before. Though (or rather, as will become clear later, *because*) invited through the Seriti village administration, Achmad never turned up at such meetings. Without having heard Achmad, the selection team reaffirmed his rights as beneficiary of the programme, and ordered Tato to stop hindering him. During later investigations by the special team, many informants stated that Achmad's selection was not based on an earlier land claim, but on his relationship with two Seriti village administrators, of whom he is a client. During a session of the special team, Achmad openly acknowledged that he had never claimed land in P16, but had been given the chance to enter the inventory by two village administrators. The conditions under which the deal was made did not become clear. In the same meeting, the informants confirmed the earlier statements by Tato. They recognized the existence of a 0.5 hectare claim on the location of the land given to Achmad by the project. According to the accounts given, the same members of the village administration made this claim disappear when they were informants for the inventory. As the village administrators had not represented Tato, his claim had not been registered. The village administrators themselves were also heard about the case. They stressed that Achmad *did* have a land claim, and traced it to another farmer again in their attempt to retain control over the allocated land. This farmer, however, had received compensation for his claim many years ago. The farmer who had paid compensation and taken over the claim had already become a beneficiary of the land reform programme. In this case, the special team decided that the rights of Tato should be fully recognized by giving him half of the plot allocated to Achmad. It also stressed that Achmad, a landless farmer, should be allowed to keep the other half, on the condition that he actually worked the land himself and for himself (that is: not as a tenant for any member of the village administration or others). The ruling by the team was readily accepted by both parties and laid down in a written statement signed by the parties, team members and witnesses. The team made an appointment with Achmad and Tato for definitive division of the plot and allocation in the field. However, when BPN surveyors turned up for final measurement and field allocation, Achmad suddenly refused to recognise the decision of the team. During the next session of the special team in P16, Achmad was invited again but did not turn up, upon which a BPN surveyor picked him up at his house. During the ensuing hearing, when pressed to clarify this sudden change in his behaviour, Achmad told that after the last meeting he had been pressured by a member of the project staff and a village administrator not to accept any ruling by the special team. During the meeting with these people, he had even been forced to hand in the land working permit (SIM) given to him by the special team after accepting its ruling.²⁰

²⁰ After BPN had decided, on the basis of experience in Seriti, to improve the procedures for land allocation, land-working permits (SIM) were handed out to farmers who had accepted their new plots in the field. This policy fitted in with the need for greater flexibility and postponement of final formalization by the bupati.

Allocation of land to persons with special merits for the village was quite common in the sixties. But there are considerable differences in the degree to which such land claims are recognized as being based on merit, or on the misuse of strategic power positions in the local administration:

An example of a claim widely acknowledged to be based on merit is that of Sumbung. In the fifties, when Seriti was threatened by DI/TII attacks, his brother Markus, a colonel in the Indonesian army, had succeeded in bringing guns into the village to arm the defence forces. After the defeat of DI/TII, Markus had been rewarded with five hectares of land in Seriti, located in current P16. When still alive, the colonel transferred the claim to Sumbung. This fact was widely known among the inhabitants of Seriti and Tolemo, and the claim was recognized and respected. However, the land had only been partly used for a short period, mainly because of flooding. It existed as a matter of principle rather than 'in the field'. In the eighties, when the land inventory was about to start, Sumbung wrote a statement in which he divided the claim equally among himself and four other people, all kin. These became claimants of land on the basis of this honorary claim. However, during the selection more people were to turn up who tried to trace their claim to Sumbung. Most of them were clearly fake; recognition of all fake claims would have added up to at least ten hectares.

One of the people entitled to one hectare of the above land claim was Nadira, wife of Amiruddin, a subdistrict official who had been the village head of Seriti around the period of inventory and selection for PIADP. In the selection for land reform, Nadira's claim had been recognized. When the special team checked again the background of another claim on the name of a farmer called Nuri, that had also been recognized in the selection procedure but the strength of which was seriously doubted by the team investigating the problems in P16, former village head Amiruddin was called to the team. It had become a public secret that Nuri had lent his name to Amiruddin and, in fact, worked the land as a tenant. Defending Nuri's 'claim', Amiruddin stressed that it originated from Sumbung (see the case of honorary land above). During the same meeting, his wife Nadira was also present. She had been invited twice by the special team to come to the field and formally receive the land allocated to her. However, she had never appeared on these occasions. Only after she had been given a last chance to meet the team, she turned up, afraid of losing her rights. When asked about the claim on which her selection had been based, she suddenly traced the claim, generally recognized to originate from Sumbung, to another source, confirming her husband's story about the origin of Nuri's claim. Confused about this new development, the team postponed its decision and promised that it would check the information. During the next meeting, the team produced the document signed by Sumbung himself and ruled that Nadira remained entitled to one hectare of the Sumbung claim, on the condition that she confirmed that her claim to land derived from Sumbung and not from any other source. The team also ruled that Nuri had no recognized claim to land, and had acted as a client of Amiruddin. Nadira, cornered by the evidence produced by the team, answered that she wanted to discuss the issue with her husband first. Much later, in a turbulent session in which the special team presented its advice for changes in the selection results for P16, the case was discussed again (see below), but never solved.

Another case of such 'honorary land', this time an example of the allocation of honorary land that had little support from society, is the following:

Rosmawati is the wife of Kamaruddin (local military commander for the PIADP area). The selection team recognized her claim - almost one hectare; according to the inventory, the land had been first cleared in 1965 - and allocated one hectare of sawah. Though in the inventory she has the status of *janda* (widow), her actual marriage bond with the commander is widely known. Though avoiding doing so in public, many farmers protested the project decision to give her land, stating that she had no legitimate rights to land. When the special team started doing its work in P16, further inquiry was made into Rosmawati. Most informants were very clear: 'she has no rights to receive land, because she has never cleared or worked land before.' The special team called Rosmawati several times, but she never turned up. As most people related the land to the power position of Rosmawati's husband, the special team also heard him in an attempt to get more clarity about the claim on the basis of which the project had given land to Rosmawati. Kamaruddin acknowledged that selection of his wife was actually not based on any pre-existing claim. Rather, as he explained, the land

was *tanah penghargaan* (honorary land) given him for his services to the community, but registered on the name of his wife to avoid ‘misunderstandings’. In view of the fact that the commander had been involved in similar cases in Sinangkala, the team decided to advise replacement of Rosmawati with a farmer who had stronger rights to land in P16.

As we have also seen happen in Sinangkala, when individuals or kin groups seem to have lost the battle for land at the local level, they may decide to mobilize kinship relations at a higher level:

Three members of the Limbong family were among the first settlers in Seriti. Because of the pivotal role of one of them in the history of refugee settlement, this is one of the most prominent families in this village. In the sixties, three members of the family were given land in the area of current P16, two hectares each. The plots were drawn on the first village-made map of land use in the area. The land was indeed developed and surrounded by bunds, but left fallow after flooding. Even tax had been paid on the land, as long as it had been productively used. However, the claims were not incorporated into the land inventory. This probably happened under the influence of a member of the village administration, who was in conflict with the family. The existence of the claims was recognized and reaffirmed in preparation of the actual inventory but, to the surprise of the claimants, never put on the map and list of claimants. After the team had started its work in P16, members of the family approached team members with the demand for recognition of their claim. In the meantime, the family had also activated its relations in the capital; relationships that linked the family with BPN. The wife of one member of the kin group happened to be the daughter of a high-level BPN official at the Land Reform section, while she herself also worked for BPN. The family made BPN in Jakarta send a letter inquiring into the issue and demanding six hectares of land registered on six different names. After consultations with the head of BPN (who, worried by these connections to the centre, had urged the special team to seriously consider the issue raised in the letter), the demand for six hectares was turned down. Instead, the special team promised that, to redress the loss of land claims by the family, allocation of one hectare of land to a member of the family living in Seriti would be seriously considered.

Some claimants played the adat card to legitimize claims. However, if the results were negative, adat as a basis of legitimacy was easily replaced by another one. This case shows how people shop around between potential bases for legitimacy, in search of recognition by the project:

Petrus Sanu is an inhabitant and former Seriti village head, temporary village head of Tolemo, and subdistrict official. He received one hectare of land in P16. Claiming more land, he filed a complaint against the project decision. Though his functions left him little opportunity to openly disturb the project and negate decisions of the selection team, he continued striving for recognition of three hectares of land he claimed as *tanah milik adat* (customary land). According to informants he had once cleared about one hectare of land and had it registered on the basis of SK6 (see chapter 4) in the seventies. However, the land had been sold a long time ago and transferred several times since. The project had given both Sanu and his brother Yulianus a hectare of land. Thus, they had got off quite well considering the weak basis of their land claim. Without doubt, this success was due to Sanu’s position in the administration. When the special team entered P16, Sanu started demanding yet another hectare. When he realized that nobody was willing to recognize the existence of a ‘customary’ land claim, and that the general opinion was that he had no reason to complain about the selection results, he shifted to another strategy. He tried to lure the team into believing that he had been promised land by a former Seriti village head who had played a role in the struggle against DI/TII. The team did not accept this new claim history. Sanu became an active but largely silent adversary of the special team.

Often, the parties involved, whether initial claimants or farmers receiving land from the project, simply did not accept application of the project rules for recognition of land claims and decisions by the selection team based on these rules:

Elis Sampe is a widow from Seriti. Her husband had been an army retiree. The land claimed by Elis had been cleared by her husband in the early sixties and measured by the Tolemo hamlet head. Elis' husband had been in possession of a letter of recommendation from the regional military commander, containing a request to the Seriti village administration to give him five hectares of land. The village administration refused to honour this request, on the ground that two hectares was the maximum to be allocated to farmers clearing land. The army pensioner worked the land until the late sixties, when the floods made agriculture impossible. In the land inventory for PIADP, the two hectares were split up and registered on the name of Elis herself and of her son Tandi. Only Elis was selected as a beneficiary of the programme. However, Tandi, who was supposed to give up his claim, continued working the land. Since the eighties he had invested much energy in levelling the land and making bunds. The project allocated the land to another farmer, Samad. Seeing that Tandi continued to work the land, Samad did not have the courage to set foot on it. He refused to occupy land already worked by another farmer. Finally the special team decided that Tandi had legitimate rights to the land and should be recognized as a beneficiary of the land reform programme.

What all these cases show is the high degree of embeddedness of land tenure in a variety of social, kinship and power relations. As the cases show, social or kinship connections to the subdistrict or village administration, the army, or the local village elites were an asset in the struggle for land and facilities in PIADP. It will be clear that the routine approaches to land redistribution and settlement that had been developed for PIADP would never be able to cope with such complex and sensitive land rights issues.

Lessons from Sinangkala and Seriti: new approaches to farmer selection and land allocation

Back to 1989 now, when the special team mentioned above did not yet exist. Sinangkala had become a skeleton in the cupboard, and Seriti was well on its way to becoming another unsolvable problem for PIADP. Meanwhile, project activities shifted to Salu Jambu and Rongkong, the third and fourth areas of implementation. The first selection rounds had been held in these areas or just started, and tendering procedures for the housing and sanitation construction programmes of the settlement plan were about to start, putting increasing pressure on implementation of the land reform programme. The experiences in Sinangkala and Seriti had yielded a number of insights that were to lead to changes in the programme. As conflicts in Seriti mushroomed, the new project leader of BPN came to the important conclusion that his agency should have a more prominent role in the land reform process: having a greater say in the programme, and taking more responsibility than before. The land reform process had generated or laid bare various conflicts (see above). However, PIADP had not created an atmosphere conducive to solving such conflicts. On the contrary, by conceptualizing the programme as a technical routine, it had hidden existing tensions and conflicts rather than openly addressing them. By concentrating decision-making power in the selection committee, it had made claimants dependent on village elites and project officials, and thus created a widespread distrust of the project. This distrust had been intensified by what was widely known about Sinangkala. During the monthly meetings of the district steering committee and subdistrict 'coordination meetings', several agencies were putting strong pressure on BPN to step up field implementation of the land reform programme by rapidly staking out the new plots in all remaining areas. This pressure was exerted primarily by BANGDES and PERTANIAN, agencies that were fully dependent for their contribution to PIADP on finalization of the task of BPN: allocation of agricultural land and home yards. In addition, BPN was frequently criticized for not handing out land titles in Sinangkala and Seriti in a routine fashion. Leading persons of BAPPEDA actively supported and actually stirred up these feelings against BPN. They needed an image of PIADP showing rapid and steady progress rather than problems and stagnation.

BPN itself, as its project leader realized, had nothing to gain by routine implementation. In the case of Sinangkala, BPN had also been under constant pressure to hand out land titles; the agency had given in to that pressure several times. However, when conflicts broke out, the project leader of BPN was obliged to recollect the titles and admit failure. Therefore, he decided to take a firmer stance, and do his utmost to create circumstances conducive to the solution of land conflicts rather than just engaging in the fulfilment of quantitative targets to please the project bosses. This firmer stance of BPN paralleled my own analysis of the situation on the basis of my first experiences in PIADP. We agreed that a first requirement was an increased legitimacy of the selection team and PIADP as a whole in the eyes of the farmers subjected to its regulations. Legitimacy could only be restored if, contrary to especially Sinangkala, the selection process did not allow *petani berdasi* to sneak in through their connections or power positions in the selection committee, as long as this resulted in the rejection of claimants with stronger rights to land.

Further, key activities required a shift from the office or village meeting hall to the field. In Sinangkala and Seriti, land allocation had been a paper process. As far as land reform required field activities, farmer presence had been an exception rather than the rule. New plot boundaries were measured and staked out without the farmers involved (former claimants and new owners) being present at all. The new project leader of BPN was determined to make his field staff become more involved by meeting farmers in the field and inviting them for any activity related to their land. 'Allocation' should not be understood as putting a name on a map, but as the outcome of a process of negotiation between farmers and a project team which gave the opportunity for questions, preferences, plot exchanges, complaints and refusal to give away or receive land.

To make this possible, the meetings should have a more open character. In Sinangkala and Seriti, farmers had been kept at a distance. If invited at all, they were reluctant to speak their minds in the presence of higher district officials, army and police. There was a need for more serious attention to farmers, their argumentations and claims. This required a forum in which farmers' objections against project decisions or ongoing conflicts could be more openly discussed and, if possible, solved. Working seriously on conflict resolution required a shift from hierarchic, top-down selection meetings towards an approach that would be more responsive to complaints from farmers who felt damaged by the project and more flexible in its implementation. Changing the style and composition of meetings between project staff and farmers by creating spaces for discussion on a more equal footing was a time-consuming and risky undertaking, but there was no other way. As conflicts tended to become visible only after land allocation, it also made sense to postpone formalization of the selection and allocation results towards the end of the process.²¹

Other changes were needed as well. Changes that would require quite a different style of decision-making about land, using different criteria and leading to different outcomes of the selection procedures. The selection team took decisions about the relative strength of land claims by giving codes to the claimants: code A for those with strong claims (and hence future beneficiaries), code B for those whose claim needed further consideration, and code C for those with weak claims (and hence no rights to land). After having attended a number of selection meetings, it had struck my BPN partner and me how claimants were often routinely given a code on the basis of very unclear data and criteria. As to C codes, for instance, there seemed to be a general bias against small claims. Notwithstanding its initial ambition of redistributing land in favour of the poor, the process had become a threat to claimants of small parcels of land who were sometimes routinely given a C code in the selection. In view of the project norm of allocation of one-hectare plots, small claims required

²¹ Most project officials were against this greater flexibility. However, it fitted in with the wish of the bupati to avoid administrative disasters like Sinangkala, where the SK had been changed several times. This made him *malu* (ashamed), as it gave the impression of unreliability of his administration. Therefore, he wanted to sign once only.

a great redistribution effect. This tended to complicate the selection and allocation process. The composition of the selection team - with a bias towards village administrators as far as local-level representation was concerned - did not always guarantee due representation of every claimant. In fact, the selection team represented some claimants far more actively and better than others. This type of representation was a threat to small claimants:²²

Martha lived with her husband and six children on a small piece of land in the Seriti area. Martha's father, who also owned irrigated fields in Salu Pao, had given them the 0.4 hectare plot some years ago. Since they occupied the land, Martha and her husband had gradually improved their shack into a small wooden house. Part of the land was planted with perennial crops, the remainder was used for growing vegetables and maize. Martha's husband worked as an agricultural labourer and sharecropper, Martha earned additional income from harvesting labour. Initially the land had been planned as consolidated village land. However, in view of the shortage of home yards for settlement the selection committee had decided that the area where Martha and her family lived should become a settlement area divided into home yards. The selection committee had given her a C code, considering that the land originated from her father who was a beneficiary of the programme himself. Further, the land had been transferred after 1986, a violation of project regulations for area B (see chapter four). Finally, as one official stressed during a selection meeting, 'the land claim was too small to be recognized anyway'. Martha and her husband had heard about the decision from a hamlet leader who had attended the selection meeting in which codes had been given to the various claimants. One day, when surveyors of BPN were in the field, they were approached by Martha, who was crying. She asked them to come and have a look at the location of her home yard. Having seen the situation, BPN decided to demand reconsideration of the earlier decision. In the end, the land was not interfered with.

Apart from biases in representation, there were also the constraints imposed by the rules for selection and allocation. Notwithstanding all stories about 'empty' land before PIADP had started, the inventories had made clear that, whatever the strength of all these claims, all land in the TUs for land redistribution was already claimed. That was a drawback for the optimistic project plans for resettling farmers from outside the project area and for giving land to the landless. In addition, claims larger than one hectare had in most cases been split up during the inventory. Parts of such claims had been registered on the names of spouse, children or other kin. Most of such cases reflected a rather 'natural' process of transferring land, only given urgency by the sudden need for formalization and registration (and, through registration, the expectation of future recognition) in the framework of PIADP. Therefore, the redistribution effect - if redistribution was accepted at all by the claimants - was minimal. Enlarging small land claims to the standard size of one hectare, let alone giving land to landless farmers or settlers from outside, was impossible. Nor was it acceptable in the eyes of the losers in the process (more often than not small farmers themselves, rather than large landowners with speculative ambitions). The settlement programme made the situation even more problematic. In TUs like P16, land had to be cleared from earlier claimants for the purpose of establishing the home yards of the new settlements. The claimants, if recognized as sufficiently 'strong', had to be compensated with new land, preferably in the same TU. Therefore, by hook or by crook, a redistribution effect had to be squeezed out.²³

This pressure for redistribution also led to another kind of arbitrariness in the selection process. Though there was a long list of legitimizing criteria (see chapter 4), in the end the number of

²² In some cases, representation by village representatives in land registration, selection, or allocation of project goods literally had to be bought, either with money or with a share of the material project benefits to be expected from recognition of the claimant (part of the living allowance, housing material etc.).

²³ I remember many discussions with my BPN counterparts, in which we concluded that the best thing to do with the most positive effect for the farmers, was to call it all off. However, we also realized that the various interests that had developed around the programme would never allow for this. See also below.

hectares available for redistribution in a TU rather than the strength of the land claims determined the outcome of selection. The selection process was a rather arbitrary mechanism for wiping out a certain number of claimants in order to match the number of accepted beneficiaries to the number of plots, deriving its legitimacy from the PIADP land policy document. The underlying assumption was that rejected claimants would accept the decision by the selection team and part with their land. PIADP land policy was based on the principle that no compensation should be paid to claimants negatively affected by the programme. And indeed, as had been the underlying reasoning, farmers who received land through the programme were, in principle, compensated through other facilities: a home yard, housing and sanitary units, living allowance, seedlings, agricultural extension. But what about the claimants who had received a C code and were expected to give up their claim? They were excluded from project facilities, except from public goods like irrigation canals (assuming they owned other land to use the water for) and roads. By compensating the 'winners' with project goods for any loss of land and thus making land the main point of entry for access to additional facilities, PIADP land policy had only strengthened the ties of claimants to their land. Farmers understood this relationship between land and facilities very well:

Yohanis is a farmer originating from Tana Toraja. In the late sixties, he settled in Salu Pao and acquired land by paying compensation to a local farmer. When the land inventory was held, Yohanis made use of the option of having his claim, amounting to about 2.5 hectares, split up and registered on the names of himself, his two children living in Salu Pao, as well as a nephew. During the preparations for implementation of the programme in the TU in which the land is located, members of the BPN survey team met Yohanis, who asked what was going happen to his land. He expressed the hope that the selection team would recognize the claim, and that he would be spared the kind of disturbances associated with the programme in Sinangkala. The farmer was very honest about his intentions in having the claim split up into four pieces by the inventory team two years earlier: 'when the inventory was held I was told that land claims could be split up and registered on the name of children and other kin, and that by doing so we stood a better chance of keeping all our land. I had also heard about the facilities and thought "imagine if four claims are recognized. That would mean getting four hectares of land, four home yards, four houses and four living allowances." So I had the claim registered on four names.' Answering the question of one of the surveyors as to where all the land needed to give him four one-hectare plots and four home yards could be found, he answered: 'when I heard about the problems, I realized that such a thing is not possible at all without encroaching on the land of other farmers. Let me just keep my land and get some facilities from the project.'

Finally, and increasingly urgent as the programme approached the TUs along River Rongkong, serious attention was needed for the differences in quality of land and possible consequences of these for the programme. First, redistribution of land in areas characterized by great differences between marshy, badly drainable land and more elevated ridges on which cultivation of seasonal or even perennial crops was possible, was bound to become even more problematic and conflictive than under 'normal' conditions. Second, in some TUs along River Rongkong, such differences in elevation and suitability for irrigated agriculture, drainage and other conditions had led to all kinds of adaptations in terms of land use and cropping choices. Finally, serious drainage problems existed in the planned settlement areas in TU S15-II in Salu Jambu, and TUs R4 and especially R5 in Rongkong. Apart from the fact that the settlement areas were totally unsuitable for settlement, redistribution of land needed for its implementation would even be more problematic than in other TUs. Differences in quality of the land made redistribution particularly conflictive. Surprisingly, the project had never paid much attention to these dimensions of land redistribution.

On the basis of this analysis of the situation in PIADP there was little reason for optimism about further improvement in Sinangkala and Seriti, nor about continuation into Salu Jambu and Rongkong. Yet, there was the belief (or, perhaps, above all the hope) that improved practices of implementation of PIADP could positively influence the outcome of the programme. More

particularly, priority was given to a restoration of faith in, and legitimacy of the programme in the eyes of the affected farmers. Creating a setting that would allow for dialogue between farmers and project staff, for criticism, and compromise was an absolute priority. However, the scope for introducing even such changes beyond the margins set, routines developed, and interests generated by the programme were extremely limited.

4. Land redistribution in the Salu Jambu and Rongkong areas

Salu Jambu and Rongkong

The Salu Jambu area (B3) stretches out along River Rongkong. Since the sixties, many migrants from Tana Toraja settled here. While previous local claimants had often been more interested in timber and sago palms, the Toraja settlers introduced the cultivation of irrigated rice in the zones free from flooding. Until the seventies, they cultivated one crop a year. After the introduction of HYVs, two harvests a year became common. In the flood-prone areas a variety of seasonal (and, in the elevated parts, perennial) crops was cultivated. Before 1973 the river had been far away. Around that year it had changed its course towards Salu Jambu. Land use in TUs S12 and S15 only showed a rapid development after construction of the river protection dike. Exceptions were the low and marshy parts, drainage of which remained difficult. In the previously flooded parts, the exact size and location of land claims were not clear. The Rongkong area (B4), also situated in the flood-prone zone of River Rongkong before construction of the dike, showed similar characteristics and development. After construction of the dike, land had rapidly been developed here as well.

Soon after the start of PIADP it became clear that a large part of area B3 was intensively worked under clear conditions of land tenure. As a consequence, these areas had been shifted to the land consolidation programme. In the end, only the TUs S12ki (in part) and S15 (divided into S15-I and S15-II) were included in land redistribution.²⁴ New settlement in the framework of PIADP was planned in S15. The location of this settlement, locally known as Marengko (Tor. 'dry'), had been planned around a slightly elevated part of the TU, relatively free from flooding, where a small number of Toraja families had settled. Part of the newly planned location, however, could hardly be drained during the rainy season. The Rongkong area comprised five TUs (R1-R5) that were all included in the land redistribution and settlement programme.²⁵

²⁴ In the initial plans for PIADP, the third area of implementation had comprised a large number of tertiary units: St2ki, St2ka, S12ki, S13, S14ki, S14ka, S15-I and S15-II.

²⁵ Surprisingly, even in the Rongkong TUs the physical conditions had not been taken into account. Main objective of PIP had been to maximize the irrigated area, even into the former flood zone of the Rongkong TUs. However, irrigated agriculture was not very promising here. Contrary to the Salu Jambu TUs, where the new irrigation infrastructure was an extension of the existing system, for technical reasons a different approach had been taken in area B4. A weir had been constructed in the main drain of the project area, from which these TUs had to be irrigated. Due to shortcomings of the irrigation infrastructure itself (the Rongkong secondary canal, fed from the drain; the quality of TU construction) and the physical characteristics of the area (the many elevations and depressions in the landscape), irrigated agriculture did not really take on here. In addition, farmers who claimed more elevated parts of land were increasingly attracted by alternative land use opportunities offered by cocoa and citrus cultivation. Other farmers continued to cultivate seasonal crops like soybeans, peppers and maize. In the lower Rongkong units (R4 and R5) the problem was not so much how to get water but how to get rid of it. In these parts, the combination of excessive drain water and backflow of water from behind the dike even seem to have worsened the livelihood prospects of the population.

Land reform and settlement in Salu Jambu: SI5-II

TU SI5(-II) was crucial for implementation of the programme in Salu Jambu. While in SI2ki and SI5-I only redistribution of irrigated agricultural land had been planned, the settlement programme for area B3 was planned in SI5-II. Hence, rather radical interventions in land tenure and reallocation of land were required here. The inventory of land claims in this TU had identified 106 land claims, including six small consolidated home yards.²⁶ Other major characteristics of the land claims are illustrative of the development of land claims in area B3 as a whole. First, the shift from lowland Luwu claimants towards migrant Tana Toraja claimants is well reflected in the area of origin of claimants identified in the inventory. An overwhelming number of claimants of land (seventy-nine) in this TU had a Tana Toraja (and in a few cases highland Luwu) background. Twenty claimants had a lowland Luwu, and one a Javanese background. Second, the majority of claimants identified in the inventory traced back their claims to the seventies and eighties, while a smaller number of claims originated in the sixties.²⁷ Whether traced back to the sixties, seventies or eighties, the large majority of claims had been transferred at least once and often two or even three times. Fifteen claims in the inventory were still based on the land clearing activity of the identified claimant (all of lowland Luwu origin). Another forty-one claims had been acquired by compensation payment or bought (*ganti rugi / beli*) by migrant settlers, in thirty-five out of forty-one cases from local inhabitants who had done the first clearing, and in the remaining cases from Tana Toraja settlers who had done so earlier. The remaining forty-four claims were transferred to kin as a gift or inheritance. Thirty-nine cases concerned gifts to a child, two were gifts to a spouse, and three gifts to a brother. The gifts to children more or less reflect the bilateral inheritance practices prevailing in the Luwu and Tana Toraja region: twenty-three cases concern gifts to male children, while sixteen cases were gifts to female children.²⁸ Twenty-four out of forty-four cases of gifts (all to children) went back to around 1987, the year of the inventory. Under pressure of the inventory and the rules for land allocation of PIADP, claimants had probably done formally and immediately what they would otherwise have done in a more informal manner and spread over a much longer period.²⁹

As discussed above, the land inventory had given claimants the opportunity to split up their land claims and have them registered as separate claims before implementation of the programme. As a consequence, transfers like the gifts discussed above were included in the inventory (but not necessarily recognized by the selection team; see below). Therefore, if identified land claims are clustered on the basis of their (common) origin, another picture of land tenure before project intervention emerges, characterized by larger claims and a smaller number of claimants. However, splitting up the land claims in the inventory had the advantage of uncovering local practices of land transfer through inheritance rather than assuming large absentee landownership or speculative intentions. Analysis of the claims made clear that, especially in the sections hit by severe flooding earlier, sometimes there was uncertainty about the exact size and boundaries of claims, but broad

²⁶ The remaining claims, averaging slightly less than one hectare (0.94 ha.) can be distributed over size categories as follows, with the percentages between brackets: 0.01-0.50: 16 (16); 0.51-1.00: 49 (49); 1.01-1.50: 25 (25); 1.51-2.00: 4 (4); 2.01-2.50: 5 (5); 2.51-3.00: 1(1).

²⁷ Twenty claims (20%) originated in the sixties, forty claims (40%) in the seventies, 31 claims (31%) in the eighties; of nine claims the period of origin is not known.

²⁸ The low quality of land inventories and the male 'household head' bias of the selection committee rather than local inheritance practices had led to the disappearance of claims of women by registering them on the name of the husband, or to their rejection in the selection team on the assumption that these claims were actually claims of the husbands of female claimants, while the male claimant had already received land from the project.

²⁹ Generally, parents gradually given their children a greater responsibility for a plot of land.

agreement on the existence of the claims themselves. Speculative intentions among claimants were largely absent, though it is likely that some speculation has occurred around the construction site of the protection dike, where claimants were compensated for land on which the dike was built.³⁰

Development of large landownership was not a major characteristic of land tenure in this TU (nor was it in other TUs). From the sixties onwards, land had been taken over from local inhabitants by payment of compensation, traded, split up and transferred through inheritance. On the whole, however, it had remained of little value before construction of the dike. In the whole TU, one case of development of large landownership stands out. The case shows some aspects of the unclear character of land claims in a setting of land tenure influenced by unregistered land transactions under the specific physical conditions of flooding. It is also illustrative of the reserves on the part of project officials (especially BPN) against full application of project regulations to the land claims concerned, and of the *de facto* subordination of PIADP project law to national land law:

F. Mangentang is a (pensioned) teacher originating from, and living in, southern Tana Toraja. Through kinship ties with earlier settlers he became aware of the opportunities for acquiring land at relatively low prices. He decided to invest his surplus financial resources in land in Salu Jambu. From 1965 onwards, when the inflow of Toraja farmers into the area began, Mangentang regularly bought land from local Luwu claimants. He was helped by the (then) hamlet head in finding people willing to sell land. In the course of time, Mangentang built up a large land claim. The land claimed by the Mangentang is located in two TUs, of which SI5-II belongs to the redistribution area, while neighbouring St2ka is located in the consolidation area. All land claimed by Mangentang was acquired through purchases from local Luwu inhabitants. Though the existence of the land claims is recognized and can be traced to transactions generally known among village leaders and elders, the claimant seems to have profited considerably from the unclear boundaries of land in the period before dike construction. Claims surrounded by fallow land were expanded by incorporating small stretches of surrounding land. The total area claimed by Mangentang (but registered on the names of a large number of children) is twelve hectares in the redistribution area and eleven in the consolidation area. However, according to one village elder, the total area of land claimable on the basis of actual land transactions in the past is much smaller. Moreover, during construction of the project infrastructure he received compensation from the project for almost two hectares of land lost to enlargement of the drain and construction of a farm road. He had paid IPEDA tax for nineteen hectares of land. None of his claims were contested by other farmers. The land is, for the greater part, worked by kin from Tana Toraja. When the land inventory was made, the land claims were registered on the names of Mangentang's ten children, most of whom live in far-away places throughout Indonesia where they have relatively high-status jobs like doctor, scientist, high-level government official, and lawyer. He did so not only in anticipation of the PIADP land reform programme but also in order to be safe from a possible application of the BAL rules specifying the maximum landownership (chapter 4). Two of his children live in the area, and were closely monitoring the way the programme developed. When it had started in area B3, the children collectively sent a letter of protest against the possible redistribution of their land. In the letter they pointed out that the total area claimed, even before it had been split up on the names of the children, did not exceed the maximum area of land as specified for Luwu in BAL. Further, they stressed that they assumed that BAL and not the PIADP regulations will be applicable to their land claims. Finally, they warned that they would not agree to redistribution of their land by application of project rules. In a discussion about the land claims built up by this claimant and the possibility of intervention in land tenure on the basis of project regulations, BPN functionaries openly stated that they were hesitant about such intervention in land tenure. They feared that this would generate a new wave of unsolvable land conflicts and titling problems, for which BPN will be responsible. They also feared legal procedures against the project as a whole. Redistribution on the basis of project regulations, then, was not really an option and did never happen.

³⁰ In the other TUs (SI2ki and SI5-I) a small number of candidates for selection was found who had no land claim. They were no members of district-level agencies and administrative apparatus (these had massively seized the opportunity of Sinangkala) but members of the subdistrict administration or their relatives.

From the beginning, implementation of land redistribution and settlement in S15-II had faced many problems. First, if land redistribution was accepted by the population at all (and prospects were not bright), there was hardly any redistribution effect to be expected. Only a radical redistribution of land, confiscating part of the larger land claims that had been split up among relatives, would create a redistribution effect. However, this option was neither feasible nor socially justifiable. Under these conditions, it would not even be possible to guarantee claimants of land in the settlement area a plot of land in compensation of the land needed for the settlement programme. The settlement plan would require an area of at least ten to twelve hectares of (claimed) land. Second, the intensive use of more elevated parts and the presence of several marshy areas in the TU made redistribution of claims virtually impossible. The enormous variations in quality of land - the elevated parts suitable for cultivation of seasonal crops like rice or maize, or even perennials like cocoa; the depressed areas not drainable and unsuitable for agriculture - had never received serious attention from the project but were a serious problem. Redistribution would certainly entail resettlement of farmers on land of lower quality than that of their initial claim. Finally, serious drainage problems had become manifest in part of the planned settlement area. Awaiting a solution for the drainage problems in S15-II, implementation shifted to the other two TUs of Salu Jambu (S12ki and S15-I; see map 3). Postponement was welcome to the BPN surveyors, lower-rank fieldworkers with little influence in the land reform process. In this period, officials of other agencies and administrators were already losing interest in the programme. Those who had personal interests in the project, had already seized their opportunity in Sinangkala. Those who primarily minded their careers realized that the programme was a potential threat. However, the selection team still included officials who were in favour of an enforced implementation followed by the routine distribution of land titles.

To avoid conflicts, leaders of the villages and hamlets to which the farmer population of these units belonged had regularly pleaded for consolidation and formalization of existing claims. Like in S15-II (except for the case discussed above), tenure was relatively egalitarian. The farmers, a mixture of people from Luwu and Tana Toraja origin, were not enthusiastic either. The conflicts in Sinangkala were widely known. The farmers had learned one important lesson from Sinangkala here: fake cooperation with implementation, don't change claim boundaries, but avoid open protests or resistance against PIADP. Thus, farmers were hardly interested in all talk by officials at the selection and allocation meetings about greater efficiency, higher production, and straight and orderly ownership boundaries. Claimants of land closely followed the latest developments in the programme, but kept at a safe distance from the officials and avoided confrontation with the selection team. During staking out of the plots, farmers were present in the field and did not openly object to the redistribution of their claims. Outwardly, they seemed to have resigned themselves to the changes created by the project. But in the end, nothing changed. Farmers retained their old claim boundaries without crying out that they did. In Salu Jambu, then, PIADP was again creating two quite distinct realities: that of formally recognized ownership in the land reform administration on the one hand, and of *de facto* control in the field on the other.

Investigations into the drainage problem in S15-II and technical measures to solve it took more than one year. In the meantime, pressure on BPN staff responsible for land allocation was increasing. Especially BANGDES, responsible for the new settlement areas, became increasingly nervous about delays. Most agencies blamed all delays on BPN (which had antagonized the other agencies by gradually taking a stricter attitude towards selection, allocation and titling, and taking on a more prominent role in the selection team). For BPN, implementing the programme in S15-II did not seem a sensible thing to do. However, it could not decide on its own *not* to implement it. Continuation of the settlement plan, especially the provision of housing facilities and construction of sanitary units, was in the interest of too many actors. Cancellation on the basis of a critical

attitude to the land reform programme was unacceptable to Indonesian officials and the Dutch consultancy firms alike. First of all, the expenses for the settlement plan (housing, sanitation) were financed from the grant component of Dutch development aid to PIADP. Discontinuation would not be conducive to bilateral relationships. Second, for the Dutch engineering consultancy firm responsible for implementation, such a decision would amount to admitting failure to reach the targets. PIADP had always been propagated as a means of reaching the poorest and giving land to the landless, fitting in with Dutch development policy priorities. In the same vein, the settlement programme was one of the components of PIADP that contributed to its 'success' image and could be sold to the outside world as 'participatory' and 'benefiting the poor'. Third, for administrators, officials and other power holders it was a source of status: making a well-known programme like PIADP a 'success' could pay off in terms of career prospects. It was also a source of profit, through funding, tendering procedures, and contacts with contractors.

There was a dilemma here: giving up the land reform component and the land allocation dimension of the settlement programme only while continuing the distribution of material goods would further degrade the programme into an arbitrary dole-out of project goods. On the other hand, its continuation would definitely lead to new conflicts and contribute nothing to the objective of increasing security of tenure for farmers.³¹ We (that is: BPN and myself as adviser for the programme) decided to try and steer clear from all these vested interests, by postponing a decision on SI5-II and gradually working towards the decision not to implement land reform and settlement, on the basis of the argument that the physical conditions in this TU would not allow for such a programme.³² In the meantime, attention of the selection team focused on the Rongkong area.

Land redistribution in the Rongkong area

In 1989, the programme in the Rongkong area had started. When work in R1 began, the selection team still consisted of the same people who had been involved in the other areas. As more and more officials of the selection team (from BAPPEDA and other agencies, army and police) were losing interest, BPN officials acquired greater room for manoeuvre to influence the programme. As the team moved to R2 and R3, it consisted of a core of BPN surveyors, complemented mainly by hamlet and village administrators, village elders, a subdistrict official, and myself. In the absence of BAPPEDA officials, army and police it could experiment more freely with new approaches to land reform: more fieldwork, building up a more dialogical relationship with affected farmers, solving rather than suppressing conflicts, and adapting the programme to existing conditions. Initially, there was some hope that these changes would make negotiated changes of claim boundaries possible. The BPN fieldworkers had gradually managed to create a high degree of openness, flexibility and tolerance for diverging opinions or protests, as well as a good working relationship with both

³¹ After discussions with BPN on the issue, I once suggested the possibility of a radical reconsideration and reorientation of the programme to the team leader and project representative for the Dutch engineering consultant. The answer was clear: this was out of the question. Such a move would have negatively affected the 'integrated' character of the programme.

³² In the course of 1991, when the contracts for wood delivery for the houses and for construction of sanitary units for TU SI5-II were in the making, a small field team of a BPN fieldworker, a BANGDES fieldworker and a local supervisor for the consultant prepared a list of farmers from the Salu Jambu area who were entitled to housing and sanitary facilities and owned a home yard in one of the existing villages. Though existing houses were tolerated, government regulations did not allow for allocation of such facilities outside the settlement parts of the TUs. Thus, a homestead pattern was not allowed for, though many Toraja settlers seemed to have a preference for such settlement.

claimants and local administrators. During long and regular meetings in the field or in the villages, the team discussed complaints, negotiated boundaries and considered alternative options. In the end, farmer support for intervention in land tenure remained very low here as well. In TU R4, the selection team did its utmost to negotiate a broadly supported outcome for the land reform and settlement programme. Negotiations with the farmer population of this TU and their local leaders took more than a year of regular plenary meetings, field gatherings, measurements and discussions. However, this did not yield broad agreement about the outcome and a really sustainable result.

Notwithstanding adaptations like minimizing the redistribution effect, attempts to reduce the damage done by the project, and the changed style of working of selection team and fieldworkers, intervention in land tenure was unavoidable in all TUs mentioned. All parties directly involved in or affected by the programme - claimants of land, local administrators, project officials, myself - were aware of the fact that the strong interests in favour of continuation of the settlement programme made further implementation of land reform unavoidable and redistribution of claims inescapable. Within the constraints set by the need for implementing the land reform programme, BPN fieldworkers, village and hamlet administrators, and claimants of land had found a more respectful way of dealing with one another than had prevailed in the other areas. In the months after implementation of the programme in these TUs, it became clear that there were differences with the earlier areas. Emerging conflicts were more often negotiated with the village administration and BPN fieldworkers, who maintained regular contact with the local administration. Tensions did not rise as high as had been the case in the other areas, primarily Sinangkala. However, the number of farmers working land in accordance with the new ownership boundaries was to remain low in all Rongkong TUs, and showed the same decreasing tendency as in the other areas.

When selection in TU R5 started, we decided to actively block further implementation of the programme in view of the physical conditions in this TU and the possible social consequences of implementation. In this TU, physical conditions (drainage problems and related differences in land quality) were used as an argument for cancelling the whole programme. A first official request to this effect in the steering committee was rejected. Later, a real 'bottom-up' process led to cancellation of land reform and settlement: the village administration sent a letter of request to the bupati, who accepted the request. Housing and sanitation facilities were distributed to those farmers who did already own a home yard. A dole-out of material project facilities was the highest result achievable in PIADP, it seemed. Or was there still hope for improvement?

5. Taking the lead: the special team for conflict solution

Especially in Rongkong, the focus of the land reform programme had shifted from redistribution of land by a rather haphazard application of PIADP project law to minimizing the harmful side effects of the implementation of the settlement plan and its consequences for tenure security. The greater freedom of operation of the selection team had made a new approach feasible and worthwhile trying. Though there were already serious doubts about the long-term sustainability of the results, in TUs R2, R3 and R4 there was some progress in making the programme more flexible and adaptive to local conditions. Confrontations between farmers and the army or police did not occur here, and tensions did not rise as high as in Sinangkala. The situation held some promise that emerging problems and land conflicts could be solved by further negotiations between claimants and the field team. In sharp contrast, Sinangkala and Seriti continued to haunt project officials of all agencies. As the final evaluation and probable termination of PIADP came near, pressure on BPN to engage in routine titling in these areas was further stepped up. At the same time, newspaper articles regularly

appeared about the PIADP land issue, in which the BAPPEDA project staff was given ample opportunity to accuse BPN and the field team of obstructing land titling. Such pressures made the BPN project leader even more resolved to seriously tackle the conflicts rather than using quantitative land titling targets as window-dressing. We agreed that there were no options for such an approach within the existing project structure. The tense situation required the formation of a special team with a strong input from BPN and direct formal support from the highest-level district authority (the bupati) rather than from BAPPEDA, the staff of which was too deeply involved in PIADP. In the course of 1990, preparations for formation of the team started; a little later it was formalized by Decree of the Bupati.³³ As related above, the special team started its work in TUs P15 and P16, and prepared for activities in the highly conflictive TUs D1 and D2 in Sinangkala.³⁴

An unexpected development: another project extension

In the course of 1990, an Indonesian-Dutch team evaluated PIADP. Notwithstanding the problems in all areas of implementation, this was meant to be a real *final* evaluation of PIADP. For several reasons, the main institutional actors were not really interested in continuation. On the part of the Dutch, there was the feeling that the project had been going on for too long. The Dutch Agency for Development Cooperation was dissatisfied with the performance of the engineering consultancy firm that implemented PIADP, above all with its failure to meet targets agreed upon in project planning. Termination also fitted in with new Dutch policy priorities focusing on other parts of Indonesia. The engineering consultant, aware of this attitude to PIADP, gave priority to a smooth termination. Maintaining good relationships with both governments and saving the image of PIADP as a 'model' for integrated rural development projects in Indonesia were more important than another extension. In view of the problematic situation, it had little to gain from the expectations created by another project extension, and even less from strict monitoring of progress. Therefore, it had put its bets on stressing the image of relative success, with an additional documentation of 'lessons learned'.³⁵ Thus, the consultancy firm assumed a rather moderate and low profile attitude, to avoid being found too 'demanding'. Field conditions and local staff views of the problems, tasks to be performed or new priorities were secondary to these larger strategic objectives. To press this view upon the evaluation team, the engineering consultant produced a mildly positive 'status report' for the mission (PIADP, 1990a; see Quarles van Ufford and Roth, 2003).

Those confronted with the field reality of the land reform programme and its consequences for the 'beneficiaries' in terms of tenure insecurity were fiercely opposed to an outcome that would present PIADP as a success story, giving consultants the opportunity to back out, leaving behind farmers and local administration with the conflicts. My BPN counterparts and myself felt that PIADP had created problems rather than solving them, and was continuing to do so under the pressure of quantitative targets and construction contracts for the remaining parts of the settlement programme. As a result of interventions in land tenure, a Dutch priority, land conflicts had rapidly increased and

³³ Decision of the Bupati No.15/I/1991, 26-1-1991.

³⁴ The first report of the special team to the Bupati gives data on the land reform situation in P15, P16 and D2. When the team started its work in TU P16, 47% of the farmers worked land more or less in accordance with the SK while 53% worked land that did not correspond to the plot specified in the SK. Some 51% of the farmers who had received land were involved in land conflicts. In P15, there were conflicts about 22 out of the 28 redistribution plots (79%). In the Sinangkala TUs D1 and D2 the percentage of plots about which conflicts were going on were 77% and 54% in 1990.

³⁵ The writing process was rather strictly controlled by a 'moderator' from the Jakarta branch office, prompting the consultants team which lessons should be learned and which hushed up.

security of tenure decreased. Land titles threatened to become the paper symbols of bureaucratic routines and targets that had been met in an administrative sense but not in reality. More conflict and loss of capital were at hand in the settlement areas. More time was needed at least to make a last serious attempt to solve them and reach an acceptable degree of tenure security for affected people in the agricultural and settlement areas.

On the part of the Indonesian government, the picture was not clear and uniform either. The Indonesian agencies were as target-oriented as the Dutch. Like the Dutch development agency, the Indonesian agencies became increasingly nervous as money was spent but no results could be reported. Especially before the end of the Indonesian financial year, this resulted in an increasingly strong downward pressure through the government agency hierarchies upon district-level agencies to assume a less quality-oriented attitude. BPN was told that it had to hand out more land titles, and BANGDES was warned that it should dole out housing facilities, sanitation units and living allowances without bothering about any criteria. However, at the responsible ministry (BANGDA) there was quite some enthusiasm for continuation of PIADP, if only because this was one of the last developmental activities with foreign financial support in Luwu. Though there was broad agreement that continuation should take another form, and support to PIADP should become embedded in a more comprehensive regional development plan, the option of project continuation was welcomed. Agencies at the provincial and district levels had lost interest in PIADP. This was another stimulus for a more target-oriented approach to PIADP. But at the same time, there remained a core of lower-rank but highly committed field staff, especially in BPN and PERTANIAN. Notwithstanding increasing pressure of their bosses, they remained faithful to their tasks in, and views of, PIADP.

For some district-level officials, continuation was a downright threat. They had been too deeply involved personally in manipulation of land inventories and the selection process. Project extension with a more critical attention to the problems of, and conflicts generated by, the land reform and settlement programme could damage their careers. Especially if extension was to provide the special team with time and support to critically investigate into earlier decision-making in land reform. But even for those who faithfully but routinely did their job, the problems of PIADP had become a nuisance rather than a challenge. If they proved unable to 'deliver', PIADP would probably not be good for their careers. The district-level agencies, then, generally prepared for the mission by speeding up delivery of project facilities and concealing the problems in land reform and settlement behind an administration in which the targets were met. For some agencies, PIADP had simply become too heavy a workload, and a financially not very attractive one at that. Earlier that year, private enterprise opportunities had presented themselves that promised to be far more lucrative. When the Chiquita company entered Luwu to explore possibilities for large investments in banana cultivation for the East Asian market, most district-level officials of agencies involved in PIADP and the Dutch engineering consultancy firm literally 'went bananas': Chiquita is a rich company and did not hesitate to make that clear to the officials of key agencies like BAPPEDA and BPN. Not very surprisingly, Chiquita became their new priority.³⁶ At the local levels of subdistrict, village and hamlet, administrators were not in favour of continuation, because they were personally involved or simply fed up with it. On the other hand, some members of the local administration expressed their fear that unsolved land conflicts might get out of hand and lead to violence later.³⁷

³⁶ When confronted with fierce protests by local farmers, plans for the establishment of a large Chiquita estate (15,000-20,000 hectares) in North Luwu were never implemented.

³⁷ During village elections, one village head spoke out in favour of routine distribution of titles while at the same time propagating a village policy of farmers returning to their original land claim if he was given a second term. This seems to be a contradiction, but the two go together very well. Once the titles have been distributed, officials disappear from the village, after which people can make their own arrangements again.

Contrary to the wishes and expectations of most actors, and in the face of attempts by the Dutch development agency, embassy personnel, and the engineering consultancy firm to make clear to the mission what the outcome of its evaluation should be, the evaluation team concluded that, in view of the existing problems, another extension would be necessary.³⁸ It recommended, among others, a strong focus on conflict solution in land reform and settlement. The determination on the part of BPN to solve land conflicts and the establishment of the special team for conflict solution had given rise to some optimism about the possibility of solving land conflicts and creating tenure security for the farmers affected by PIADP. BPN officials from Jakarta promised more material support, regular monitoring of the situation and a less target-oriented approach to land reform and titling.

Open confrontation: the demise of the special team

In late 1990 the special team had started its work in TU P16 (see above) by a critical check of farmer selection and land allocation. The team concluded that it could only be reasonably expected to do its difficult work if the selection results were 'cleaned up' in all areas of implementation, and land allocated to persons who demonstrably had no land rights was given to persons who had stronger rights but had received no land. From the moment the team started its work, members of the local administration and a number of district and subdistrict officials had been following its activities with growing suspicion. If the team was going to be successful in P16, it could also be expected to extend its work back into Sinangkala. It was, in fact, already preparing to do so. Since the team had started, it had come under fire of especially BAPPEDA. In meetings, the team was continuously attacked by district officials and members of the local administration, and blamed for delays in implementation. Officials tried in vain to persuade the Bupati to bring the team under control of a BAPPEDA official. Changes of personnel in BPN formed another source of uncertainty for the team. First, retirement of the BPN project leader and chairman of the special team was coming near. Second, in 1990 the head of BPN Luwu, who had always (passively) supported the activities of the BPN project leader, had been replaced. To the new head, PIADP was, to say the least, not a matter of great priority. New priorities were massive routine titling to fulfil quantitative targets in Luwu, and field surveys related to the plans for establishing Chiquita banana estates in Luwu. For PIADP, he actively supported the policy advocated by most project officials and BAPPEDA: routine titling, chasing quantitative targets for construction, and hiding existing problems behind the image of success still associated with PIADP at higher administrative levels.³⁹

Under the new BPN head, the surveyors of the special team did not always turn up in the field, making it impossible for the team to do its work as planned. Though this was not interpreted initially as a conscious attempt to hamper the functioning of the team, it soon turned out to be exactly that. The surveyors had been given a new assignment that strictly tied them to the office: preparing at least one thousand land title documents for PIADP, to be officially handed out on the occasion of the 31st birthday of BAL in September of that year. They were forbidden to do any other work or go to the field. Motivated surveyors were punished for their contribution to the team; association with it became a threat to their careers. There was evidence that persons related to the local administration and district officials were actively sabotaging the work of the team. Invitations

³⁸ During a briefing at the embassy of the Netherlands in Jakarta, the team was even lectured by a member of the embassy about the intended outcome of the evaluation (see Quarles van Ufford and Roth, 2003).

³⁹ Some BPN officials in Jakarta stressed the fact that BPN had its own responsibility here and should continue to operate independently. They expressed their doubts on the practice of chasing titling targets, stressing that titling is only useful if it does not generate conflicts. The central BPN office had advised the head of the Luwu office first to check land targeted for certification, but in vain.

to farmers or informal leaders to attend team meetings disappeared. In some cases, farmers were forbidden to be present at meetings and give information, or pressured not to accept decisions in land conflicts taken by the team. Members of the team had received all kinds of subtle threats.

In a special steering committee meeting, headed by the bupati and attended by BPN officials from Jakarta and the provincial office, the position of the special team was asserted again. The decisions taken in this meeting were a threat to those in favour of covering up the conflicts in the land reform programme. The higher-level BPN officials stressed again that land titles should only be handed out after the team confirmed the absence of conflicting claims on the land concerned. The bupati stressed again that the team should report not only to the PIADP steering committee but also to him personally; that field workers of BPN should be allowed to continue doing their work for the special team; that officials or administrators who had illegally acquired land should be expropriated. Finally, it was stressed that, contrary to rumours spread by officials who tried to incite PIADP staff to quickly 'deliver the goods', PIADP would be extended by at least one more year.

As the first results of the work of the team became visible, tensions between the various parties in PIADP mounted. Adversaries of the team were waiting for an opportunity to avenge themselves for the humiliating meeting described above, in which the team had received high-level support. During a meeting of the steering committee, chaired by BAPPEDA and attended by a number of high-level district officials, a report was discussed in which the special team gave information about the weak rights in P16 of a number of persons related to the local administrative apparatus and pleaded for allocation of the land to farmers who felt harmed by the selection process.⁴⁰ From the beginning of the meeting, the atmosphere was very tense. Many adversaries of the team were present as members of the steering committee or as local administrators. Members of the two parties hardly attempted to hide their rage. In his introductory speech, showing open contempt for the team, the BAPPEDA chairman expressed the hope that the team would in the future use its competence to support the project management rather than 'blocking progress of PIADP'. After that, a number of members of the steering committee, the local and district administration, and the team were given the opportunity to react to the advice of the team to replace people whose selection was not supported by a land claim with farmers who did not receive land. The most prominent cases discussed were those of Rosmawati and Nuri (see above):

A village head: 'I do not see the point of what the team is proposing to do. The results of selection and allocation have already been laid down in a Decree of the Bupati. Therefore, I think that under these circumstances it is better just to stick to the SK, and not to introduce changes again.'

A subdistrict head: 'It should be acknowledged that the land claims of the persons mentioned are not very strong indeed. However, it is better just to let these people have the land on the basis of the following considerations: first, they are already working the land and have harvested it. Second, they are formally acknowledged as beneficiaries of PIADP in the SK. In order to keep up government authority and avoid the emergence of more complicated problems, it would be better to affirm and maintain the earlier decision.'

Another subdistrict head: 'In principle, I am against new changes in farmer selection and allocation of land. It might easily give problems. We should stick to the SK and rapidly finalize the distribution of land titles.'

The subdistrict military leader: 'The people mentioned all have a strong land claim and are not land grabbers, as suggested by the team. The location of their land was claimed by nobody, and it had the status of free state land. Therefore I agree with other speakers that no further changes should be brought about in the status of this land, and that those who work it now should remain the owners recognized by the project.'

A BPN surveyor, who had been forbidden by his boss to work for the special team and grown irritated by the continuous sabotaging of his work, he was determined to become more specific about the kind of problems experienced: 'People who have no rights to land should be thrown out and replaced by people who worked

⁴⁰ Present were, among others, the chairmen of the Luwu People's Representative Council and of the district court, and the heads of the district police, and military command.

land before the project came but did not receive land in return. For the location occupied by Nuri we have found a letter of declaration drawn up by Amiruddin, stating that the land is registered on the name of Nuri but that the land is actually owned by Amiruddin. As to other people mentioned in the report, they never turn up if they are called by BPN. We need to know whose land we are surveying and titling, because as surveyors we are responsible for the process. We do know who are behind cases like these always the same people are behind such cases, cover them up and have personal interests in them. Some of them are present here in this meeting, for instance *pak koramil* (the local military commander; D.R.).⁷

Now the meeting went completely out of hand. Shouting and quarrelling between BPN officials and the military commander predominated. The latter replicated emotionally, shouting: 'I cannot guarantee your safety in the field any longer'. After the meeting, the minutes of which neatly state that it 'has yielded two concepts for solving the problems in P16', outside the meeting room a fight broke out between the commander and the BPN project leader and chairman of the team.

After this meeting, obstruction of the team intensified. The new head of BPN started organizing mass land titling in Sinangkala, Seriti, and the Rongkong TUs. Though actual distribution of the Sinangkala titles was prevented several times by the bupati, it was clear that the team, having lost its basis of support in BPN itself, was losing ground. The head of BPN had quickly formalized retirement of the BPN project leader. He had also drawn up new task descriptions for his staff. Surveyors of the team were forbidden to enter PIADP. One of them - the one who had been so outspoken in giving his opinion about certain private interests in PIADP - was rapidly transferred to the island of Selayar, one of the most out-of-the-way places of the province. In a new steering committee meeting, chaired by BAPPEDA, rapid fulfilment of the targets of PIADP was stressed as a priority. Those present in the meeting decided that distribution of titles should continue, and no further changes should be made in the SKs for Sinangkala and Seriti. The BAPPEDA chairman silenced those who openly expressed their doubts about this 'solution'.

Adversaries of the special team had made a clever use of the preoccupation with quantitative targets at all levels of administration, of the fear of damage being done to the image of PIADP as a success (and implementing officials as successful project administrators), as well as of the growing government fear of dissension and conflict among agencies and administrators only half a year before the national elections that were to secure another period of Suharto rule. During a meeting with BANGDA officials in Jakarta, the consultants were told no longer to hamper quantitative targets in land reform, settlement and construction.⁴¹ The head of the district planning office presented a beautiful report on progress in the land reform programme under the new head of BPN. At this final stage, the PIADP affair was again played out in the South Sulawesi press.⁴²

By the end of 1991 it has become clear that the special team had been completely taken over by the same forces that had controlled land reform in Sinangkala and Seriti. Forces that had, for various reasons, an interest in reporting success while maintaining secrecy about the actual outcome. The special team (that had lost its chairman due to retirement) was replaced by another team that, again, perfectly reflected the vested interests in PIADP, that is: the village heads, subdistrict heads, police and military and a selected number of BPN personnel who could be counted on for a routine finalization of PIADP. A supervisory team chaired by the BAPPEDA project coordinator guaranteed that no awkward questions were asked about the programme.

⁴¹ In construction work, the same issue played a role because of financial interests involved in the irrigation works, improvement of the Rongkong protection dike and roads, and housing and sanitation contracts.

⁴² Usually, contractors or project officials paid journalists for writing such articles. E.g. 'Terjadi Kemelut di Proyek Pompengan Kabupaten Luwu', *Pedoman Rakyat* No. 314, 21 January 1992, in which the BPN leader of the special team (who had just retired) was severely criticized for slavishly following the consultants, and the consultants were given a lashing for hampering the Indonesian process of development.

6. The end: back to project routines

After dissolution of the special team, PIADP land policy openly shifted towards the rapid fulfilment of quantitative targets. BPN engaged in routine titling throughout PIADP, both inside and outside the redistribution areas. As in Sinangkala, the land titles massively handed out to farmers did not correspond with actual tenure patterns in the field, which tended to follow the pre-project claim boundaries. The SKs for land redistribution, the allocation maps and the title documents based on them were a paper reality, representing formal rights to land issued by the state, but *not* the actually existing patterns of land tenure. Once those in favour of creating this paper reality had won, a major objective of land reform had definitively been given up: creating stable and secure land tenure supported by land title documents and an up-to-date land administration. Land titling had degraded into a senseless bureaucratic routine: to cover up existing problems and conflicts, to please bosses, to save careers and images, and to maintain good relationships in the world of development. PIADP was reduced to the dumping of the last infrastructure and facilities of the settlement programme, with an open disregard for quality, rights of 'beneficiaries' or sustainability of project results.

The extension of PIADP, with a primary focus on land reform, had run against too many interests of various actors in PIADP. Stressing its relative autonomy from the regional administration, BPN had more or less forced the bupati to recall his decision about the special team and replace it with a new team. Even after that, he continued to openly criticize the target-oriented approach taken by BPN which had, of course, not solved the problems of the other agencies and therefore generated new tensions.⁴³ However, half a year before the national elections, the bupati was expected to unify all powers in his area for the larger objective of helping Suharto's GOLKAR party to another victory rather than being involved in conflicts.

During a private meeting with a high BPN official in Jakarta, the latter apologized for the situation that had arisen in PIADP. However, he also made clear that, from the beginning, the Indonesians and the Dutch had been talking about quite different conceptions of land reform, shaped by different ideas of a just land reform process. According to him, the consultants should have taken a more tolerant attitude towards the 'Indonesian style' of implementing land reform. After all, the number of 'petani berdasi' was relatively small: 'though they did not claim land before project implementation and therefore have weak initial rights, they are also Indonesian citizens and have to prepare materially for the period after their retirement. Finally, as the land was free state land, BAL in principle does not exclude anybody from owning it.' These words by the high official put into perspective the high ambitions of the PIADP land policy more or less imposed by the Dutch. His remarks also made clear that neither the damage done to the legitimacy of PIADP in the eyes of farmers who had lost their land, nor their future livelihood were a priority issue among higher-level officials. The same discussion showed how important the issue of non-recognition of existing claims on state land had been. The direct association of state land with 'free' state land had, in the end, led to the neglect of existing claims, sometimes to the advantage of those without strong claims but high ambitions to obtain land and project facilities, protected by their power positions and relations.

On the Dutch side, the picture was not very encouraging either. The Dutch actors were mainly preoccupied with concerns about images, reputations, good relations and future opportunities. Early 1992 I visited the Netherlands for consultations with DGIS about the land reform crisis in PIADP. DGIS was, above all, afraid of a conflict about the project with Indonesia, and not so much about

⁴³ The focus on quantitative targets that could be quickly met led BPN to shift its focus from area B to area A, where it could quickly title large numbers of existing home yards. BANGDES, haunted by the targets of the housing and sanitation programmes, waited in vain for BPN to parcel out the last home yards in area B.

what had actually happened and what the contribution of Dutch development policy had been. Therefore, discontinuing support to the project was out of the question for the Dutch. I was told to 'sit out', to forget about the land reform programme except from some final monitoring, and to just make sure that the programme would not cause trouble with the Indonesian authorities. A few months later, by the end of March 1992, quite a different kind of conflict broke out between the governments of Indonesia and the Netherlands: about Dutch reactions to Indonesian human rights violations in eastern Timor. In reaction to the Dutch decision to make development aid conditional upon Indonesia's human rights record, the government of Indonesia rejected development assistance from the Netherlands and ordered all Dutch-funded projects to be handed over to the administration or other donors. One month later, PIADP was transferred to the regional authorities.⁴⁴ One of the 'social' consultants who had stood at the cradle of the land reform programme cynically called this sudden and unexpected ending a 'blessing in disguise'. The engineering consultancy firm seemed to agree this time. For the consultants, the PIADP experience had lost its relevance. Like development cooperation with Indonesia, PIADP was no longer an issue. Those who stayed behind were the former 'beneficiaries'. How were they going to cope with the legacy of the land reform and settlement programme?

⁴⁴ All allocated funds were transferred to the Indonesian authorities. Land reform activities had already stopped before termination of the programme.

‘Back to normal’: administrative order and chronic land conflict

1. ‘Back to normal’

Some weeks after project termination I returned to Palopo once more before travelling to the Netherlands. I met many people who had been involved in the project and took my leave of them. I also ended up at the BAPPEDA office, where I was received by the former PIADP coordinator, with whom relations had been very strained. But that belonged to the past now. We had coffee and chatted in an easygoing atmosphere no longer determined by the problems of PIADP. When I had to leave to prepare for my departure, the coordinator offered to drive me back to where I stayed. On the way back, I asked him about the situation in former PIADP and developments after its termination. *‘Sudah kembali ke normal’* (back to normal), he answered. It was not difficult to imagine what he meant. The stories of other people in Palopo, with whom working relations had been much better, had already made clear that most programmes had been declared ‘finalized’ almost immediately after transfer of the project to the local authorities. Part of the remaining financial resources for the settlement plan had disappeared. With project targets formally realized and funds spent, the situation had returned to ‘normal’ for the project officials of the agencies that had been directly involved in PIADP. The farmers in the former project area continued to be confronted with the long-term impact of land reform: uncertainty, insecurity, conflicts and threats. What did ‘back to normal’ mean in the long term, both for farmers affected by the programme, and for the regional and local officials and administrators who, like the farmers, had to cope some way or another with the long-term effects of the land reform and settlement programme of PIADP? That was the main question with which I returned to Pompengan in the course of the nineties.

‘It is not going to start all over again, is it?’

I enter the former PIADP area for the first time since 1992. To get a first impression of the situation, meet old friends and acquaintances, make people aware of my presence, and explain the reason of my return to the area, I make a first round trip through the area with friends from Palopo. Meeting some people on the road and paying visits to others, we hear many stories and get a variety of points of view about developments in the area since 1992. Earlier meetings with former project officials and other people in Palopo had already given me a general picture of the situation. Thus, I had met a BPN official who had worked in PIADP as a surveyor, and had been one of the BPN members of the special team. In 1991, when the land reform problems escalated, he had no longer been allowed to enter PIADP. After termination of the project, he was again given a task in the former project area:

‘In the beginning there was no longer any BPN activity in the project area. A new BPN team for PIADP, from which I was still excluded, organized sessions of mass titling in the former redistribution areas. They had engaged in titling of land outside the former land redistribution area to reach their target of distribution of titles without being troubled by the land conflicts. But after a while people in the field, farmers and the local government, started complaining that BPN had never finished its job. People were still waiting for BPN to stake out their land. Land conflicts were going on while people did already own a land title. So, in the end, the head of BPN was forced by such pressures to engage into some kind of field activity in the area. It was decided that another reallocation of land was to take place, to protect the settlement areas and make titling possible. BPN staff worked out plans for several TUs, among others TU R4 and the TUs in Sinangkala. The plans were only partly implemented in R4 and then left unfinished again. BPN had the same plans for Sinangkala, but had actually never reached that area. The plans were based on new changes in the claim boundaries, which people did not accept. I was part of the group of surveyors assigned with this task. As to me, I was not really eager to return to PIADP. As a member of the special team I had been blamed for many of the problems of the programme. I have been given another titling task again, in an area that is less sensitive than the Pompengan area. Actually, the situation in the project area is quite disastrous, not only for BPN as the agency responsible for the quality of titling, but also for the local and regional administrations, and especially for the farmers involved. For BPN, PIADP is not really an issue at the moment. They just keep their hands off. The problems cannot be solved anyway. The special team was the last serious chance we had to solve conflicts in PIADP. Since the team was dissolved, nothing has happened that contributes to the solution of conflicts, except for initiatives by farmers themselves. They make their own deals, to avoid escalation. Yet, land-titling problems will remain a burden for farmers, local administration, and perhaps for BPN. Most land titles have been handed out, without any previous checks on the status of the land. If trouble comes from it, BPN will be responsible, and surveyors like me will again be blamed for it.’¹

In the former project area I meet Duma, an old Toraja farmer living in Salu Pao, still wearing the same tiger-striped cap as before. During selection in R1, he used to be present whenever there was a selection meeting. Standing outside, hanging over the low wall of the open meeting hall, he consistently followed the latest developments in decision-making about his land claim. As he also owned land in another TU, the selection team had given him a C code for the land in R1. Duma, who had intended to transfer the land to his son, never accepted this decision of the selection team and continued to make clear that he would never leave the land, even if this meant disturbing other farmers. The new owner of the land had never even tried to set foot on the land. When we meet him, Duma is in a good mood. He recently managed to sell his land for Rp. 4.5 million. Duma:

‘When the project was still going on and the selection team had just decided that I had no rights to the land in R1, I told the village head that it was my son’s. He used to answer “as a consequence of a decision of the government you or your son don’t have any land in R1 any longer”. Who would have the courage now to maintain that I did not own land in R1? Another farmer from Salu Pao has bought it from me! But, by the way, why have you come back? Will there be another project? It is not going to start all over again, is it?’

The above farmer did not seem to have had great trouble in continuing to exert full control of his initial land claim that was formally no longer his. For farmers whose land claims had been used for the establishment of home yards in the new settlement areas of PIADP, the situation was much more problematic. Here follows the story of a farmer who found himself in that position from project implementation until the mid-nineties:

¹ In 1997, 278 (out of 482) titles for agricultural land, and 310 (out of 400) for home yards had been handed out in Sinangkala. In Seriti, 180 (out of 300) and 140 (out of 142) had been handed out (excluding consolidated land). In Salu Jambu, none had been handed out. In Rongkong 205 (out of 356) and 343 (all redistribution home yards and a number of consolidated plots).

'I had a 0.75 hectare piece of rain-fed land in one of the planned settlement areas. My father had given it to me before the project started. I used it for the cultivation of maize, soybeans, and vegetables. In combination with seasonal labour and work as a carpenter, the harvests gave my wife, our two children and me a sufficient income. Initially, I had been enthusiastic about the project, but when it had all started here I changed my opinion. Generally, people did not want to move away from their land. Neither did farmers like me in the settlement area. But we had been told that we should not hinder a government development project, so we were afraid of hindering the settlers. We left our land behind, assuming that the government would give us new agricultural land in return. When I tried to occupy the land given to me by the project, the owner forbade me to enter the land. I waited for a while to see what the government was going to do about it. In the end, there was nothing but conflicts. Farmers outside the settlement areas stuck to their initial boundaries, while those who had moved from their land in the settlement area had lost it to the settlers. I waited for almost three years. Three years, in which I had no access to my land and had to rent other land. Then I was fed up with the situation. I decided to return to my initial land. I was not the only farmer who did so, nor was I the first. I was able to reach an agreement with the settler on my land. He was ready to pay compensation for the land; he also felt bad about it. But I told him that I wanted the land back because I had no other place to go to. In the end, when he gave in, I agreed to pay some compensation for his cocoa trees. After he had lifted his house and moved it to a home yard of his kin, I re-occupied the land.'

Visits to the various settlement areas show that many houses have indeed disappeared during the last few years. In such cases, the land has usually reverted to its former agricultural function. Largely hidden between the crops, the sanitary facilities of the former project are still visible. Talks with farmers and other people also confirm the impression that the TUs in which agricultural development had been combined with farmer settlement were the real trouble areas. In TUs with a purely agricultural function farmers had simply returned to their initial claim boundaries (or, as was often the case, had never moved from it in the first place). In the functionally mixed TUs, pressure put upon the home yards in the settlement areas by claimants returning to their initial claims was an indicator of the processes that had been going on outside the settlement areas. Claimants of land in the settlement areas had become the main losers of PIADP. Their position explained this concentration of land conflicts in the settlement areas. These first impressions also confirmed the total lack of government intervention, the limited relevance of government regulation pertaining to land, and the almost exclusively local character of attempts and initiatives to solve land conflicts. Finally, it became clear that no part of PIADP had been spared the burden of land conflicts.

In this chapter, which concludes the part of this book on PIADP, I present evidence on the long-term effects of the land reform and settlement programme on land tenure. It is based on research in former PIADP in 1997, with an additional short visit in 1999. Thus, I have traced the processes set off by intervention in land tenure over a five to seven years' period, and been able to relate these processes to a long period of project intervention. As will be seen below, the outcome of these long-term processes is open-ended. Nevertheless, major trends are clearly visible seven years after project termination. Hence, it is possible to draw conclusions about the relationships between intervention and security of tenure, about the ways in which various actors cope with the realities of protracted and widespread land conflict, and about the long-term impact of legal regulation of land tenure in PIADP. This chapter consists of the following sections: in the next section I describe developments in the Sinangkala area. The third section focuses on the Seriti area, especially TU P16. In the fourth section I shift to the Salu Jambu and Rongkong areas. The fifth section sums up the findings of this chapter. Finally, the sixth section concludes the case study of land redistribution and settlement in PIADP with some final remarks on regulatory ambition in a complex project environment. I will also return here to the role of law and agency in the attempts to regulate land tenure, in the conflicts generated by these attempts, and in attempts to solve such conflicts.

2. Sinangkala: winning and losing

'Beaten in court, winning in the field'

In January 1990, the suits of Kelompok 88 had been dismissed by the Palopo district court. Then, the plaintiff had lodged an appeal to the provincial court, which had been dismissed early 1992, just before project termination.² Another appeal in cassation to the High Court in Jakarta in April 1993 was also lost.³ What did these losses in the formal legal arena mean for the situation in former PIADP? Did claimants in Sinangkala need a court decision to get what they wanted? If the government had had its way in the court room, what about the field? It is interesting to see what the former lawyer of Kelompok 88 has to say about post-project developments in the area of PIADP:

'Since 1993 you can see a gradual but definite and increasingly massive return of farmers to their initial land claims. As all our cases were lost, I have explicitly advised the group of people with whom I had contacts to do so. I told them that it is better immediately to reclaim their land than to wait for a solution that is probably never going to come. And, as you can see in the field, that is what happened. Little is left now of the pattern of land redistribution in Sinangkala as it had been enforced in the eighties. In the settlement areas, many settlers have left their home yards. But most people did not regard that as a great loss. It is better to lift your house and put it on a safe place than to be haunted by conflicts about the land on which you settled. But people also found other ways to solve their problems. Some settlers preferred to pay compensation for their home yard. I advised my clients to try and find reasonable solutions with the settlers and to avoid violence. I have also advised the people in Sinangkala not to disturb land used for public buildings by reclaiming this land. These buildings are in the public interest and should not be disturbed After some years, there is little left of the land allocated to the fake claimants in Sinangkala. Most of them have gradually been pushed out by farmers who insisted on returning to their own initial claim. What I am still worried about is what will happen in the future. Many PIADP land title documents are circulating, but there are hardly any titles that cover the existing situation. Land title documents have proved to be of little use to the owners. There are even cases known to me of banks refusing PIADP land titles as collateral to loans. Still, titles can damage those who actually work the land, if anyone would decide to start a procedure on the basis of such a title. Fortunately, there is slight chance that people will start a legal procedure on the basis of their Pompengan land title. Whoever knows the situation in PIADP will not venture into such an undertaking Of course, in the past we have made use of all kinds of relationships at the district, provincial and even national level. In the end, these relationships have not had a great impact. In the last resort, the struggle had to take place here. Higher-level officials and authorities were not always motivated to stick out their necks in this complex and controversial case. For them, there was the danger of *pecah piring* (loss of income; D.R.). Once I received the following answer to a letter I had written to get support: "If you are convinced that you and the people you represent have been excessively disadvantaged by the government, I advise you to continue your struggle, but I cannot do but continue to support the plans of the government". I have concluded for myself that this is the way it should be, that in the end it is the best way of solving the problems in Sinangkala. In the end, it does not matter if you get beaten in court. We lost in court but we have won in the field.'

Connections in Palopo get me into the district court, in search of further evidence on PIADP. I spend many hours searching the registers for land cases in former PIADP, but in vain. Apart from the Kelompok 88 case in the early nineties, few cases related to PIADP entered any court after

² By decision of the provincial court in Makassar, 15-03-1992.

³ In its statement of appeal (*memori kasasi*) it was again stressed that PIADP had been based on a wrong interpretation of the 1984 decision of the Minister of the Interior and an improper application of regulations for land reform (esp. articles 2,3,6 and 14 of the BAL) to a project, under the assumption that project land had the status of *tanah negara bebas* (free state land).

termination of the project. There is one interesting exception: the case started by Beddu, who claimed a small piece of land on the location of the home yards in D1. He had lost some land to construction activities, for which he had been compensated. Though he asserted to have claimed about 5.5 hectares, the strength of his claims had always been seriously doubted. A former local leader of DI/TII, he is widely known as *orang keras* (a stubborn person, strongman).⁴

This seems to be the only case after termination of PIADP in which a receiver of project land went to court to demand recognition of his landownership on the basis of land allocation by the project. Beddu sued five farmers who made it impossible for him to work his project land. In 1991, these farmers had returned to their initial claims because they were unable to work land received from the project. Since that year, Beddu demanded access to his land and compensation for his loss of harvest income. In 1996, his demand for compensation (Rp. 1.5 million per harvest; two harvests a year during five years) amounted to Rp. 15 million. To his advantage, he could show the ownership title handed out by BPN. To his disadvantage, Beddu is said to have once admitted during a court session that his own initial land claim had not been very strong. The case had already been in court in 1991. He had won the case on the basis of the sole criterion used then: formal ownership supported by a PIADP land title. Two of his disturbers had been sentenced to one-month jail. However, as we have seen above, there is a difference between winning in court and winning in the field: Beddu continued being disturbed. As negotiations between the parties did not lead to a solution, he went to court again. In the 1996 and 1997 court sessions, he demanded recognition of all his rights, cancellation of all other rights and documents pertaining to the land, compensation, confiscation of the land to prevent claimants from selling it, and immediate access to the land. Early 1997 his suits were turned down. He immediately decided to appeal. When in 1997 I had access to the case material, the case still remained undecided.⁵

There are some remarkable aspects to the case. First, the court no longer automatically decided in favour of the holder of a PIADP title document, but also seemed to inquire into the background of the claims. It organized a field visit and called witnesses, among whom the Pompengan village head. The latter recognized both the plaintiff's rights to the land on the basis of an earlier claim in the area, SK and land title document, as well as the presence of an initial claim on that location on the names of the defendants. He made clear that the defendants had received project land but were unable to work it because the claimants of that land did not allow them to do so and harassed them as soon as they tried to work it. One of the defendants stressed that:

'The landownership document shown by the plaintiff as proof of his ownership rights does not have legal validity because the plaintiff himself did not have a initial claim (*dasar tanah*). Moreover, the ownership title cannot be maintained because the project regulation of which the title was a product, is in such a degree of disorder now that, as a consequence, it is automatically cancelled.'

Further, the fact that farmers were massively returning to their initial claim or settling their conflicts locally in a way that deviated from the formal government decision about land in PIADP came to form part of the argumentations used by the parties involved. Beddu also stressed that in 1994 he had reached an agreement with one of the farmers disturbing him and that 'by mutual

⁴ In lowland Luwu, there was much protest against the refugee settlements and expansion of migrant population around these settlements (see chapter 4). As a compromise, resettlement of lowland Luwu farmers in the (later) Pompengan area was allowed as a strategy to stop expansion of (Christian) migrant settlements. A local strongman, Beddu is said to have controlled land distribution to Islamic farmers from the catchment areas. In the early nineties, he was involved in organizing settlement of hundreds of migrant Bugis farmers outside the Rongkong dike. Beddu and many of his kin received project land and facilities.

⁵ As the verdict had only very recently been passed, the record of the session was not in the file.

agreement' (*secara musyawara dan mufakat*) he had returned half a hectare of the land to this claimant of the land. This argument was immediately used by one of the other defendants:

'This clearly shows that, in fact, the situation in the project is such now that people are massively returning to their initial claims The plaintiff himself has already acknowledged in his statement that the land he demands is not located on his initial pre-project claim. But he also states that he will continue to follow government regulations. This is not the proper thing to do. The regulations by the government are in great disorder now, as a consequence of which people return to their initial claims. If the plaintiff really has an initial claim to go to, then it would be easy for him to return to that land now as well. Perhaps he only became a plaintiff because he does not know where his initial claim is located.'

In Sinangkala I pay a visit to the village leader, who had played a crucial role in implementation of the pilot project. He does not seem to be really pleased with my interest in recent developments pertaining to land. He must be in dire straits: responsible for peace and order in his village and blamed by all parties for his failure to represent their interests. However, he readily confirms my first impression that farmers have massively returned to their initial claims, and gives a creative explanation for these developments:

'I am only an *orang kecil* ('little man'; D.R.). I could not undertake very much against all that messing about with land by higher officials. The current problems are caused by the fact that officials of the court and justice did not sufficiently profit from the land redistribution. As a consequence, they started stirring up trouble. Nobody now prevents people from returning to their initial claim.'

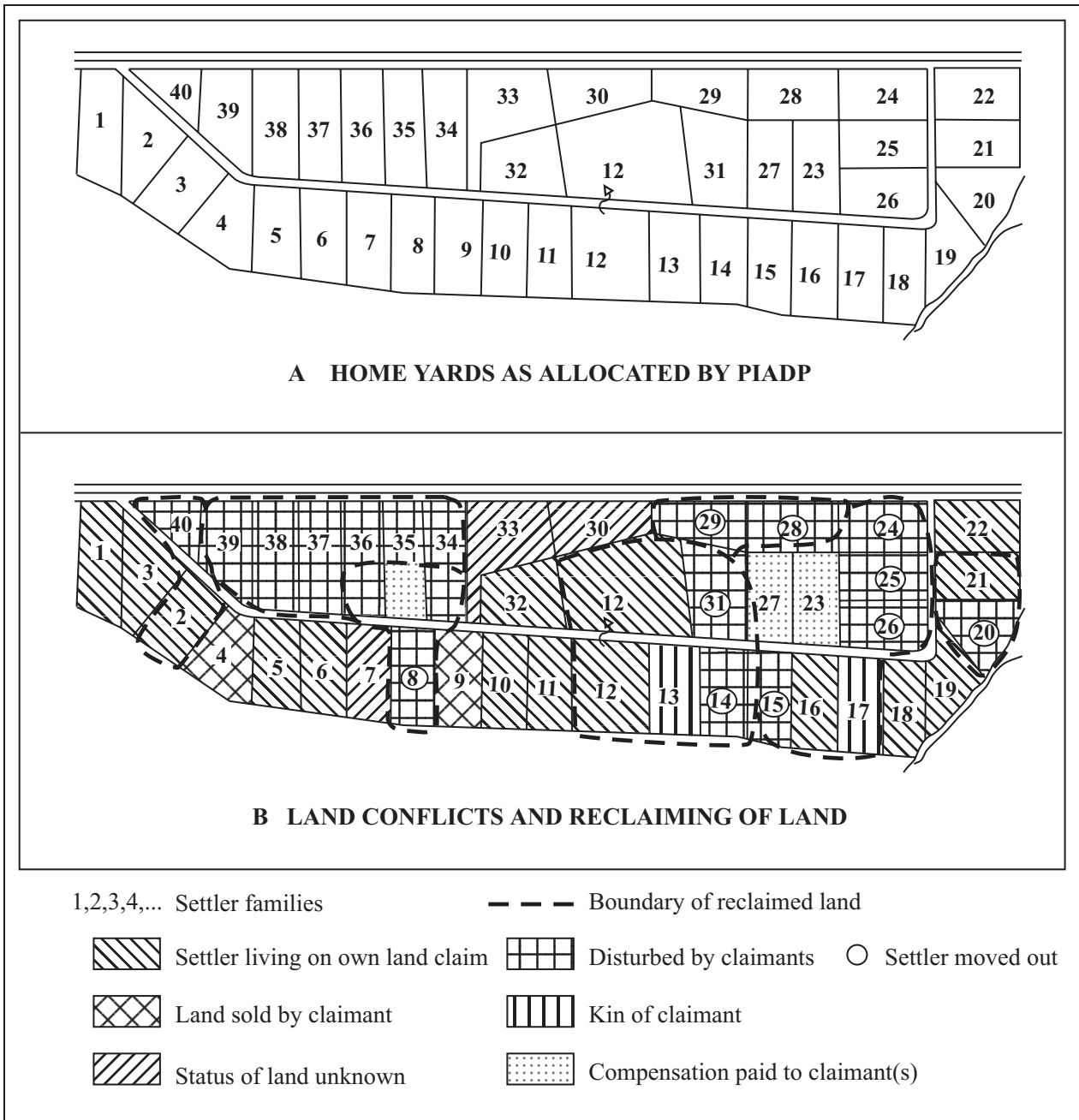
All further attempts to meet him for more in-depth discussion of developments in Sinangkala failed.

Evidence from the Sinangkala TUs

Tertiary Unit D1

In this TU, claimants have massively returned to their original claims. As a consequence, pressure exerted by claimants on the home yards of the new settlement area increased even before project termination, but has become clearly visible some years later. This is borne out by further research into land conflicts in D1. Upon implementation the area consisted of forty home yards (see map 6). Three of these were actually consolidated plots. One of the consolidated numbers (no. 12) stands out by its size; it belongs to one of the leaders of Kelompok 88. Map 6b represents the situation in the course of the nineties. Out of this total of forty home yards on (mainly) redistributed land, the formal owners of fourteen yards were not engaged in any conflict. They had either returned to their initial claims, or received project land located on their own claim. Initial claimants of the land disturbed the formal owners of seventeen yards. Ten of them had moved their house and given up their formal right. Others were still pressured by, or negotiating with the claimants. Owners of three yards had managed to reach an agreement with the claimant. They had paid compensation and were no longer disturbed. The status of three home yards was unknown. Claimants and formal owners of two home yards had sold their land (as in both cases the land had been allocated to them by the project, no other settlers were involved). The formal owners of two home yards, who had received land not located on their own initial claim, managed to stay on the land because of their kinship ties to the initial claimants.⁶

⁶ The account adds up to 41 home yard cases. This is caused by the fact that one home yard (no. 35), located on two different initial claims, was partly disturbed (by a claimant who refused to accept compensation) and



Map 6: post-project land conflicts and claims on the home yards in tertiary unit D1

As the trend of returning to the initial claims became more pronounced, the plot boundaries of land allocation by the project have been rapidly losing their relevance in day-to-day dealings with land in the settlement area. The map shows the 1997 state of affairs in the process of reshuffling of boundaries under the influence of farmers returning to their initial land. Several claimants have now more or less fully reclaimed their land, or taken decisions about parts of their claims without heeding the formal land allocation pattern (e.g. claimants who have agreed to settle the issue by payment of compensation for part of their land).

partly left undisturbed by the other claimant (after payment of compensation). Hence, the plot is counted under the categories 'payment of compensation' as well as 'disturbed land'.

Tertiary Unit D2

Similar developments in land tenure in TU D2 have led to the same kind of pressure on its settlement area. Many home yards and houses have disappeared, settlers moved to another place and claimants returned to their initial claim. Houses were moved out, sold or pulled down. On a total of fifty-three redistributed home yards, only eleven are undisturbed because their location coincides with the initial claim of the formal owner. Claimants of the land disturbed twenty-six yards. In twenty-four of these cases the house of the settler had disappeared. Seven yards had been sold by the owner (in all cases also the initial claimant). Of the same number of yards, the status is unknown. Settlers of only two yards paid compensation to the initial claimant.

The effects of these processes are twofold: on the positive side, claimants have proven to be able to reclaim their land from fake claimants and owners ('petani berdasi') smuggled in through the selection. At least four receivers of project land on the basis of a fake claim were squeezed out by claimants returning to their land. One was a member of the district representative council, another a district administrator, while the others were subdistrict officials. Javanese farmers contracted by a Sinangkala middleman had in most cases used their home yard, house and land, until disturbances and harassments forced them to leave. Houses were sold, pulled down or moved, and the land left behind. On the negative side, this massive return to initial claims had always been encouraged by large claimants with speculative interests in land and bent on hampering the project from the onset. One of the larger landowners, who had received much land and facilities from the project on the basis of vague claim data, was able to chase away from his initial claim nine settler families, and to confiscate public village space. According to him 'nobody feels threatened or chased away. All are aware that they are not entitled to the land, and have moved by their own free will'. Some of the people who moved away have other stories to tell: they were harassed from the beginning. No longer able to stand threats and harassments, they fled the land they formally owned.

Tertiary Unit D3

Many changes have taken place here as well. The main trend is, again, return of claimants of land in the settlement area to their initial claims. A large number of settlers in D3 (40 families) are safe because they had received a home yard on their own initial claim or that of close kin. Two settler families reached an agreement with claimants of the land; 0.25 ha. was sold for Rp. 1.2 million. Settlers who refused to pay compensation were given one third of the home yard, the claimants taking back the other part. Four settlers sold their houses and left the land. In one of these cases, part of the home yard was sold as well, as it belonged to the settler's initial claim. One claimant still seriously harassed four settlers. Settlers had planted perennials (cocoa and citrus) and, in two cases, made a foundation for a stone house. Claimants were neither prepared to accept compensation for the land, nor to pay it for crops and buildings of the formal owner.⁷

This settlement shows how important power positions are as a protection against loss of control over land resources. Three home yards in the D3 settlement, allocated to people who did not claim land on that location, are not disturbed by initial claimants of the land. The first is owned by the Pompegan village head, the others are local elite protégées. Parcels of land with 'public' functions have either been taken back by initial claimants, or grabbed by the village elite for private use. Thus, the yard of the village cooperative has been taken back by the initial claimant. Three initial claimants reclaimed the garden of the village women's organization (PKK). The plot allocated to the village council LKMD has become the location of a rice mill owned by the village head. Other receivers of land on the basis of a weak or fake claim, or with a strong claim but treated overly

⁷ Note that the package of seedlings provided to settlers by PIADP contained: two rambutan trees, mango trees and citrus trees, four coconut trees, and sixty cocoa trees. Many had already become productive.

generous because of their position in the village, were less successful. Thus, one member of the Pompengan administration and protégée of the village leader, lost access to his agricultural land and was forced to return part of his yard to the initial claimant. A former district official and local administrator, whose yard and house had been rented out, was chased away by the initial claimant. Another owner of a home yard and house, allocated on the initial claim of another farmer, was also taken back by the latter. The formal owner of the land had not claimed land in the project area, but managed to get registered through kinship ties with the village elites. The initial claimant took back his land, which covered the home yard, part of the adjoining irrigated land allocated by the project to yet another farmer, and the claimant's own home yard. He sold the whole initial claim for Rp. 12 million to a former district official, who built a rice mill and drying floor on the land.

Tertiary Units Si1 and Si2ki

Research in parts of the settlements of Si1 and Si2ki confirm impressions from the earlier TUs. In TU Si1 (twenty-five home yards), fourteen settler families were disturbed by claimants of the land. Five of them had moved their house and left. Five settlers were safe on their own initial claim. Among them were one former leader of Kelompok 88, who had also reclaimed five surrounding home yards by harassing the inhabitants (three families had left the land), and another inhabitant who had consistently refused to have anything to do with the project and its regulations, but not with its facilities. The status of six yards did not become clear.

Project settlement in Si2ki consists of two sections. The first section, twenty-three yards along the boundary between TUs Si1 and Si2ki, gives the following results: six settler families are safe on their own initial claim (two of which after exchanging home yards). Fifteen settler families were engaged in conflicts and disturbances. Nine of them had moved out yet. Only two settler families had reached an agreement about payment of compensation to the claimant. At least two receivers of land and housing facilities who had not claimed land before the project started - one of them the project coordinator himself and the other a BAPPEDA official with kinship ties to Pompengan - were forced to give up their land under pressure of claimants returning to their initial claims. Land and home yards of these owners had been rented out to farmers who worked their irrigated fields as sharecroppers. In the other section (forty-three yards), nineteen settlers are safe on their own initial claims, and another two on land claimed by kin. Ten yards were disturbed; four of them had already moved to another place. Another four settlers had been able to solve the problems by paying compensation. Another eight yards, the formal owners of which were not the initial claimants, were still undisturbed. In two of these cases, this had to do with the power position of those who held a project-issued title to the land: the ex-wife of the Pompengan village head and their son. The yard of the former had become a bone of contention between the woman, who had turned it into a sawah, and her ex-husband, who as a village head forbade her to change the function of land in the settlement area. One subdistrict administrator with a fake claim was chased out by a farmer who demanded his claim back. Irrigated land, yard and house had been rented out to a sharecropper earlier. Another receiver of land was the son of a former subdistrict leader. The formal owner, who had never claimed land in the area, decided to sell land, yard and house to the son of a high district official for Rp. 4.5 million. After a while, the claimant of the land on which the home yard was located, demanded it back. The buyer had been told that, if he objected to the claimant returning to his initial claim, he should go to court. Since then, nothing has happened; the initial claimant has his land back. Another claimless receiver of project land, the child of a former district official, was still in control of agricultural land and home yard, both rented out to a sharecropper. Even land with a public function had come under pressure as a consequence of the massive reclaiming of land. Thus, one claimant has even reclaimed the new graveyard, on which six burials had already taken place. He is said to have turned the land into sawah without even removing the human remains first.

3. Seriti: ‘as long as peace is kept’

Experiences of a subdistrict official

If the solution of land conflicts is a local responsibility, then the subdistrict level administration must be involved. Re-entering the area after several years I had to report at the Lamasi subdistrict office. Seriti, Salu Jambu, and part of Rongkong belong to this subdistrict. After reporting to the district head, I talked to an official supposed to know more about land conflicts and the way such conflicts are dealt with. Indeed, the official was proud to show me a separate book for the registration of land conflicts. However, its content was rather meagre: one land case related to former PIADP. Judging by the registered cases, there is no land problem there. One of the officials suggested that there may be an old book containing more cases. I also met Usman, the official of the section *Keamanan dan Ketertiban* (Security and Order) of the subdistrict office: ‘registration of land cases? I really don’t know, sir. Perhaps it is better to go to the villages. They make the official reports of conflicts and solutions between the parties.’ Then, fortunately, my old friend Muhammad came in. He is also a subdistrict official, and used to be highly committed to the attempts of the special team to solve conflicts some years ago. Usman, Muhammad and I chatted and had coffee. The sphere became more open now. It became clear soon that it was no use looking for another book. Hardly any registration takes place at the subdistrict level at all. Moreover, officials are reluctant to handle land cases from PIADP. Muhammad:

‘The situation in the former PIADP area is quite difficult. It is a *lingkaran setan* (vicious circle; D.R.). The Decisions of the Bupati cannot be changed because it is a decision of the district administration, but the field situation bears no resemblance to the administrative decision. Solving conflicts in the field means taking decisions that are not consistent with the SK. It seems that nobody wants to be bothered with cases from Pompengan. We once had a rather sensitive case, which we could not solve at the subdistrict office. We thought it advisable to submit the issue to the district court. After a while, the court referred the case back to the subdistrict administration, without having pronounced a judgment. Even the court does not have the courage to take decisions that could be interpreted as changes in or criticism of a decision of the Bupati. Understandably, the subdistrict administration tries to refrain from too deep an involvement, and from decisions that may damage the careers of administrators. In 1996, the subdistrict head even sent around an official letter to all village heads in his subdistrict, warning that it is strictly forbidden to deviate from the SKs for PIADP.⁸ The situation is also difficult for other government agencies. Because of the conflicting claims, collection of Irrigation Service Fee (IPEP) is a mess, and the same goes for land tax (PBB). People who have no access to their land, refuse to pay. Sometimes we have village heads, hamlet heads or farmers here complaining about the situation and asking for help. Usually we refer such cases back to the village head. We really feel at a loss and do not know what to do.’

Muhammed has been informally involved in one case that had been referred to the subdistrict by the Tolemo village administration. Muhammad:

‘The case between Marna (formal owner according to the SK; D.R.) and Salama (claimant; D.R.) was referred to us. Marna demanded from the claimant of the land a Rp. 2 million compensation for time and labour invested in the land. The claimant was in principle willing to pay compensation, but less than the

⁸ It stated that ‘whatever the government has decided should be affirmed and upheld. Nobody except the responsible authorities should change a government decision. Anybody who feels damaged by the project (government decisions) has the opportunity to complain through the existing legal procedures.’

amount demanded. It was finally decided to give Marna the usufruct of the land for another three rice cropping seasons, after which the land was to be returned to the initial claimant. In dealing with the cases we had to operate very carefully, avoiding speaking about our solution in terms of *kembali ke dasar tanah* (returning to the initial claim; D.R). That would have been dangerous, both for us and for the farmers. When we found this solution, we were officially told that it was impossible to bring about changes in the SK. But, speaking among us, the camat stimulates this way of actively and creatively looking for solutions. “*Asal damai*” (as long as peace is kept; D.R.) is his point of departure for conflict solution. This was, as far as I know, the only case referred to the subdistrict. Our involvement was intentionally kept low profile. A written report was made, endorsed by a subdistrict official and village head. Only the two parties keep copies. The case was solved, but the solution might well have become a stimulus for other farmers no longer to remain passive but to demand their initial claims as well.’

A village elder in the Seriti area

Tandingan, a retired police officer, lives in Salu Pao. Even during PIADP he never made a secret of his opinion about the programme. He has seen from nearby what has happened to the land, the other facilities, and the people affected. From the beginning, Tandingan was a strong supporter of payment of compensation for land. He consistently pointed out the many weaknesses of the programme and predicted its outcome. Initially, when he sees that I have returned, he surmises that there are plans for continuation of the project: ‘It has been enough. Don’t let the project come in again. It is no use, and only creates more problems.’ He comments upon post-project developments:

‘The project never considered payment of compensation for lost land. Instead, they paid a living allowance to all farmers receiving land. Had they used the money for good arrangements for compensation to claimants of land in the settlement areas, perhaps the settlement plan would have survived. The things I have seen happening since the project was terminated are a direct consequence of these choices. People have returned to their land. In Salu Pao, less than one hundred of the more than 250 project houses are still on the project home yards. All other home yards have been left by the settlers and taken back by the claimants. Many settlers were simply chased away. The only thing they could do was to lift their house and remove it to a safer place, or sell it. But they cannot take their well and toilet with them. If people from outside the area, who know nothing about the project, come and visit us here now, they look around astonished and ask “why do you people build your toilets in the middle of your maize fields?”’

Critical as he is of project intervention, he pleads for recognition and active protection of the home yards in the settlement areas, rather than seeing claimants chasing the settlers away and returning to their land claims. In some parts of the settlement areas, people have joined together in defence of their project-allocated rights. Tandingan supports them in their refusal to give up the land:

‘I don’t like the way claimants intimidate the people who live on their land. They come and visit them every day, uttering threats. There comes a moment when people become afraid or ashamed, and leave. Or they demonstratively plant the land, until the settler gives up and moves. Some settlers still live on their home yard. They are not prepared to give in to any form of intimidation. I have advised them not to move, unless the government wants them to move. Until now, farmers who demand their initial land claim have not succeeded. They are often threatened, but I tell them they should not give in. We all have two hands. Two people in this part of the settlement could afford to pay compensation, but most of them simply do not have the money. They should either actively resist or, if they are not prepared to do that, move. People should decide for themselves. When the land was distributed, I did not like the idea of being pushed off my land by the project. I was afraid, like many others who stuck to their land claim. If I had followed the project rules and accepted a project plot, I would certainly have been in trouble now. Therefore, I did what most people did: stay on my land. People from Tana Toraja generally do not like treading on the marks of other peoples’

machetes. The worst in this affair is that neither the village heads nor the subdistrict administration has done anything to intervene. I have often reported on the situation, but they never reacted. Some individuals devote themselves to finding solutions to conflicts or containing sentiments among settlers and claimants. Their efforts have helped stabilizing the situation. Things had almost escalated during the village head elections, when the project was still going on. The village head, who wanted to be re-elected, used part of the project living allowances to finance his campaign and treat potential voters to *balo* (palm wine; D.R.) and dog meat. During his campaign he promised that, once he was elected, he would let all farmers return to their initial land claim.'

Tertiary unit P16

Fake claimants have won: a farmer from P16

Aron is not very communicative about the situation in P16. The situation makes him dizzy; he would rather not talk about it too much. After the demise of the special team and termination of PIADP, the farmers in TU P16 had waited for a long time to see how things were going to develop. When there was no continuation of activities of the special team and problems remained unsolved, the situation in P16 became problematic. Threats by claimants to settlers or farmers on the agricultural land became quite common. Some settlers started negotiations about compensation, others gave up and lifted their houses. In P16 there is no land left that is not reclaimed by the initial claimant; disturbances are the rule now. Some claimants sold their land to outsiders. In the first case of such a land sale, the woman who had received project land located partly on this claim reported the transaction to the village head, as soon as she had heard rumours about it. However, the village head undertook no action to prevent or cancel the sale (which he could have done on the ground that the claimant sold land of which he was not the formal owner). In the end, the woman was forced to return to her land claim. In her turn, she chased away three people whose land was overlapping with her claim. Aron stresses that the role of village head or village elders is very limited: 'conflicts like these cannot be solved by a village head, nor can they be solved by village elders in P16. Most of them are too deeply involved themselves.' According to Aron, no cases from this TU have ever developed into court cases.

The receivers of land on the basis of a fake claim have, according to Aron, been able to use their power positions to consolidate their newly acquired landownership as recognized in the SKs of PIADP. Amiruddin, the local military commander, Rosmawati and Nadira have retained control of the land. It was developed into irrigated fields through land development contracts with landless labourers. As long as the sawahs are being developed, the labourers are allowed to take the harvest. Once the land has become fully productive, they will probably continue working the land in a sharecropping arrangement. Nobody has reclaimed the land occupied by the people mentioned above. Thus, those in local power positions have won, and are supported by a land title document.

Land conflicts are not only a struggle between power holders with fake claims and innocent farmers. Aron:

'A farmer in P16, Yohanis, cheated me. I did not claim any land in P16 myself. Therefore, before the land inventory and redistribution, I had made a deal with him. He had one hectare of his claim registered on my name. We agreed that, once the project would be over, half of the land was to be returned to him, and the other half kept by me. In the end, he took back all land, using the argument that he had made the deal only in case the project would actually redistribute the land. So I lost my agricultural land and will probably also have to leave my home yard, which is demanded back by the initial claimant.'

Aron worries about the future, because of the tensions caused by the land reform among villagers and neighbours. The way the land was titled has become a major problem. BPN has distributed the titles for both agricultural land and home yards. However, according to Aron 'there is not even one title that reflects the actual situation, except perhaps for those who had no rights but kept their plot, and in whose interest it is now to stick to the boundaries of the land allocation plan as covered by their title.'

Land tax payment (PBB) is also quite messy. Some farmers pay for their formally allocated plot, others for their initial claim. In the beginning, PBB had to be paid on the basis of formal land allocation, but this practice was soon changed in view of the massive protest against collection on such a basis. Irrigation Service Fee (IPEP) has to be paid in accordance with the area irrigated. A complex situation has arisen here. On the basis of the administrative data used by the Irrigation Service (the data of formal land allocation), farmers are expected to pay in accordance with the project-determined boundaries of ownership (as far as the land can be irrigated). However, farmers only want to pay for the area of (irrigated) land actually under their control. For them, the claim boundaries rather than the project plots are the primary points of reference.

An informal leader about developments in P16

According to one of the Tolemo village elders, who played a role in local attempts to prevent land conflicts from escalating, all P16 farmers, except the people whose rights were very much in doubt and whose fate depends on recognition of the SK, have returned to their initial land claims. Hence, the people with a house in the settlement area came under increasing pressure. Some farmers successfully negotiated compensation, either in cash (generally around Rp. 1 million per 0.25 hectare) or in land. Initiatives for such agreements tend to come from the farmers themselves rather than from the village administration:

'Compensation is primarily an issue between the people involved. The village head and I have been involved in a few cases only. Generally, there is no registration at all. This is dangerous: oral arrangements can easily be forgotten or remembered differently by different people. Many farmers are still in doubt about how to proceed. Yet, there does not seem to be another way out of the problems. Anybody who intends to start a case on the basis of either their initial claim or the SK will be in a difficult position. The former will probably not be put in the right in court against the formal owner of the land. The latter do not have a chance in the world to actually assert their rights. Neither of the two parties have anything to win by a legal procedure. Therefore, people have gradually come to realize that it is more important to find a solution acceptable to both than to continue quarrelling. Though there still are conflicts, the situation is better than it used to be. But what worries people is that most home yards and agricultural plots have been titled.'

Land conflicts in P16: further evidence

In this part further evidence is presented of the development of land conflicts in TU P16, especially in the settlement area. The following case is of a farmer, who had claimed land on the settlement location and left it behind on the assumption that the project would give new land in return. It clearly illustrates the impact of the return of claimants to their initial claims upon the settlers in the settlement area.

Yunus claimed almost 1.5 hectares of land in the P16 settlement area. As a beneficiary of the programme, he had received one hectare of land in return. He was willing to move, but was obstructed by the farmer on whose initial claim he had been given new land. When PIADP was still going on, the special team for conflict solution had managed to reach agreement between this claimant, Parinding, and Yunus. However, in the turbulence after project termination, Parinding decided to return to his own land claim, pushing out Yunus. The latter, in his turn, had no other option but returning to his claim as well. As a consequence, he disturbed eight home yards. By 1997, three settlers had sold their house and left their home yard. Two others

were still negotiating with Yunus about compensation. According to sources in the TU, the claimant wanted his land back and was not willing to accept any compensation. At least one of the settlers who have left, had initially refused to leave the home yard. Then Yunus used close kin to put more pressure upon the settler. He was summoned to leave the land immediately, which he refused because the government had given it to him. Yunus and his kin, aware of the total lack of protection of rights formally allocated by the government, continued threatening the settler. As threats increased from day to day, finally the settler decided to move.

The above impressions are largely confirmed by further research. Research on agricultural land shows that farmers have massively returned to their pre-project boundaries. Only some owners of project land continued to insist on recognition of the project-allocated plot boundaries. These are mainly people who had no initial claim to return to: fake claimants. As a consequence of this return to initial claims, farmers who used to claim land in the settlement area did not get access to agricultural land in return and were forced to return to their own claims. Evidence of this return to land claims in the settlement area and increased pressure on the home yards of the settlers can be found in the situation in the settlement area, where many conflicts about land are concentrated. Conflicts are, by the way, not limited to the settlement areas. In some cases the return to pre-project boundaries in the agricultural area also meant a return to pre-project boundary conflicts.

The yards of seventy (out of eighty-two) settler families were permanently disturbed. Of these seventy settler families, thirty-two had already moved their houses and left (in sixteen of these cases, the house had been sold; in the remaining cases it had been shifted to another location or pulled down to re-use the material). Five settlers seriously considered moving, their ultimate decision depending on the final outcome of their negotiations with claimants and on the behaviour of the latter. Only three settlers had been able to reach an agreement on compensation. As these yards were located on the initial claim of two different claimants, one of which did not accept compensation, it was paid for part of these home yards only: the place on which the house stands and a small stretch of land in front of the house. The remainder reverted to the claimant with whom no agreement had been reached. The status of the home yards received by eight settler families remained unclear. In some of these cases, settlers were still negotiating about the possibility of compensation, either in money or with land. Only three home yards located on another farmer's land were not disturbed. Negotiations about compensation were complicated in some cases, because the formal owner of the land was not willing to pay the claimant for being allowed to use land allocated and titled by the government. In some cases, there was disagreement about compensation demanded by the settler for perennial crops or other investments left behind on the land he or she formally owns. Usually settlers are not in a position from which it is easy to demand money. Except for the few cases in which the claimant accepted payment of compensation for crops as part of a solution, settlers who decide to leave their home yard tend to cut down perennial crops before leaving.

Other TUs in the Seriti area

In TUs Sj3ki and Sj3te all changes introduced by the programme were undone after termination of PIADP. Conflicts caused by the land redistribution were solved after farmers had returned to their initial claims. Land titles have never been handed out, but farmers generally don't bother about the document as long as the situation is safe. In TU Pa3, almost all houses built on redistributed home yards have disappeared. As farmers have massively returned to their former claim, there are hardly any conflicts related to the land redistribution programme. Instead, land conflicts caused by the earlier building of a small market place and the allocation of land to a cemetery, all in the

framework of the project, have re-emerged. A small group of settlers in TU Pa2 did not give in to the pressures exerted by claimants.

As is the case in P16, the solution of land conflicts is primarily an issue for the parties themselves, sometimes with the help of village elders or hamlet heads. If written agreements are made at all, village heads, hamlet heads or village elders sometimes act as witnesses. However, few of these people are willing to sign such agreements for formal approbation, as this could be interpreted as proof that local administrators are actively engaged in activities that obstruct enforcement of a government decision. Higher administrative levels (subdistrict, district) or government agencies have hardly played a role in conflict solution or registration of agreements. Some cases were referred to the subdistrict administration. Usually the camat referred them back to the village head. The attitude of the subdistrict administration was ambivalent. On the one hand, it formally supported the official land allocation (the SK). On the other hand, it actively exhorted village functionaries to try and reach agreements by bringing the parties together, even if this meant a deviation from the SK. Government agencies have remained totally aloof from the problems in this area, and are not trusted by the farmers anyway. No cases have ever reached the district court.

4. Salu Jambu and Rongkong: the strength of initial land claims

Salu Jambu

I can be short about developments in Salu Jambu. Even during implementation of PIADP, it had become clear that land redistribution in TUs S12ki and S15-I had been implemented on paper only. Land reform and settlement activities in S15-II had been purposively postponed and were, in the end, definitively cancelled by project termination. The farmers who had land claims in this TU did not seem to regret the turn PIADP had finally taken:

Yohanis is a Toraja farmer claiming land in S15-II, where settlement had been planned but was never implemented. When it became clear that the settlement programme would never reach S15-II, Yohanis had initially been disappointed. In the end, relief predominated. Project termination had finally brought clarity about the status of his land, which was at least not going to be used for settlement. After hearing the news he waited for some time to make sure that it really was all over. Once he was convinced that the project had been cancelled, he decided to plant his land with cocoa trees. The cocoa garden will be fully productive soon, and provide him with an additional income. According to Yohanis, many other farmers in the same TU have taken similar decisions about the use of their land upon hearing that the plans for land reform and settlement had been definitively cancelled. Other farmers claiming land in sections of the TU that had been planned for irrigated agriculture have also reverted to rain-fed agriculture because of the bad functioning of the irrigation system. The land of another group of farmers, who claimed land along the Rongkong protection dike, had been partly destroyed by the contractor paid by Public Works to improve this dike. Apart from the deep borrow pits on the land along the dike, a general distrust of government officials, some farm roads and a badly functioning irrigation system the project left very few traces here.

Thus, the area has been spared the kind of large-scale land conflicts that prevailed in Sinangkala and Seriti and created a high degree of tenure insecurity there. As the case clearly shows, the possibility of intervention in land tenure by PIADP made people postpone land use decisions rather than acting as a stimulus.

Rongkong

Tertiary Unit R1

The head of the village, in which part of TU R1 is situated, had a difficult time after termination of the project. He had to mediate in many land cases that could easily escalate into violence if they were not contained. Like his colleagues in other areas, he had to do so from an ambivalent position:

‘There are no farmers in R1 who work their land in accordance with the SK or demand recognition of the project ownership boundaries. There are no serious land conflicts in the agricultural areas. Conflicts are now concentrated in the settlement area. Settlers have either left their yard, or paid compensation and stayed. Once the settler has paid, the problem is over. Often, land conflicts start off with more or less explicit threats. Usually a claimant visits the new owner to remind him of the fact that the one who was given the land by the government is not the real owner. The camat and village heads have advised settlers not to give in to such threats, whether by compensation payment or by lifting their house and moving away. But sooner or later most people move. If cases are settled by payment of compensation or if the claimant sells land, officially we do not know. As a village head I have to stick to the SK. Let them settle things among themselves, we don’t want to be involved. That is why I do not administrate anything here. We are not allowed to make two kinds of regulation, one on top of the other. I keep track of all cases that I know of, but there are no witnesses from the village apparatus. Village elders can play a more prominent role. Not tied to government regulation, they can more freely engage in bringing parties together. As a village head, I have to steer a middle course. I always say to the people engaged in conflicts: “Even though the government owns this land, if anybody used the land before the project started, it would be good to create understanding between the parties”. I never advise people to pay or receive compensation, but I do say to people who received project land: “if you want to defend your rights on the basis of the SK, go ahead. You will certainly win in court, but you and your land will never be safe”. I think payment of compensation is the only way to solve the problem. We cannot let ourselves be wholly guided by the rules. We have to cope with these problems among ourselves. The camat has ordered us to base our decisions on the SK. But his letter did not tell us how to cope with the demands by claimants in the settlement areas, and who is responsible if people get hit by a parang. Nor did it say what we should do with land tax collection. We have decided to collect it on the basis of the initial claim. Those who returned to their claim, received a project home yard and still use it, or whose land was consolidated have to pay. Those who have lost their claims to the settlement area don’t pay anything now, because they derive no income from the land. Until now we have managed in this way. But the pressure from above to increase tax collection and realize new targets is increasing.’

The general picture in this TU is consistent with the pattern found in the other areas mentioned above: farmers returning to their initial land claims, pressure put upon the settlers, and a generally tense and conflictive atmosphere in which people themselves will have to find solutions for the land conflicts created by PIADP.

Tertiary unit R2

TU R2 hardly differs from earlier cases. Land is worked in accordance with the pre-project claim boundaries. As related above, only a small part of the TU can actually be irrigated. Clarity about the status of the land after the project (all farmers having returned to their claims), malfunctioning of the irrigation system and the booming in lowland Luwu of cocoa and citrus have greatly stimulated land use in this TU. Farmers who had started planting their land with perennial crops some years ago, now own a productive citrus garden. Research on recent developments and conditions in the settlement area shows that little is left of the PIADP settlement programme. Fifty home yards had been established here on redistributed land. Twelve settler families have been able to settle their conflicts with the claimant by paying compensation in money. Two settlers have exchanged land with the claimant of the land to solve their conflicts. Thirty formal owners have left their yards,

leaving behind sanitary units and, sometimes, perennial crops. The status of six other cases did not become clear.

Developments in R2 show how land conflicts and project intervention can easily become mixed up with village politics. Close kin of the village head of Salu Pao, belonging to the Seriti village elite, claimed more than three hectares of land in TU R2. After long negotiations in 1990 the claimant had agreed to a solution in which part of this land was turned into home yards for the settlement programme, and another part registered on the name of the claimants. After termination of PIADP, when the village head had publicly announced to be in favour of a general return to the initial claim boundaries, this claimant started looking for a middle course between the extremes of doing nothing on the one hand, and reclaiming all land on the other. Rather than threatening the settlers on his land or directly throwing them off he proposed them to become sharecroppers of a citrus fruit garden to be established on his land claim. When a village elder heard about these plans, he put pressure on the settlers not to accept the proposal and not to move from their land either. After the settlers had rejected the claimant's proposal the situation escalated. They were threatened and pressured to move their house. In the end, the settlers left their home yards behind.

Tertiary unit R3

Village heads and hamlet heads are in a difficult position. On the one hand they are instruments of government policy at the lowest level of administration, on the other they are part of a village society in which they need to retain a degree of credibility. Lukas is the hamlet leader of one of the new settlements created in TU R3. The settlement became a hamlet of Salu Pao. R3 was one of the TUs in which the BPN fieldworkers tried to introduce a more negotiated approach to land reform. However, some years later the TU is not free from conflicts. After project termination, many farmers have returned to their claims in the settlement areas. Lukas:

'Since termination of the project I have been almost continually engaged in attempts to solve problems, to prevent conflicts from escalating, to bring people together and make them negotiate a way out of their problems. In the end, all farmers have returned to their initial claims. The project boundaries do not have any relevance here. When the project ended, the conflicts in Sinangkala were still raging. The people here had long been in doubt about what to do. When they saw what happened in Sinangkala, they did the same: returning to their initial claims. But there is one big difference between Sinangkala and this place: While things could easily escalate over there, the situation here remained more or less under control. Rather than people fully going their own way, taking their own decisions and taking the law in their own hands, they came to me and asked what they should do. Honestly, if they really wanted to return to their initial claim I did not have the courage. Nor did I feel justified to say "no". But neither did I want to take full responsibility for the risks involved if all people would massively return to their initial claim. Many people came here several times saying they intended to reclaim their land. I always said "we must first negotiate compensation or other solutions".'

More and more farmers took the decision to consult Lukas about what to do: respect the project boundaries or go back to their initial claims:

'The first case in the settlement area was between Simon and Amir. Simon had received a home yard and a house, but was disturbed by Amir, who had lost his land claim. Amir had threatened several times to move Simon's house. I suggested to Simon that he should offer payment of compensation. After long negotiations they agreed to settle the conflict by payment of compensation. Simon paid Rp. 700,000 for 0.25 hectare, to be paid off in three agricultural seasons. There was another affair that almost escalated. A farmer named Benyamin paid one million Rupiah to Habel. But there were other interests behind this case. A relative of Habel had incurred a debt for a death ritual and was in urgent need of money. He had incited Habel to disturb Benyamin's home yard and demand compensation. Indeed, Habel started disturbing him in a very aggressive

way. It almost escalated into violence. I severely reprimanded him for his irresponsible behaviour but I could not forbid him to demand one million Rupiah in compensation, nor to lend part of that money to his relative badly in need of it as a consequence of a death ritual.’

Some cases of compensation involve compensation with land:

Marthen received a home yard in R3, but was continually disturbed by the initial claimant. After a long period of rising tensions and threats, at last the hamlet head had been able to convince the parties of the necessity of negotiating a solution. Initially, the claimant was not willing to receive any form of compensation. Later, he demanded an amount of money the settler was not able to pay. After long and difficult negotiations with the help of the hamlet head, another solution was reached: the claimant accepted compensation for his 0.25 hectare of land with another plot of land of the same size, to be split off from Marthen’s own land claim.

Another case of a settler family forced to move also involved payment of compensation by the initial claimant for trees planted by the settler:

Recently Baria moved from the home yard she had received from the project, back to her own initial claim. She had long been disturbed by Yothan. When she left the home yard, the cocoa she had planted there in 1991 was already productive. Baria easily reached agreement about the cocoa garden with the claimant of the land: she received Rp. 400,000 as compensation for the cocoa trees on the land.

Some claimants in R3 sold their land claim to outsiders (that is: people not related to earlier land allocation by the project). This further complicated matters for local administrators:

Pither sold 0.25 hectare of his land claim, which had been redistributed by the project and was now formally owned by other farmers, to Luther for Rp. 500,000. The buyer insisted on having a document from the village administration that could be used as proof of the land transaction. Thus, the hamlet head had written a letter confirming that Pither had indeed claimed land on the location of the land to be sold, and had sold the claim. The attitude of the subdistrict head after termination of PIADP had been ambivalent in such cases. According to the hamlet head, the camat had once even said about such changes that radically contradict the formal pattern of land distribution stated in the SK: “if these people really claim the land, why should we forbid them to sell it?” A neighbouring claimant later sold his claim to the same buyer. After these land transactions, that followed the claim boundaries rather than the formally recognized ones, more transactions followed. Another farmer sold his 0.5 hectare plot of land (the existence of which was widely recognized but had never been included in the inventory) for Rp. 3.5 million. The hamlet head is keen on signing declarations of payment of compensation or land purchases as *tokoh masyarakat* (village elder) rather than as hamlet head. He is afraid that involvement in such agreements in his function as an administrative hamlet head might easily be used against him in case of future conflicts about the status of redistributed land.

The village head only plays a small role in day-to-day dealing with land conflicts. Many cases that were supposed to have been ‘solved’ by the village head burst out again. Lukas, the hamlet head: ‘many people say they agree to a solution proposed by the village head, but don’t do so wholeheartedly. They only don’t dare to openly reject it.’ There is no village-level administration of land cases and the solutions reached between parties involved. If a written agreement is made at all, only the parties involved have a copy of it. Privately, Lukas has a file of all agreements reached in his area that he knows of. As a hamlet head, he administrates land tax payment. He collects the money on the basis of area claimed, but reports up in accordance with the formal ownership data.

The situation in R3 seems to be less tense than in other TUs.⁹ Payment of compensation tends to be effective and more widely accepted. Such cases will not easily explode again. In the future, according to the hamlet head, problems will only be solved in one of the following ways: payment of compensation in money or land, or moving out. There is a difference between R3 and R2: in the latter, hardly any negotiations take place or compromises are reached. While in R3 people actively seek for or accept mediation by the hamlet head, in R2 people tend to go their own way. Payment of compensation is not a frequently sought way out there. The most common solution in R2, according to Lukas, is *usir pindah* (being thrown out and move). As a consequence of this, many more houses have disappeared from the settlement area in R2 than in R3.

Tertiary unit R4

Negotiations about PIADP had been most intensive in this TU. When PIADP was terminated, prospects were better here than in other TUs. After project termination, the village administration had regularly complained to the subdistrict and district administrations that BPN had not finished its job and left local administrators behind with the conflicts. In reaction to this pressure, BPN had made a rather simplistic plan for rapid finalization of land titling. The core idea was a complete re-survey and re-allocation of land, based on the principle of a ten per cent reduction of the area of each claim for the settlement area and land with public functions. BPN had made a new map on the drawing table, and started staking out plots in the field. However, there were some problems. First, implementation meant that boundaries of existing claims would have to be changed again to create space for the farmers who had claimed land in the settlement area. In addition, the redrawing of the map had been a rather arbitrary process. Some claims had lost much more than others of the same size, and the map had been redrawn in such a way that even some land was left. This land, more than one hectare, had suddenly been registered on the names of two BPN surveyors. They had told to farmers that they had enough plots for the whole population and even some 'leftovers' they could not use any more. A little later one of them had even tried to exchange the land for a buffalo. After the village head had threatened them with a legal procedure, they gave up attempts to appropriate the land. These new affairs had enraged the village head and the farmers. Especially farmers who had claimed land in the settlement area had been completely left out of the new BPN plans. Not knowing where to go and having little faith in the latest BPN 'solution', a number of them had lost patience and started returning to their initial claims. The village head had long been able to keep his population from returning to their old claims. However, developments in Sinangkala and the latest performance of BPN had been decisive. Yet, there was not a direct massive pressure on the settlement area in R4 (Katonan Tanah; see map 3) and movement of settlers away from the home yards. According to the village head, this can be attributed to the fact that implementation of R4 had, to a large extent, been based on extensive discussions with the population. This in sharp contrast to Sinangkala, where decisions of the programme and implementation of the results had been enforced upon the population. Hence, the people in Sinangkala had been more receptive to local leaders who had the intention to obstruct the programme. Though the situation was difficult, some degree of control continued to exist, according to the village head.

⁹ Conflicts about 12 out of 58 yards were solved by compensation payment (Rp. 600,000-700,000 per 0.25 ha.). Some settlers had to come to an agreement with three claimants. Sometimes, the settler was given the chance to pay off his debt to the claimant in three agricultural seasons. Twenty-five settler families were not disturbed, usually because their yard is located on their own land claim or that of close kin, with whom they can more easily reach an agreement. Thirteen families have moved their houses and left the land. Conflicts about the remaining 8 yards are still going on. These cases might still be solved through payment of compensation.

Though tensions did not rise as high as in Sinangkala, later visits to TU R4 make clear that the same processes were at work here as in all other settlement areas. Farmers returning to their initial claims were becoming a threat to the settlement areas. There is little evidence of farmers actively looking for alternative solutions to their land problems (compensation with land or money), though compensation payment occurred on a very small scale. Sometimes the village head witnesses such cases. However, most cases are settled among the parties. Usually, such agreements have an exclusively oral character. The village head does not accept 'agreements' reached by intimidation. However, he admits that the consequence of this is not so much that such methods do not occur but rather that he does not know about them. The cases mentioned by the village head make one thing clear: the tides have turned against the receivers of project land and in favour of the initial claimants. In a recent case, the receiver of a home yard decided to give it back to the claimant, who did not pay compensation for the tree crops on the land. Some claimants are not willing to accept any compensation in money, usually because they have no other land. In one such case, a claimant chased away four receivers of a home yard on her land claim.

Most ownership titles for agricultural land and home yards have been handed out to the formal owners. Notwithstanding later activities by BPN, titles are based on the PIADP allocation plan. In the meantime, even public facilities have come under pressure. Claimants have gradually reclaimed the central village court and started cultivating it. They even intended to plant it with cocoa. However, in negotiations with the village head, the parties have agreed that the claimants will only cultivate seasonal crops on the land. The planting of perennials would further complicate the issue and give the act of reclaiming village land a definitive and irreversible character.

A hamlet head sketches a pessimistic picture of life in the village after PIADP:

'The farmers in this village have a double problem. First, we are all influenced by the land conflicts. Some because they cannot stay on their home yard, others because they lost their land to the settlement. Second, we live in one of the worst places of the Pompengan area. Irrigation does not function as it should, and parts of the land are too marshy to be cultivated. As before the project, farmers in this village can hardly use their land. Hence, they are largely dependent on seasonal labour outside the village, like harvesting rice in Lamasi. The combination of these drawbacks is too much for the people. As to the land redistribution, the situation is tense. All people have returned, or are intending to return, to their initial claims. They all try to get back their land. One more fanatically than another, but without exception. Pressure on the settlers has increased during the last few years, and more than twenty houses have already been moved. About half of these houses have disappeared from the village. Others have found a place inside the village. Payment of compensation usually takes place without us knowing about it. There is hardly any written proof of arrangements between settlers and claimants. I have my doubts about this tendency. In the first place, it goes against the rules of the project land redistribution. Second, payment of compensation on the basis of the initial claims makes any future reallocation of land impossible. That means that, in the long term, we will have to give up the settlement area. One conflict will generate another one: a chain reaction of people returning to their claims. We cannot stop it, and we will have to cope with the problem and its consequences ourselves, in this village. Don't hope for support from outside. Actually, if the people have a problem they do not like any outside interference. Having to go to the subdistrict office or appear at the district court takes much time and is very costly.'

In the R4 settlement area, about forty of the one hundred home yards created by the settlement programme were empty. At least fifteen settlers had sold their houses. Many other settlers were still under pressure, or negotiating with claimants. Fifteen cases had been settled by payment of compensation (in six cases of which the claimant was compensated with a parcel of agricultural land outside the settlement area). All settlers who had paid compensation in one form or another confirmed that, after reaching an agreement, their problems had been solved: they were no longer harassed by the claimants. As an expression of their faith in compensation payment, several settlers had planted their home yards with cocoa trees after reaching an agreement.

The situation in Salu Jambu and Rongkong in the late nineties shows how strong the initial claim boundaries were, even outside the conflict-ridden areas of Sinangkala and Seriti. In Salu Jambu the boundaries had never been changed. In the Rongkong area, where a smaller and less oppressive selection team could experiment with more flexible and dialogical approaches, the return of farmers to their initial claims is as massive as in the other areas. At least in some of the Rongkong TUs, the changed attitude of the BPN fieldworkers towards the land redistribution process had created a small basis for negotiations about land conflict.

5. The heritage of PIADP: coping with land conflict and tenure insecurity

This chapter concluded the part on irrigation development, land reform and settlement in PIP and PIADP. I have analyzed the long-term impact of PIADP in the wider context of the history of settlement and land use, and project intervention. A major objective was to inquire into the ways in which individual and institutional actors have coped with the conflictive situation created by PIADP and left behind after its termination in 1992. These specific ways of coping with massive land conflicts may also lead to a greater understanding of the role and force of the type of legal regulation of land rights introduced and imposed by PIADP. In this section I present a number of conclusions pertaining to the issues raised above, with a focus on the long-term processes observed in the settlement areas. General conclusions about the role of law in development as an instrument for regulation of land tenure in PIADP, and about this type of land conflict in a legally plural setting characterized by articulations of BAL, project law, local law and self-regulation will be presented in the next, concluding, section.

Project termination was followed by a gradual but definite trend of farmers affected by PIADP returning to their initial, pre-project land claims. This meant, above all, a growing gap between formally recognized landownership laid down in allocation plans and decisions (SK) and land titles (but also derived administrative routines like collection of the PBB tax and the IPEP irrigation service fee) on one hand, and the field reality of land tenure on the other. This return to initial claims was relatively unproblematic in TUs without a settlement area. In TUs with a combined (planned) agricultural and settlement function, claimants who returned to their pre-project land put increasing pressure on the receivers of project home yards. This could take various forms like polite negotiations, harassment and threats, destruction of crops or borders, or re-occupation and ostentatious planting of the land by the claimant. Settlers were rarely left undisturbed by the initial claimants of their land. The cases discussed in this chapter have shown that the options for solution are limited: deals about payment of compensation in money or land by the formal owner to the initial claimant of the land (or by the claimant to the formal owner for perennial crops or other valuables and labour investments), settler families lifting their houses and moving out, or continued settler resistance against pressure by claimants.

Loss of relevance of the PIADP allocation plans, SKs, and land titles in favour of claim-based definitions of ownership meant that important decisions about land (e.g. inheritance, sale, land use by others) were increasingly taken by the initial claimant on the basis of the claim boundary, with an open disregard for state-defined (project-defined) landownership and the rights of the new formal owner. As the Sinangkala case - the only large Pompengan case that ever entered the court - has made sufficiently clear: 'winning in court' does not automatically mean 'winning in the field'. Some way or another, farmers, officials and administrators had to cope with the complex situation related to this field of tension between formal rights based on state regulation and project law, and actual control based on local definitions of rights, self-regulation or power.

Farmers affected by PIADP did so in a variety of ways. First, throughout the area many farmers gave in to threats and harassment by claimants and moved out. Claimants were often not willing to accept compensation, nor formal owners to pay it. Often, no agreement was reached about the amount or form of compensation. Houses were pulled down, moved or sold. Other facilities were left behind on the former home yards without becoming a topic for negotiations between the parties. Sometimes, settler and claimant negotiated the value of perennial crops like cocoa. Some claimants paid compensation for perennials left behind by the settler. Usually, such agreement could not be reached; many settlers destroyed their crops before leaving the yard. Second, in all settlement areas there are cases of formal owners and claimants negotiating compensation for the land itself. Basically, two forms of compensation were found: in money or in land (the former being more common). There are relatively few cases of conflict solution by payment of compensation. However, payment is a guarantee for tenure security: once it has been paid, the conflict tends to have been really solved. Compensation payment may be a complex affair if project home yards overlap with more than one claim. If the parties did not reach agreement, moving out was usually the consequence. Sometimes, formal owners of a home yard compensated claimants of the land with another piece of land outside the settlement area. Third, some settlers refused to bow to the demands and threats of claimants. These cases have the greatest future potential for violence. Finally, farmers who had received a home yard on their own claim, or on land of kin or friends (many settlers had managed to reach such solutions during land allocation), were in a relatively secure position. Staying on your own land is the best guarantee for tenure security, followed by living on land of kin and payment of compensation to the claimant. Possession of a formal ownership title is not a relevant factor.

Sometimes a third party, which can mediate and witness agreements, or at least stimulate parties to enter into negotiations, was involved. Village heads, hamlet heads, informal leaders and village elders played a role in conflict solution. The role these people play depends on their position in the village, and their own involvement and interests in land issues related to former PIADP. In some villages, hamlet or village heads could play a positive role. However, there is a clear reserve on the part of village functionaries, keenly aware of the dangers involved in attempts at conflict solution, which entail deviations from formal government decisions. They tend to make sure that their role remains low profile to avoid conflicts with the higher authorities, whose formal decisions they should represent in the village. They keep no administration of land cases solved by compensation or by other means, or do so privately only. Informal leaders and village elders have a little bit more room for manoeuvre, as they are not subject to the dilemma that haunts government servants.

For farmers engaged in a land conflict, the state legal option (e.g. going to court) is the least attractive. Most farmers are understandably afraid of distant, unknown, costly, time-consuming procedures, the outcome of which is far from certain. A complaint lodged by the claimant will probably be dismissed. However, the tides seem to be turning against PIADP title holders; there was a gradual tendency away from decision-making purely on the basis of formal ownership rights towards consideration of other factors, primarily the strength of the claim and the general trend for farmers to return to their initial claim). Most claimants can have their way by other means. If a formal owner goes to court, he or she will probably win the case on the basis of a proof of formal ownership, but then be confronted with the difference between winning in court and winning in the field. The claimant will continue to reclaim the land by harassing the formal owner, often with success. For formal owners who were smuggled into the project through dubious land registration and selection and have no initial claim to return to, the state legal option may be the only one left.

Government agencies and administrative units above the village level have, generally speaking, refrained from active intervention in land conflicts and enforcement of formal ownership rights on the basis of earlier regulation and decision-making arising from project intervention. Even though

project decisions on the basis of the land policy document, laid down in allocation plans, SKs and land titles, had been corroborated by the verdicts of the various courts in the Sinangkala case of Kelompok 88, there was no great enthusiasm for their active enforcement in the post-project period. After the demise of the special team for conflict solution, BPN was interested in chasing land-titling targets rather than in quality of the titling process. Only when pressed to continue its work by local administrators who had to cope with the conflicts, BPN made another half-hearted attempt to intervene in land tenure. However, it did so no longer on the basis of earlier project decisions. Provoking much protest, these attempts (and the discretion left to implementing surveyors to use another reshuffle of land claims for their private interests) were bound to fail. Since then, BPN has given up all attempts to be involved in regulation of land tenure in former PIADP.

The village and subdistrict administrations could also be expected to play a key role in solving land conflicts within their administrative boundaries. To start with the latter, this chapter has shown that the role of the subdistrict administration was very limited at best. Though it has been directly involved in solving a small number of PIADP cases, the large majority of land conflict cases referred by villages to the subdistrict were referred back to the village without having been paid serious attention to. The subdistrict administration took an ambivalent position. It was torn between the need to support, enforce and maintain district government decisions based on the PIADP land policy on the one hand, and its own pressing need to reduce tensions among the population and avoid further escalation into violence by solving land conflicts on the other. While the former was bound to cause more land conflicts, the latter would entail deviations from formal government regulation and decision-making, with possibly serious consequences for the officials involved.

To cope with this dilemma, at least formally the attitude of the subdistrict administration was firmly in support of government decisions. In practice, it actively stimulated local administrators to try and reach compromises between parties by any means. While the formal stance excluded the possibility of deviating from government decisions pertaining to land, the more practical stance for internal use required such deviations. It stimulated farmers to return to their initial claims, to pay compensation for land they formally owned, to pay compensation to claimants for harvest income losses, or to formal owners of home yards for perennials lost by leaving their land. This fear of going against formal decisions of the district administration also explains the low profile character of subdistrict involvement in conflict solution. Any sign of formal involvement by reporting or formal approbation of agreements that violated the SK was avoided. Thus, coping with the long-term impact of the programme demanded a high degree of self-regulating capacity of the other actors involved (e.g. farmers affected by the project, local leaders, village elders).

The effects of this massive return to initial land claims are ambiguous. The boundaries of initial land claims have proved more stable and relevant in social interaction between claimants than those of the redistributed agricultural plots and home yards. Rights defined on the basis of initial land claims are stronger than those defined by project decisions and land titles. In a situation where the farmers had little to expect from state regulations in terms of protection of their tenure security, such local conceptions of legitimate ownership have provided effective protection against forms of speculation caused by project intervention. Take, for instance, the fake claimants. Many of them had slipped in through the inventories and the selection process of PIADP. The majority of farmers were not in a position to influence the key processes, relationships and forums for decision-making involved in project implementation. After project termination, the initial claimants of the land pushed out many people who had received land from the project on the basis of a fake claim.

However, this did not happen in all cases. Both in the Sinangkala and Seriti areas some people in local power positions managed to retain control over the land allocated to them by PIADP. Some of these people (e.g. in Sinangkala) have even been able to strengthen their economic position. It is in their interest to continue to support the formal land allocation decisions and to assert the legal

validity of the land titles handed out by BPN. The return of farmers to their initial claims is in the advantage of the powerful in society in two ways. First, larger claimants like the leaders of kelompok 88, some of them with speculative interests in land, have supported or even actively stimulated this development, simply because it was in their own interest. However, it must be added that redistribution of land by changing the claim boundaries had a very weak support among farmers throughout the project area. Therefore, these developments should not be simply interpreted as the outcome of power play by a landowning elite. They are also more directly related to a set of local principles, norms, and ideas about land tenure. These are based in part on customary notions of land tenure, which tend to stress the importance of investments of time, labour and other resources in land. Second, attempts by PIADP to increase the landownership of small claimants or, in some cases even landless farmers, has totally failed.

'Back to normal' meant a gradual return to the pre-project claim boundaries and land tenure relationships. This process meant the final demise of the legal-administrative symbols of the land redistribution programme: land allocation plans, allocation decisions, and landownership title documents. Second, it marked the beginning of a new period of withdrawal of state involvement in land registration and titling in the area. Finally, it meant nothing less than a huge destruction of capital, time and labour invested in the land reform programme and the facilities on the home yards of the settlement programme. Many years after termination of PIADP, the farmers affected by PIADP and a diversity of government agencies and administrators involved are still struggling with the tensions, uncertainties and insecurities caused by the programme. By their specific ways of coping with the effects of intervention in land tenure, together they create another layer of unregistered and untitled rights to land in the Pompengan area. Back to the early eighties, back to normal, as if nothing has happened after all. But at least the farmers know better.

6. PIADP: ambitions of legal regulation, growing complexity and human agency

Growing ambitions, increasing complexity

In this case study on land reform and settlement in PIADP (chapters 4 to 6) I have analyzed the history of project intervention, its long-term effects upon land tenure and the ways in which various actors cope with the conflicts and tensions generated by the programme. As I have shown, the long-term outcome of intervention in land tenure in PIADP comes dangerously close to the exact opposite of the project objectives that were the product of the Dutch socio-legal engineering ambitions. PIADP left behind a greater and more widespread insecurity of tenure than had existed before. It created a new layer of claims and formal rights, competing with existing claims to land based on historically developed local definitions of land rights. Due to PIADP, land registration and titling - the absence of which had, at least before PIADP, been a problem of planners and officials rather than the people claiming land - had now become a *real* problem for farmers, administrators and officials alike. The gap between formally allocated land titles (as recorded in project lists of beneficiaries, on project maps, and in title documents) and actual control of land had become a major threat to the long-term tenure security of claimants and formal titleholders. Especially in the settlement areas, land conflicts uprooted the lives of initial claimants and settler families many years after PIADP. The conflicts and doubts on the part of regional administration and government agencies about how to cope with them, created serious administrative problems in the many cases of conflict, land transactions, payment of land tax, and collection of irrigation service fee. Experience with PIADP has shaped farmer perceptions of state intervention in land tenure in such a way as to

create an even greater distance between the population and BPN than before the project. Conflict solution is primarily an informal process, from which formal state institutions like the local and regional administrations and BPN are almost entirely absent. There is no legal enforcement of decisions pertaining to land taken in the project period. Farmers involved in land conflicts, in their turn, avoid going to court, afraid as they are of endless procedures with an uncertain outcome and little meaning in the real-life struggle for control over land.

The relationship between policy intentions and outcome is an elusive one, and not as straight and unidirectional as believers in the rationality of development would have us believe. Mosse (2003: 43) even suggests that policy theories and project models function as legitimizing ideas, even if they do not direct action. Whatever may be the case, in this concluding part it is not my intention to stand and gaze in amazement at this huge gap between policy and practice, but to explain and understand it in terms of the processes and context of intervention. A focus on agency and (legal) complexity can contribute to such an understanding. I will make some final remarks here about the normative and legal dimensions of the PIADP interventions in land tenure and settlement, and relate these to the field of actors and the ways in which they used various definitions of rights to land as a weapon in their struggle to acquire new land or retain control over their initial claims.

The shift from a construction focus in PIP to a socio-legal engineering focus in PIADP had paved the way for an ambitious donor-driven programme for land redistribution, titling and farmer settlement. This was the outcome of a number of developments in the project as well as in the wider development policy environment: unclear land tenure, changing approaches to development (and, hence, criteria for success and failure), and a (related) trend towards greater social scientific consultancy input. With this shift in general focus, plans for intervention in area B became more sensitive to the poverty dimensions of development, the relationship between rural poverty, agrarian relations and land tenure, and the issue of tenure security. Thus, planning for PIADP was increasingly driven by a political agenda for intervention in land tenure, with land redistribution to the poor and landless, farmer settlement, and creation of security of tenure as its focal points. As project extension came near and much funding was still available, land reform and settlement had become inevitable, even though there had been serious doubts about engaging in these activities. Intervention in land tenure was primarily a Dutch policy priority. The Indonesians took a macro-economic approach to irrigation development in PIADP: it was just part of the higher objective of increasing the national food production through large-scale investments in irrigation infrastructure.

As I have stressed in chapter 4, the plans for land reform and settlement had emerged from a gradual realization on the part of Dutch consultants of the enormous complexities of engaging in irrigation development in the downstream part of the project area. Paradoxically, this awareness of the need to cope with such complexities was translated into even more complex plans for future involvement. The regulatory ambitions of the social engineers were boundless, and based on an infinite trust in the possibility of exerting control, of having regulatory options to choose between, of determining when to use the carrot and when the stick. Intervention in land tenure in PIADP was also based on an instrumental view of law and on assumptions of law as an effective instrument for controlling and steering human behaviour in the direction of the general policy lines and project objectives. The instrument created to this purpose was the PIADP project law (see chapter 4).

When land reform and settlement had become accepted as options for development of area B, the modes of planning for the 'integrated' project became increasingly inward-oriented and self-referring (see Roth, 1994; Quarles van Ufford and Roth, 2003). Absolute primacy was given to the production of policy outlines and project planning documents that should establish the image of efficient, target-oriented planning (e.g. PIP, 1985a; PIADP, 1986c, 1987a, 1987b). The plans and implementation routines for PIADP had been conceptualized in almost complete isolation from their historical, socio-cultural, political-administrative and institutional context. The first socio-

economic survey - for the Sinangkala area - appeared in 1986. A survey for the other areas of implementation appeared in 1989, more than two years after determination of the development plans for these areas (see PIADP, 1986b, 1989a). This mushrooming of regulatory ambitions and assumptions of controlled change coincided with a growing preoccupation with quantitative targets typically belonging to a project managerial culture. Quarles van Ufford et al. (2003) argue that types of development with such a highly managerial focus are basically a-historic, aside from their self-created histories of project cycles. But even these tend to be exclusively oriented to an assumedly manageable future rather than linking past experiences with future plans. PIADP had no history, but its future was already there: in time frames, budgets and quantitative targets. In the process, the socially and politically sensitive issue of land redistribution had been transformed into a primarily technical and administrative routine (Roth, 1994).

Legal complexity and land tenure

PIADP project law was a translation of general moral and normative notions of development into a regulatory framework for project intervention. It made PIADP legally enforceable and formed the legal basis for decision-making about rights to land, and allocation of land and project facilities. An instrumental use of project law as a basis for implementation fitted in perfectly well with its managerial preoccupations. It boosted the image of efficiency, effective control over existing conditions, processes and target groups. It created legitimacy for project implementation towards the donor - and receiving governments, and served as a basis for justification of project decisions about allocation of land and project facilities, about inclusion of some and exclusion of others. Last but not least, it was the perfect counterpart of development in providing the legal dimensions of project teleology: projecting the normative 'ought' into the future, in complete isolation from the empirical 'is' (see Cotterrell, 1992; Spiertz, 2000). Intervention in land tenure was not only a dream of Dutch planners and Indonesian administrators but a 'legal fact' even before its implementation.

PIADP project law consisted of project-specific regulation (allocation of land and project goods, priority categories of beneficiaries, etc.) combined with elements of BAL (especially on the social function of land, redistribution of excess land, tenure security and absentee ownership). After the political unrest in the sixties, land redistribution had become a taboo in Indonesian politics. Hence, its articles in BAL and later regulations had been shelved. Since the sixties, there had been no experience with processes of land redistribution and there was little commitment to it. PIADP was one of the few New Order experiences with land redistribution. The creation of PIADP project law was an interesting experiment with the revitalization of the national land reform law. However, there were also important differences between BAL and project law, especially in the definition of maximum landownership and compensation for loss of land in excess of the maximum size (see chapter 4). Though land tenure in PIADP was fully regulated by project law, especially on the point of the upper limit of landownership BAL continued to be a legally relevant factor (see also below).

Local customary (adat) notions of land rights played a role as well. Not so much as a discrete and easily discernible 'traditional' legal system, but rather as more or less institutionalized local rules and practices pertaining to land tenure that had developed in a social context characterized by rapid change, migration by groups from different areas of origin, and processes of individualization and commercialization of land tenure. Since long, these had exerted their influence on land tenure. However, changes in the conceptualization of, and societal value given to, land tenure had largely taken place outside the legal framework of the state. In a context in which monetary land transactions were common, control of land by adat institutions had largely disappeared, and all land had the formal status of state land, farmers claimed rights that were, at least in their own eyes, as

strong as formal, state-recognized ownership. Such rights were, in most cases, based on the labour and other resources they had invested in land clearing and development, or on such investments by the person from whom they had received the land. In a local context in which land registration and titling by the state had hardly played a role in the past, few farmers looked to the state for formal recognition of their rights to land. Land conflicts did, of course, occur in the pre-project period, uncertainty about precise boundaries was quite common, and cheating and power play were also part of the game. However, strong norms existed that stressed the importance of respecting each other's land clearing boundaries, bunds, crops and other evidence of land use and investments. Thus, the boundaries of parcels of land created in the process of clearing and development were generally seen as a relatively reliable source of tenure security. Though the government had played a role in initiating (re-)settlement schemes in the area, land tenure was characterized by a high degree of self-regulatory capacity on the basis of a set of norms with a partly customary character. Aside from rights to land based on such customary norms, other, specifically local, types of rights to land had been created, such as the 'honorary' land for people with merits in the period of refugee settlement and DI/TII.

Thus, normative-legal complexity was a major characteristic of the context of PIADP, creating both constraints and uncertainty about rights to land as well as opportunities for the strategic use of various sources of legitimacy in 'shopping' behaviour (K. von Benda-Beckmann, 1981; Meinen-Dick and Pradhan, 2001). Such normative complexity also influenced other important dimensions of human life related to other social (security) functions of land tenure. Implementation of the land reform programme required the 'delinking' (Wood, 1985b: 13) of farmers from their social and kinship networks with their concomitant commitments and obligations, and the establishment of completely new relationships pertaining to land tenure between a state agency and individual farmers as (usually male) 'household heads'. Thus, for instance, the land redistribution programme also clashed with norms pertaining to inheritance of land. The bilateral inheritance pattern of both the (Islamic) lowland Luwu and (Christian) Toraja populations allows for inheritance of land by women. However, even for land registered in the claim inventories on the name of a female spouse or daughter, the selection process was biased towards recognition of land claims on the name of the male, even if registration on the name of the female was not a 'trick' by the claimant to keep the land but a true representation of the origin of the land right.

Law, land and agency

In chapter 1 I have pointed out the relevance of actor-oriented sociology and use of the concept of 'agency' in analyses of the relationship between law and behaviour in legally complex societies (see K. von Benda-Beckmann, 1981; Long, 1992). Agency was a crucial factor in the story of PIADP in general, and in land tenure issues in particular. The specific history of pre-project state intervention in the area, combined with other contextual factors and the modalities of intervention of PIP and PIADP were conducive to radical transformations of development policies and project plans under the influence of a variety of actors: consultants, officials and administrators at various levels, and farmers affected by the project. All had, at least to some degree, the capacity to cope with the tensions and contradictions of PIADP and pursue their own interests through their own strategies, choices and actions. The outcome of the programme was the positive sum of an intricate interplay of actors rather than the 'failed' implementation of a predetermined course of action. Much more could be said about PIADP as an arena of individual and institutional actors. I will concentrate here on a number of outstanding points pertaining to the use of law. What was the role of law in struggles about land and project facilities, both during and after project implementation? How did

project actors use law to create a basis of legitimacy for specific policy agendas, claims, and choices for particular types of action and behaviour?

As discussed above, three major sources of regulation played a role in the struggles about land in the area of PIADP: project law, BAL, and customary norms and principles pertaining to land tenure. Project law had been conceptualized (mainly by Dutch consultants) to make a strictly controlled land allocation possible, and to prevent speculation from occurring on a large scale. Generally, there was a firm belief in the feasibility of such regulation as an instrument for control of land tenure. At the same time, project law had much to do with representation of the project and its implementing consultants and Indonesian government agencies. It showed that efficient and effective solutions to the problems of irrigation development, coupled to clear quantitative targets, were in the making under a more socially sensitive project set-up. If the canals, dikes, and roads had been the symbolic capital of the civil engineers, PIADP project law was the symbolic capital of the social engineers.

Though project law regulated land tenure in PIADP, BAL remained a potential source of legitimacy for those who were aware of the differences between the two, mainly on the point of the allowable upper limit of landownership. Claimants of land, who knew the upper limit of ownership specified for Luwu in BAL, sometimes used this as an argument against redistribution of their land by the project. Thus, the degree to, and conditions under which either BAL or project law would be applicable to PIADP was a source of uncertainty to both claimants and officials of BPN, who would have to base their action and decisions in the field on either of the two. Sometimes, farmers openly disagreed to application of project law to their land claim, and demanded application of BAL. Though the Indonesian regulations formally allowed for deviation from the upper (and lower) limit of landownership for developmental purposes, BPN officials were not really eager to deal with such cases on the basis of project law. As I have shown in chapter 5, BAL continued buzzing around as a legal factor next to project law, to be used by anybody in whose interest it was to do so.

Customary notions and practices of land tenure, mainly the high value attached to land and plot boundaries created by one's own labour and other investments, played a largely hidden but very important role. Though very few people referred to customary law as a source of legitimacy of their claim during processes of registration and land redistribution, it was an important determinant factor of the behaviour of people affected by PIADP. They experienced existing boundaries as a source of tenure security, and externally imposed changes of these boundaries as a major threat to it. Even the reconsolidation programme (in which boundaries were adapted but the area owned did not change) was massively rejected. If enforcement in the redistribution areas was not strong or absent, farmers tended to prefer staying on their initial land claims. Farmers who received home yards tried to make deals with kin or friends who claimed land in the settlement areas rather than just accepting any land allocated by the project. Where claim boundaries had to be changed, neighbouring farmers often made agreements about the meaning they accorded to such boundaries in practice: they tolerated the boundary stakes placed by BPN, and were even willing to make a bund if project controls made that necessary. However, they also retained the boundary markers of their initial claims and continued working their land in accordance with the latter. Many farmers who received land from the project refused to start using it because they felt they did not have the right to do so. Thus, it was primarily in the relationship between regulation (by project law) and farmer behaviour (guided by customary norms and principles) that the social significance of project law and local norms and practices pertaining to land became manifest. As I have shown, the social significance of project law in terms of its influence on behaviour was low in the project period, and even further decreasing after that.

The capacity to use law as a weapon in struggles about land and, hence, the factor of agency itself, was closely related to the different power positions of actors in PIADP (Crook, 2001; Houtzager, 2001; Long, 1992; Starr and Collier, 1989). Those who were 'close to the fire' as a consequence of

their privileged position as district or subdistrict administrator, official, member of military or police, village head or member of a village elite, had a distinct advantage in using the legal-administrative process in their own interests. Power over and influence in the land inventories, selection meetings and decision-making on allocation of project facilities were a major asset. The land inventories were a primary instrument for gaining access to project land and facilities (see chapter 5). The relations of kin, identity, power, and interest between district -, subdistrict -, and local elites, between village heads and part of their populations, village administrators and surveyors, between military or police and local leaders, were an important determinant of later decision-making in the framework of PIADP. Thus, the ability of actors to influence the land inventory was a first step in the process of 'translation' of fake claims into formally recognized rights to land and facilities by making these claims fulfill the criteria for recognition by the project.

In the selection process, registered claims had to be turned into project-recognized land rights, with additional allocation of other facilities. Here, power positions came in handy again during the process of giving selection codes to the claimants identified by the inventories. The project rules for selection and allocation did not solve the problem of scarcity in land allocation. As I have argued in chapter 5, these rules were mainly used to legitimize decisions taken by the selection team in a rather haphazard way. Hidden agendas were the need to reduce the number of accepted claimants to make settlement possible, and the need on the part of representatives of village and subdistrict or government officials to represent fake claimants to whom land had been promised. This required a further reduction of the number of claimants that could be accepted as 'beneficiaries'. Often, this involved practices of labelling claimants as 'deserving' or 'undeserving', 'willing to follow the rules of the government' or 'greedy and unruly', claiming an area of land that is either 'too small' or 'too large' for project recognition, behaving 'like a communist', etc. (see Wood, 1985b). The power of representing certain interests or the certainty of being represented in the selection meetings made the difference for many people, not in the last place for officials themselves. Local administrators often used this power in the allocation and distribution of project facilities as well.

Though claimants of land in the area were terribly dependent on the people who were supposed to represent them in project matters, they were far from powerless. The 'beneficiaries' had been denied any form of agency in the first place. The blueprints of project implementation only knew 'participation', a project-orchestrated agenda for the use of farmer labour with positive image-building effects mainly for the outside institutional publics (the foreign donor, Indonesian government agencies). However, notwithstanding the strong project need for grateful 'model' beneficiaries, farmers affected by PIADP were basically demanding and 'unruly' (see de Vries, 1992). In Sinangkala, the showcase of PIADP and main location of the 'private projects' of officials and administrators, enforcement by police and army had still been relatively strong. In the other areas, the balance had changed. The farmers, who had to be lured into following project regulations, giving up part of their land, moving to another place, or accepting project decisions pertaining to allocation of facilities without the presence of strong enforcing powers, were quite aware of their strong position. Often, farmers made their compliance with project rules dependent on further negotiations about their demands for more land and project facilities. Thus, in practice, farmers rather than project officials held the carrot and the stick, and decided on the use of either of the two.

Several groups had been able to profit considerably from the land redistribution in Sinangkala: local elites, district and subdistrict officials and administrators, and the larger claimants of land in the area. Main losers were the claimants of smaller parcels of land redistributed to other farmers, claimants of land in the settlement areas, and claimants whose land was confiscated. Once they had joined forces in Kelompok 88, the dissatisfied claimants contested PIADP project law. According to them, it had been based on a government instruction in which the area had been wrongly declared 'free state land' (*tanah negara bebas*; not an official term but reminiscent of the colonial concept of

‘free domain’; see chapter 2, footnote 51). The government instruction had given district officials greater freedom to decide on the allocation of project land. But was it free? As the lawyer of the group had been right in stating, prior rights to the land had indeed existed. Unwitting of local conditions, the national authorities had simply assumed empty land. In their appetite for donor funding of the settlement plan, the district officials had done nothing to correct that assumption. In their ambition to play a more important role in project implementation, the consultants had let their decision-making be guided by images and opportunities in the donor world rather than by good research on land tenure and critical reflection on the feasibility of their plans. However, all court cases against PIADP were lost. Decisions made on the basis of project law proved to have some value, at least on paper and in court.

But what did such decisions mean in practice? The difference between winning in court and winning in the field is crucial here. Legal uncertainty and insecurity had characterized PIADP from the onset, even in Sinangkala where enforcement had been strongest. With no government agencies or administrative units actively enforcing the project decisions of land redistribution and settlement after PIADP had been stopped, a massive return to initial claim boundaries was the strongest guarantee for tenure security. In the nineties, this massive return to initial claims led to the expulsion of part of the fake claimants. Holding a PIADP land title became an increasingly weak guarantee of rights. Even in court, actual control over land on the basis of initial claims became part of the argumentation about rights to land. In the end, fake claimants (officials and administrators) themselves were about the only people in the project area who retained a distinct interest in upholding the project definition of legitimate ownership of land: the paper reality of SKs, allocation maps, and land title documents. As they had no initial land claim to return to, a project land title document was their only possible proof of legitimate ownership and chance of survival. Even then, the (local) power position of the persons involved (and, in some cases, the question whether there was a competing claim on the land involved) rather than the mere possession of a formal title document determined whether fake claimants were able to keep their land or not.

For local administrators, project law served many purposes during the project and in the post-project period. During implementation of PIADP, they could freely explore the opportunities created locally by PIADP, while publicly taking some cautionary distance by stating that, as administrators, they had no choice but enforcing project regulations. Village heads or subdistrict administrators who did not wish to get involved in the land conflicts that formed the heritage of PIADP, tended to refuse involvement in conflict solution with an appeal to existing decisions pertaining to landownership on the basis of project law. They stressed that, as local representatives of the government that had taken these decisions, they could not do anything but support them (be it in word rather than in deed), rather than actively engaging in forms of conflict solution of which the outcome would contradict formal government decisions.

The above remarks about the role of law as an instrument of regulation of land tenure put into perspective the image of legal regulation as an unambiguous and effective instrument of control in a development setting like PIADP. Project law was a headache for some, an opportunity or both at the same time for others. Whatever it may have meant for various actors, it did *not* do what it had been created for in the first place: making the ideals and ambitions of project law come true by changing land tenure. Such tensions between regulatory ambitions and the reality of land tenure could long be contained by the use of forms of representation and image management that suggested an unproblematic linear process from plans to field reality, and a one-to-one relationship between regulation and behaviour. Gradually, the real role of law in PIADP became painfully clear: it had become a major source of disorder, insecurity, tension and conflict.

Kertoraharjo: a Balinese settlement in Luwu

1. Entering a Balinese village world

The village of Lestari is located in North Luwu, along the main road to Central Sulawesi (see map 7). This part of the settlements along the road is still known by its Javanese name of Kowarasan (health), after the small clinic the Dutch established here in the colonial period. A strange name for the current settlement, a grubby complex of three hotels and bars annex brothels, mainly frequented by truckers. Turning east, one soon enters the expansive rice fields irrigated by the Kalaena system. The road passes through Purwosari, a Javanese village established in the sixties. After Purwosari, before entering the Toraja village of Patengko, another road turns south, and soon reaches the Balinese transmigrant village of Kertoraharjo. Balinese settlements can be easily recognized by the specific shape of the houses, temples and public meeting halls. The entrance gate to the village, the family temples surrounded by fragrant flowers on the premises and the large village temple with its sculptured gong tower convey the sensation of being in Bali. So do the groups of women on their way to a ceremony, carrying colorful trays of offerings on their heads, and the village priests in their white garments, their long hairs tied together in a bun. Beautiful *penyor* (decorated bamboo poles) erected at the entrances to all home yards along the axis road remind of the endlessly repeating cycles of ceremonies associated with Balinese Hinduism that are a crucial part of Balinese social and religious life.

Around the market place near the central field, Balinese youngsters have gathered in front of the ramshackle wooden shops and *warungs* (food shops). Sitting on their motorbikes or standing around in groups they chat and smoke, in the meantime trying to make up their mind about what to do this Saturday evening. Many of them start off with a meal of *bakso* (soup) in one of the Javanese-owned warungs mainly frequented by Balinese. Just behind the warungs is the local cinema, a huge shed-like wooden construction usually referred to as *gedung* ('the building'). The Balinese-owned cinema with its Indian movies attracts mainly Balinese youngsters. One hour before the movie begins, Indian film music is blown at full volume out of a creaking speaker. Boys and girls crowd around the cinema, the girls walking around in small groups, the boys showing off their motorbikes while making eyes at the *cewek* (girls) passing by. As the movie is about to start, the youngsters make up their mind whether to buy a ticket or not. Some stroll back to one of the shops to have a drink or bakso, chat, or watch television in one of the shops connected to a power generator. In the course of the evening some decide to ride to Kowarasan on their motorbikes to chat, drink, play cards or watch a *pilem biru* (blue movie).

In 1999, before the first general elections after the Suharto era, new electricity infrastructure is about to reach the village. As if to illustrate the fact that the impact of the crisis is not the same throughout Indonesia, the inhabitants of Kertoraharjo are massively investing in television sets, parabolic antennas, and laser disc players, in order to finally enjoy electricity and to be prepared for its expected arrival. Many invest in motorbikes, ploughs, and improvement or construction of houses and family temples. Most farmers had good rice harvests, sold at a reasonable price. The cocoa farmers are less satisfied,

spoilt as they are by the 1998 cocoa prices. The cinema owner is suffering his own small crisis: with electricity and televisions sets entering the village, the days of his enterprise are numbered. A friend from Bali had suggested him to turn it into a discotheque with loud dance music, drinks, spotlights and mirror balls. But that would probably have a bad influence on the village youths and lead to a conflict with the customary village. So there it stands as a lonely monument of progress in times of crisis.

This is the first of four chapters on the role of land and water resources in Kertoraharjo. In this chapter I focus on the history of settlement as experienced by the Balinese population of Kertoraharjo. The second section gives a general description of the village and its inhabitants. The third section focuses on the arrival of the Balinese and Javanese groups of settlers and the first period of land clearing and development. It also provides a description of major characteristics of the settlers. In the fourth section I will describe the wider area in which settlement took place and the competing claims to land resources between various settler groups. In the fifth section I will give an account of the way in which the settlement was spatially and organizationally defined and divided in the government administrative and Balinese cultural spheres. In the sixth section I will discuss the difficult process of unification of the heterogeneous Balinese population groups. The chapter ends with a short conclusion.

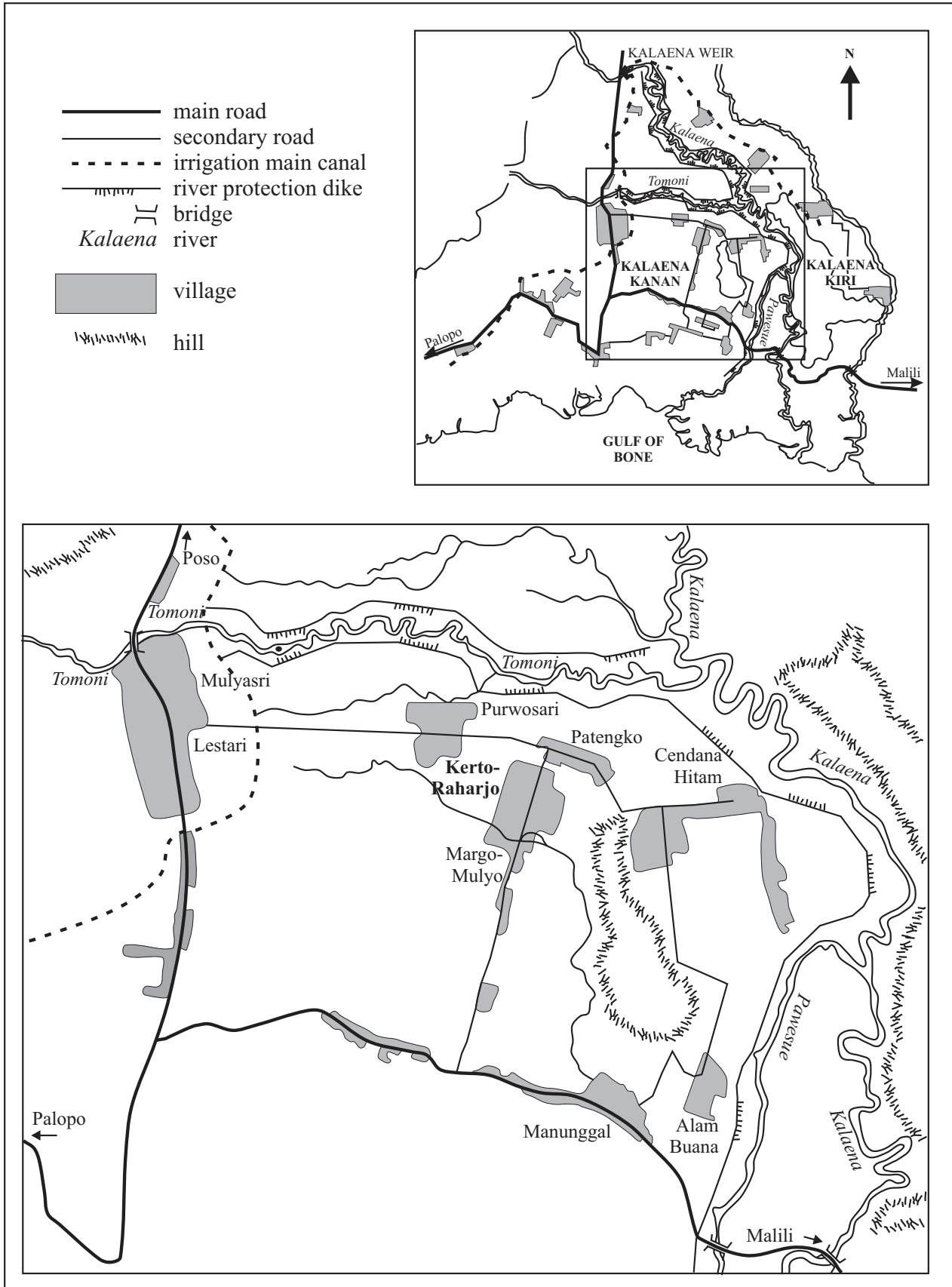
2. Kertoraharjo Village

Current Kertoraharjo is the northern part of the former transmigration settlement Kertoraharjo I. Five hundred transmigrant families from Bali and Java were resettled here by the government in 1972 and 1973. The village consists of a rectangular settlement block reminiscent of its planned layout. The main road forms the central axis, cutting across the village from North to South. Fourteen narrow lanes perpendicular to the road give access to the home yards, formerly allocated in square 0.25 hectare parcels. From the fourteenth lane onwards to the southern edge of former Kertoraharjo I, the settlement pattern changes from the block form into a pattern of ribbon settlement along the axis road, with part of the agricultural land directly adjoining to the home yards (see maps 7 and 8).

In 1986, the transmigration settlement was split up into two administrative villages: Kertoraharjo and Margomulyo. The boundary between the two villages cuts through the part of the settlement block located to the West of the axis road at the axis of the sixth lane. While the part North of the boundary belongs to Kertoraharjo, the part South of it now belongs to Margomulyo. The settlement block located East of the axis road belongs to Kertoraharjo. The central field (*lapangan*) of the old settlement, East of the axis road between the thirteenth and fourteenth lanes, still belongs to Kertoraharjo, as does the small market place, where a regionally rotating market is held every Monday and Friday. South of the small market shops, where settlement continues along the ribbon pattern, all home yards East and West of the road belong to Margomulyo. Agricultural land East of the road (formerly allocated as irrigated land) belongs to Kertoraharjo, while all land West of the road (allocated as rain-fed land) belongs to Margomulyo (see map 8).¹ Kertoraharjo borders on the villages of Patengko in the North, Cendana Hitam and Alam Buana in the East, Margomulyo and Manunggal in the South, and Purwosari and Mulyasri in the West. According to village statistics, Kertoraharjo had a 1997 population of 1,308 people, divided over four administrative hamlets (*dusun*).²

¹ In the transmigration pattern prevailing in the seventies, settlers were entitled to a 0.25 hectare home yard, 1 hectare of irrigated land (*sawah*; in the usual absence of irrigation during initial settlement often referred to as 'future sawah'), and 0.75 hectare of rain-fed land (*ladang*).

² The administrative hamlets of Kertoraharjo are Wana Karya (110 households, 383 people), Side Karya (39 households, 214 people); Bali Karya (87 households, 357 people); Mekar Sari (123 households, 354 people); see below.



Map 7: Kertoraharjo and the Kalaena area

The village offices of both villages, the market place, and a primary school, its ramshackle buildings still dating from the initial period of settlement, are located around the central field.³ Next to the primary school are the ruins of what used to be the local branch of the Indonesian State Bank (BRI). It was established in the early settlement period, in line with the policy of stimulating rural production through the combined development of input and produce cooperatives, facilities for agricultural credit and local savings. However, as farmers used the bank for borrowing rather than for saving, the branch office was closed. The village cooperative (*Koperasi Unit Desa*; KUD), the ruins of the first building of which are South of the field, went through another development. After the sheds and office had been moved to another place, the original buildings fell into decay. The vague mixture of public and private interests in the new cooperative organization made for a combination of huge cooperative losses and rapid expansion of the private enterprise of the entrepreneur who had become its chairman.⁴

Javanese and Balinese religious buildings are spread across Kertoraharjo and Margomulyo. Mainly Javanese Margomulyo has two mosques and a few small prayer houses for its Muslim population, and a small Protestant church for the small group of Javanese Christians. For the Balinese, the picture is different. The institutions of *desa adat* (customary village) and *banjar* (customary hamlet) are very important in Balinese society (see Warren, 1993). These, in their turn, are closely affiliated with the Hindu religious institutions of the customary village. As the customary village includes the Balinese in both administrative villages, customary and religious infrastructure (*banjar* halls, village temple) and other religious buildings can be found dispersed over the administrative villages of Kertoraharjo and Margomulyo. The village temple is located at the centre of current Kertoraharjo, between the sixth and seventh lanes. All members of the customary village are affiliated to this temple, apart from possible additional affiliations to other places of worship. Smaller religious communities and social groups have also established various other temples. These groupings are based either on a common region or place of origin, (fictive) common affiliation, or actual common kinship relationships.⁵ The subak temple (*ulun suwi*) and small offering places (*bedugul*) are all located outside the settlement area. The former on the slope of Karambua hill, East of Kertoraharjo, where a small spring surfaces; the latter in the irrigated fields of the Balinese farmers. Part of the customary village land (*pelaba desa*) has been permanently lent out to the subaks of Kertoraharjo (see chapter 9).

Because of their strategic position, many home yards along the axis road are used for a variety of off-farm and non-agricultural economic activities, primarily rice mills. Kertoraharjo has eight of them; another nine are in Margomulyo. These villages form the subdistrict centre for rice milling and rice trade. In harvest time, the large drying floors seethe with activity, while the mills spit out a continuous stream of husks and dust falling down on glowing and smoking piles. Other economic activities on the home yards along the road are the making of plain or decorated cement blocks for house, wall or temple construction, repair shops for bicycles, motorbikes and hand ploughs. Further, there is a variety of shops, food stores and stalls. Especially for the millers, whose enterprise must be accessible for large trucks, location along the road is essential. Only one of the Kertoraharjo mills is located in a lane away from the road.

³ Kertoraharjo has two primary schools (SD) and a lower secondary school (SMP). Pupils who follow higher secondary education (SMA) have to go to schools in Wotu or Kowarasan.

⁴ For good reasons, the KUD is often referred to as *Ketua Untung Dulu* (the chairman profits first).

⁵ Examples are Pura Pedharman Pasek Gelgel (membership with a fictive common descent), Pura Dalem Penataran Ped (Nusa Penida membership), Pura Dalem Tarukan (fictive descent), and Pura Tirta Empul (members from Tampaksiring; see below). The Pasek groups (*warga pasek*), one of which is called Pasek Gelgel are a socially and politically important commoner movement in Bali opposing the social hierarchy with the Brahman priesthood at the apex (see Boon, 1977; Schulte Nordholt, 1991). Pura Penataran Ped is a branch of the central Ped temple on Nusa Penida Island, from which its members originate. Similarly, pura Tirta Empul refers to the central temple of Tampaksiring in Gianyar District, place of origin of its members.

Home yards away from the axis road are accessible through the lanes. Yards are neatly arranged along the lanes. Hedges or fences border most yards. If families have been able to build a large permanent family temple (*sanggah*) directed towards the road or lane side, the temple wall may function partly as a border. With growing prosperity, an increasing number of inhabitants have walled their yards. The spatial orientation and arrangement of the village layout is crucial in Balinese religion and cosmology. Therefore, the whole Balinese lifeworld is arranged in ways compatible with this orientation. This involves an ordering of spaces, buildings, places where specific activities are carried out, and of the human body itself, with reference to two main axes distinguished in Balinese religious-cosmological classifications of the world: the East-West and the mountain-sea axis.⁶ Such orientations can, for instance, be found in the layout of temples, the position of the cremation and burial places, the orientation of people when sleeping or of the dead when laid out, but also in the layout of houses, buildings and spaces with other specific functions (family temple, toilet, pig pen) on the home yards.

The northeastern section of home yards tends to be occupied by the family temple, the guardian temple and the house. The southwestern section (or at least a position on the yard Southwest of the house and temples) is used for the toilet, the pigpen and other uses associated with pollution and malevolent spirits. Thus, Balinese home yards are similar in their layout, with a main divide between the northeastern and the southwestern spheres. Main features are one or more houses, depending on the composition of the family living on the yard, the family temple and other small offering places (*taksu*, *penunggu*), the kitchen, washing place and toilet, storage, and sometimes a *wantilan* (open roofed place used to sit and sleep in, but also for laying out the dead). In addition, almost all houses have a rice barn (*lumbung*) in which the harvest part reserved for consumption, for contributions to one's own ceremonies or those of others, and to local organizations, or for covering unforeseen rice needs and expenses is stored away. After harvesting, offerings for the *mantenin* thanksgiving ritual are placed on the open front part of the rice barn (see chapter 9).

Initially, the 0.25 hectare home yards were allocated to nuclear or augmented nuclear settler households. However, since then children were born, grew up and married, forming new nuclear or augmented families. Spatially, the Balinese coped with this growth in a number of ways, partly determined by the patrilineal descent orientation and virilocal residence pattern after marriage prevailing among Balinese.⁷ First, home yards that had initially remained empty (e.g. marshy locations) were gradually filled up with new households. Second, yards of settlers who decided to leave the settlement were transferred to new households. Third, gradually the male married offspring of the initial settlers started replacing the old generation. Fourth, ever more new couples settled on the home yards of initial transmigrants, usually the male partner's parents. The relationships between such kinship-related nuclei living on the same yard may take any form between the extremes of almost complete separation and independence on one hand, and very complex multi-stranded ties on the other in matters of daily subsistence, the management of financial and other resources, and labour allocation on the land. In one case the house is shared but financial resources largely separated, in another case different nuclei may each have their own house but largely pool financial resources, labour power, and land. Fifth, many Balinese have bought yards or rain-fed plots of Javanese in Margomulyo. Sixth, another possibility for offspring was settling on (part of) the agricultural land of the parents. Finally, as land prices rose and new opportunities emerged under the influence of improved infrastructure, transport facilities and a booming cocoa market, migration to places where new land settlement was still possible became an increasingly important and attractive option for young couples (see chapter 8).

⁶ Known as *kangin-kau* and *kaya-kelod* respectively. For Sulawesi, see Charras, 1982; Davis, 1976.

⁷ Geertz and Geertz (1975) point to the danger of reification of this general orientation as a 'kinship system'.

There are also deviations from the pattern of village layout generally found in Bali itself. First, the temple infrastructure of Kertoraharjo (and, for that matter, many other Balinese transmigration villages throughout Indonesia) is different. While the basic temple infrastructure in customary villages of Bali consists of an axis formed by three temples (*pura puseh*, *pura dalem*, and *pura desa / agung*), together known as the *kahyangan tiga*, in Kertoraharjo this temple infrastructure does not exist. After arrival, the transmigrants were strongly advised by the Hindu-Buddhist section of the Department of Religion and by Parisada Hindu Dharma Indonesia, the national representative organization of Indonesian Hindus, to combine the three temples into one complex in order to save expenses for building, inauguration ceremonies and rituals.⁸ Hence, plans for building three different temples were discarded. Instead, a village temple (*pura desa*) was built at the centre of the Kertoraharjo settlement block. Symbolically, the three temple functions are combined into one *padmasana* (lotus seat) in the central village temple.⁹ Second, the location of the burial and cremation place for the inhabitants of Kertoraharjo could not be planned in accordance with the specific wishes of the various religious affiliations of settler groups. Its location, East of the village, did not really fit Hindu-Balinese spatial criteria. However, with some creative reasoning using the principle of *desa, kala, patra* its location could be made to fit such criteria.¹⁰

3. The early years of settlement

Journey, arrival and land development

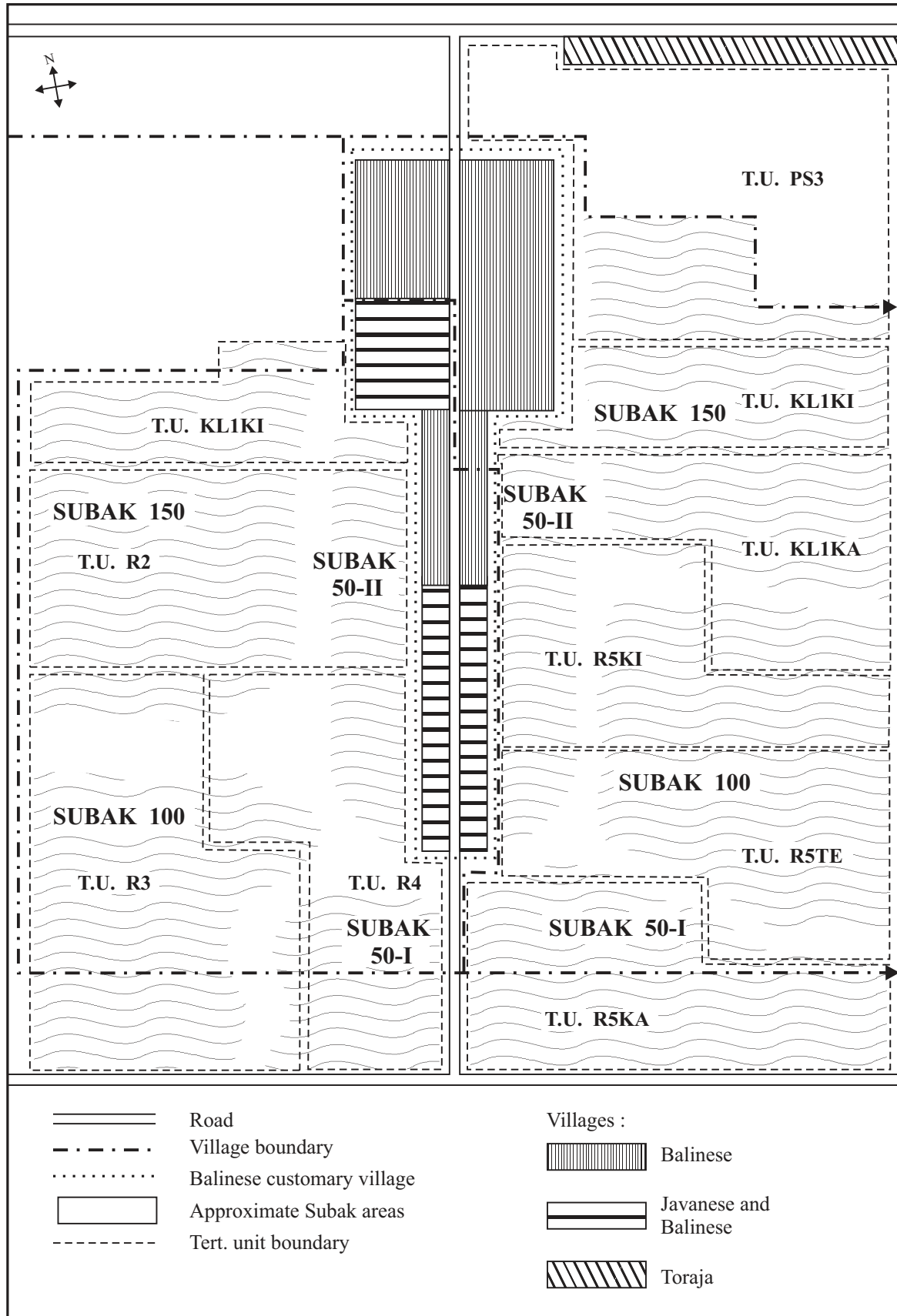
Early 1972, 150 families gathered in Denpasar, capital of Bali, to prepare for transmigration to Sulawesi. Before leaving, they were split up into two groups: the first group of 100 families consisted of people from the districts of Badung, Gianyar, Tabanan, Bangli and Karangasem; the second group of 50 families mainly came from Jembrana. In Denpasar a group leader (*kepala rombongan*), a deputy leader, and three subgroup leaders (*kepala kelompok*) were appointed by the authorities.¹¹ The two groups left Denpasar on two different ships, the Bidara and the Badung. The Badung arrived in the gulf of Bone in North Luwu in the morning of the following day; the Bidara arrived in the afternoon. Before leaving Bali the settlers had been provided with information about journey and settlement by the Transmigration Department. According to the officials, the destination of both groups was Sidoraharjo in North Luwu. However, soon after arrival they discovered that the plans had changed. The group leader was taken to an alternative destination, Kertoraharjo I in the Kalaena area, to inspect local conditions. In the meantime the transmigrants unloaded their personal belongings and prepared for transportation to their destination.

⁸ Parisada Hindu Dharma Indonesia (PHDI), established as Parisada Hindu Dharma Bali in 1959 and renamed PHDI in 1986, also represents non-Balinese population groups whose religious traditions were classified as 'Hinduism' under the New Order regime. See Bakker, 1993, 1997; Ramstedt, 2003.

⁹ The lotus seat is a temple shrine or chair for the highest God Sang Hyang Widhi Wasa. It is usually (and also in Kertoraharjo) situated in the extreme *kaya-kangin* (northeast) corner of the temple with the seat of the chair facing the opposite (*kau-kelod*) direction (see Eiseman, 1996a; Schulte-Nordholt, 1991).

¹⁰ *Desa, kala, patra* literally means 'village (place), time, circumstances'. It conveys the idea that customary law is flexible and adaptive, its form depending on the local context of its existence (Warren, 1993: 13).

¹¹ Apart from specific qualities (teacher, health worker, agricultural extensionist), political screening (non-PKI) played a role. Being group leader held certain advantages after arrival: e.g. the right to choose land rather than join a lottery. Further, people who had occupied such a function were likely to take administrative positions in the project and later village administration as well.



Map 8: administrative spaces and boundaries in Kertoraharjo

Many transmigrants were upset by the changes in the plans. Some people had relatives in transmigration settlements near the initial destination. Aware of the dubious reputation of the transmigration programme and the wide gaps between the image created in promotion campaigns and the reality of specific settlement locations, they were openly worried about their destination. Another factor played a role here: before leaving, many Balinese had heard stories about the Kalaena area being infested with *elephantiasis*. When the deputy group leader asked the prospective unit leader why the plans had been changed, the latter answered that such was the decision of the Department of Transmigration, and that those who disagreed were free to return to their area of origin. In reply to questions about elephantiasis, the unit head made clear that this disease had already become rare and, if it were to occur again, the government would provide the necessary medicines. Indeed, though people with the disease could still be seen among the local population, hardly any Balinese caught it.¹² As explained later by a transmigration official, the problem with the initial destination was that it had been filled up by another group. Kertoraharjo was the only settlement where housing had been prepared, though not in a sufficient quantity for all household. In the end, those who refused to accept the alternative destination were pushed into the truck ready for transport to Mulyasri, close to the Kertoraharjo site. There, a lottery was held to give all transmigrants a number that corresponded to the plot number of their future home yard.¹³ From Mulyasri, the settlers walked to the site.

After arrival, the settlers started clearing their land, home yards first. This work was performed individually, as it involved no heavy clearing labour. After a few weeks, most settlers had cleared, cleaned and fenced their yards and continued with their agricultural land, the (future) irrigated fields first. These were located relatively close to the settlement, in the current TUs PS3 and KL1ki/ka, stretched out between the boundary with Patengko in the North and Karambua hill in the East (see maps 7 and 8). Sawahs were also allocated by lottery, except for those holding leadership functions, who had the first right of choice. Depending on the labour needed, land was cleared individually or by groups. As there was still a lot of forest, most settlers worked in voluntary collective labour groups (*seka*), consisting of owners of adjoining parcels of land. Initially, they tended to work in large groups of ten to twelve men. After a settler had been hit and killed by a falling tree, it was decided to work in smaller groups, in order to minimize the risk of accidents. Depending on the forest cover, a group consisting of five or six men could clear one hectare in one to two weeks. Those who had finished their work on the sawahs, reported to the unit leader and received a number for a rain-fed plot. While wood on the sawah plots could dry for burning, work on the ladangs continued. The ladang area for this first group of settlers was located southwest of Kertoraharjo, mainly in the western part of current TUs KL1ki and R2. In contrast to the sawahs, the heavy forest cover on most ladangs had already been cut, but wood and trunks not yet cleared away. Many years later, it took a special land clearing programme to remove trunks, roots and scattered remains of the largest trees.

After this first group of 150 families, several other groups followed. The second group to arrive was a group of 100 Javanese families, the third was a group of 100 Balinese families. After these large groups, three smaller groups of fifty families each followed, the first and second consisting of Balinese and the third of Javanese. Each new group arrived between two and three months after the preceding one. The second Balinese group (100 families) was settled between the seventh and the twelfth lane, the third Balinese group (fifty families) between the tenth and the fourteenth lane, and the fourth (fifty families again, later known as Tampaksiring) in the southern part of the settlement. The Javanese group of 100 families settled in the block West of the axis road, and the second Javanese group of fifty families ended up South of the Tampaksiring group. Problems of flooding occurred on a number of home yards allocated to the first and second groups. From the first group, some eighteen families

¹² Elephantiasis was endemic in the Kalaena area until well into the seventies.

¹³ At this early stage, the advantageous position of group leaders became manifest: group leaders did not take part in the lottery but had the right to choose the location of their home yard and, later, agricultural land.

had to move to drier places on the other side of the settlement, most of them ending up in the tenth and eleventh lanes. A relatively small number of Balinese families could, for various reasons, not cope with the new circumstances of life in Kertoraharjo and returned to Bali.¹⁴ During the first year, in the period of land clearing and development, the settlers were fully supported by the government. Contrary to experiences in other Indonesian transmigration settlements, the system of food allowances seems to have worked quite well here. Basic foodstuffs and other daily necessities seem to have arrived timely and more or less in the quantities promised.

After land had been cleared, the settlers received seeds from the government and started to grow their first crops on their ladangs: cassava, maize and other rain-fed seasonal crops, and the first perennial crops. They received seedlings of coconut, clove and other perennials. The unit manager advised to plant perennials on the ladangs (except the low parts) and on the elevated parts of the sawah area.¹⁵ Later, the farmers planted their first rain-fed rice crop. Government food support had already stopped then, and the farmers were in dire straits. To make things worse, the rats were the main beneficiaries of the first harvests, forcing the farmers to subsist on cassava. Wild pigs also did much damage to the crops. Soon after the first harvest, the Food for Work programme brought additional food supply. Every three times the settlers had performed collective labour on the infrastructure, they received a food allowance. The food for Work programme continued between one and two years. However, food scarcity and difficulties in making ends meet determined life in Kertoraharjo for at least five years. Subsistence agriculture was under continuous threat of plagues and diseases. Many settlers, especially Javanese, left in search of wage labour in construction, forest exploitation, or mining. Hindu-Balinese ritual-ceremonial obligations were performed at their most simple level.

General background of the transmigrants

The settlers originated from all districts of Bali except Buleleng. Most came from Jembrana, Gianyar, Badung, Tabanan and Nusa Penida island in Klungkung; smaller groups from Karangasem and Bangli.¹⁶ This section provides an overview of the background of settlers, based on interviews with eighty-five initial settlers. I also present such background characteristics for the spontaneous settlers, who came at their own initiative, usually on the basis of prior information and with help from transmigrant relatives. Some were wholly self-supporting.¹⁷ State-sponsored transmigrants show a prevalence of settlers from Jembrana and Gianyar, and smaller numbers from the other districts in Bali.¹⁸ The overwhelming majority had been farmers in Bali. Some had other activities as their primary source of income: daily wage labour, crafts, trade, health care and teaching. Few transmigrants had been engaged in additional occupations before leaving. The eighty-two farming households engaged in agriculture, either as a primary or a secondary source of livelihood, had access to different types of agricultural land under different tenure arrangements. Of the total of forty-six settlers who had had access to sawah in Bali, twenty-five worked land owned by parents and (partly)

¹⁴ It is difficult to get a clear picture of the number of families that left. In the first group there were seven.

¹⁵ In the end, almost all land, both on the sawah side and on the ladang side, could be irrigated. After finalization of the irrigation system, the terms 'sawah' and 'ladang' continued to be used, not to distinguish land use but in a geographical sense, as land to the East and land to the West of the road traversing Kertoraharjo.

¹⁶ I could not trace the exact composition of the settler groups (except the group from Tampaksiring).

¹⁷ In Indonesian transmigration policy, *transmigran spontan* was a separate category of partly sponsored migrants. In Kertoraharjo, the term is used for those who came without state support for journey, settlement or access to land or other resources.

¹⁸ Of the 85 transmigrant families selected on a random basis, 29 originate from Jembrana, 24 from Gianyar, 9 from Badung, 8 from Tabanan, 7 from Karangasem, 7 from Klungkung and 1 from Bangli.

divided among male children to be productively used. In most cases, the land had not yet been transferred as inheritance. Use of land owned by parents took place under various arrangements for distribution of its produce. In four cases, sons worked their parents' land under a kind of sharecropping arrangement. Another nineteen worked the land of landowning farmers under sharecropping arrangements, usually a 1:1 (Bal. *nandu*) distribution of the harvest between owner and sharecropper, but sometimes with a (for the owner) more favourable 2:1 distribution of harvest produce. Finally, only two settlers who used to have access to sawah in Bali were the actual owners of that land.¹⁹

Box 2: background of transmigrants in Kertoraharjo

Ketut Tistra is a transmigrant from Jembrana. His wife Wayan is also from Jembrana. Three of their six children were born in Bali and three in Kertoraharjo. In Jembrana, Ketut was a small farmer and fisherman. He worked 0.25 hectare of irrigated fields and one hectare of rain-fed garden land. Before he decided to join the transmigration programme, Ketut was in debt with shop owners and a moneylender. Two of his brothers were engaged in a severe conflict about inheritance and distribution of the parental land. Ketut decided to register for transmigration, take the uncontested part of his share, and sell it just before leaving. With the proceeds he paid his debts, and took the remainder as a small starting capital for Sulawesi. Since his departure from Bali in 1972 he has never returned to the island of his birth.

I Gusti Budiarsa originates from Badung. With his wife and one child he arrived with the first group of settlers. When Gusti registered for transmigration, his economic prospects were not really bad. He had just graduated as a teacher, and was looking for work. As there were no vacancies he decided to help his parents on the sawah: 0.6 hectares for three male heirs. He decided to register for transmigration, hoping to find employment more easily in an area that was still in development. If there were no teaching job, he would at least be able to work his own land. With his educational background, Gusti became vice group leader for the first settler group. Almost immediately after settlement he became an honorary teacher, later he worked on a regular salaried basis. While his teaching provided them with income, health insurance, and monthly rice allowances, the land provided additional food and income. Gusti's educational background and former position as a group leader proved to be an asset in village affairs: after settlement he was involved in the establishment of a village cooperative, for which he had followed a special course. He still holds a position in the village representative council.

Nyoman Santika and his wife Made originate from Jembrana, where Nyoman was an agricultural labourer. When he registered for transmigration he was still unmarried. What he did, however, was registering his sister as his 'wife'. Santika: 'that was not really a problem. Many transmigrants did the same. The authorities did not care if your wife was really your wife, but rather that, once you joined transmigration, you did not drop out again. Many Balinese had dropped out before and returned to Bali. So they preferred people who did not qualify but really wanted to leave to those who were in doubt.' As it turned out, the trick with his sister was not necessary. Even before he left, he met and married his current wife. Though the authorities did not really seem to bother, Santika was afraid to appear with another woman than the one registered. He solved the problem by telling the authorities that his wife was pregnant and would follow to Sulawesi once the initial phase of land clearing and development was over. His explanation was accepted: Santika left on his own, later to be joined by his (real) wife.

Source: fieldwork

¹⁹ Farmers working sawah under sharecropping arrangements had access to a mean area of 0.5 hectare. The two cases of ownership concern small plots of sawah of 0.25 hectare and 0.12 hectare respectively.

Twenty-four settlers had access to rain-fed land used for seasonal or perennial crops. Eleven settlers worked their land under various sharecropping arrangements. Ten settlers had access to rain-fed land of their parents, mostly undivided among future heirs. Another three worked land owned by other farmers under arrangements for the development of unproductive land into productive garden land, which entitled the worker either to a specified period of usufruct right to the garden, or to part of the land in private ownership. Twelve settlers had access to a combination of various land use types: irrigated land and dry land or garden. As to current rights of the transmigrants to land in Bali, the picture is diffuse.²⁰ Even under conditions prevailing in Kertoraharjo, in which most transmigrants own an area of land they had never dreamt of in Bali, landownership in Bali can still be important. As cases in other transmigrant settings in North Luwu have shown, apparently useless land in Bali may suddenly become the object of tourist resort development projects or other investments that lead to a sharp increase of land prices.²¹

Kertoraharjo has a considerable population of spontaneous migrants who arrived without any state support. Though spontaneous migrants tended to have had a more difficult start, often more or less from scratch, some of them have reached quite a remarkable economic position (see chapter 8). Here follow some basic background characteristics of twenty-eight spontaneous migrant families. Most spontaneous migrants originate from Jembrana: fifteen came directly from Jembrana to Kertoraharjo, while another two had earlier followed their parents to other transmigration settlements in North Luwu. The other spontaneous settlers come from Tabanan, Gianyar, Badung, and Karangasem (see box 3).

Sixteen out of twenty-eight migrant families had farming as their primary source of livelihood before leaving Bali. Four of these had worked as daily wage labourers in agriculture, and therefore had no access to agricultural land and its produce on a more permanent basis. Twelve had made a living from non-agricultural labour. Ten migrants had been engaged in regular secondary economic activities that contributed considerably to their income in Bali. Of the sixteen farming families who had access to agricultural land (except home yards, and on another basis than daily wage labour) seven worked irrigated fields, four worked garden land, and another five had access to a combination of irrigated and rain-fed or garden land. These types of land were worked under various tenure arrangements. The mean area worked was 1.1 hectare of irrigated and / or rain-fed land.²² Eight farmers have no land left in Bali nowadays, the others still own land there.²³ Nine farmer families sold land (irrigated fields, rain-fed land, or home yards) before leaving for Sulawesi or when already settled on that island. For those who sold land just before leaving for Sulawesi - eight farmer families - the proceeds from selling their land was taken to Sulawesi as a starting capital.²⁴

²⁰ A total of 37 transmigrants own no land and did not do so before leaving. Another 12 transferred their rights to part of their parental land to one or more siblings (primarily brothers) who stayed behind. Ten transmigrants still own land in Bali (in eight cases less than 0.2 hectare; for the other two cases 0.5 and 3.00 hectare respectively). For the other transmigrants, the picture is elusive. Often, parental land has not yet been divided among heirs, or its division has led to conflicts.

²¹ Six transmigrants had ever sold land in Bali. Only one of them sold land before he left for Sulawesi with his family, the other five sold the mostly small plots of land that had become theirs through inheritance in the period after departure to Sulawesi. Generally speaking, transmigrants left with little financial resources. However, even small amounts of money could be very important during the difficult initial period. Crucial personal belongings like a bicycle or a sewing machine could be taken in small quantities.

²² Seven farmers worked an area of between 0.2 and / including 0.5 ha., one farmer an area larger than 0.5 up to / including one ha., four farmers an area larger than one ha. up to / including 1.5 ha., and four farmers an area larger than 1.5 ha. up to / including three ha.

²³ Two still hold the land owned before leaving for Sulawesi, another two gave right of its use to relatives, two received their share of divided parental land, and another two still have a claim on land not yet divided.

²⁴ Sixteen out of twenty-eight migrants brought financial resources with them, usually hundreds of thousands of Rupiahs and in seven cases more than a million, up to four million.

It can be seen from these basic background data that, first, farmers originating from Jembrana are very strongly represented among the spontaneous migrants, while there is a more balanced representation of various Balinese districts among transmigrants. Second, while the large majority of transmigrants were primarily (and in most cases: exclusively) farmers, among spontaneous migrants non-farm primary occupations like daily wage labour and crafts were common. Third, spontaneous migrants took considerably larger amounts of capital to Sulawesi than state-sponsored transmigrants. The farming background of most settlers in Kertoraharjo is an important factor behind its relatively successful development. In view of the small number of spontaneous migrants any further comparison pertaining to land tenure cannot be made.

Box 3: spontaneous migrants in Kertoraharjo

Pan Utama came to Kertoraharjo with his wife Ketut and three children in 1994. One of his children is married and lives in another Kalaena transmigration area, one is a truck driver for a Chinese trader in Palopo, while the youngest still lives in Kertoraharjo. In Bali, Utama was a dressmaker. They did not own any land apart from the small home yard on which they lived. Utama was born in Gianyar, but moved with his parents to Tabanan when he was a small child. When Utama and Ketut were married and had two children, they decided to register for the transmigration programme. Though Utama was not a farmer, he saw no other way to improve the economic prospects of his family. In 1982 they moved as transmigrants to Kalimantan, where they lived under difficult conditions: irrigated agriculture was impossible. Utama cultivated dry land crops, combined with animal husbandry. Before they had left for Kalimantan, three of Utama's brothers had moved to Kertoraharjo. Once, Utama had even visited them. His brothers had advised him to join them because economic prospects were better in Kertoraharjo. Utama returned to Kalimantan with the intention of joining his brothers, but could not convince his wife. However, after three years they had saved four million Rupiah and decided to move. After arriving in Kertoraharjo, Utama invested his savings in irrigated land. Initially, they lived with one of his brothers until they were able to buy a home yard of their own and build a house, financed by his work as a dressmaker on the market and the sale of cows and chicken. Though they will probably not be able to send their youngest son to senior high school, they experience their move to Kertoraharjo as a real improvement compared to Bali and Kalimantan.

Nyoman Suara came to Kertoraharjo in 1979, when he was still unmarried. Before settling in Kertoraharjo, he had worked as a manual labourer for a company in Makassar. As he began to be fed up with his life as a wage labourer he travelled around South Sulawesi in search of transmigration settlements with farming potential and good economic prospects. In Palopo, at the bus station, he asked for the names of destinations with a Balinese transmigrant population. As he did not receive a satisfactory answer he decided to look for Balinese around the buses ready for departure. Soon he had discovered a group of people who spoke Balinese. He explained to them what he was after, and asked whether they would allow him to join them to their settlement. They agreed and took him to Kertoraharjo. Suara stayed there for a while before returning to Makassar. However, longing to go back he visited it at two other occasions. When he was in Kertoraharjo for the third time he decided to settle there himself and immediately bought a home yard. In 1979 he resigned from his job and returned to Bali to arrange a permission to change residence and to fetch his father to join him to Kertoraharjo. Later that year he married his current wife, daughter of a Kertoraharjo transmigrant, with whom he has two children.

Source: fieldwork

4. Competition for land resources

The absence of large-scale land conflicts

Critical reviews of transmigration policy and its consequences for indigenous population groups abound with examples of violent confrontations between transmigrants and such local groups. To some extent, the same goes for transmigration settlements in Luwu.²⁵ However, settlements in the Kalaena area have remained relatively free from conflict related to resource competition between transmigrants and locals. In combination with irrigation development and the farming background of most settlers in Kertoraharjo, this is a major explanatory factor behind its relatively successful development. Absence of serious and protracted land conflicts meant that the settlers could, with only a few exceptions, clear and develop their land without being seriously disturbed by such conflicts.²⁶ However, conflicting claims to land between settler groups of various origins or arriving in different periods did play a role. The groups that settled around Kertoraharjo came from different origins under various state and non-state arrangements. Transmigrants came from Java, Bali and Lombok, while groups arriving under non-state arrangements or on their own initiative were mainly of Toraja and Bugis origin.²⁷ Planned settlement in the Kalaena plain goes back to the late colonial period (see chapter 2). From the sixties, when peace in Luwu had been restored, the Kalaena area attracted large numbers of Toraja and Bugis migrants in search of land. In the same decade, the first national transmigrants - natural disaster refugees from Java - arrived in the area. The Kertoraharjo settlers, then, were not the first group of settlers to arrive, nor were they the last.

Settler groups competing for land: four village cases

Patengko

Patengko is a village with a Toraja population. This settlement has a peculiar history, which goes back to the mid-sixties, when the leader of a group of Toraja timber workers applied to the local authorities for land for his group and their families. The group, from a densely populated area in Tana Toraja, was given land for settlement and agriculture. As the area was still densely forested, no limits were set to the area of land claimed by the settlers. They could take as much as they were physically able to work. However, in the sixties migration from Tana Toraja to Luwu was a sensitive issue, and restricted by the Luwu authorities. Some migrants on their way to Patengko were even captured by the army and accused of *transmigrasi gelap* (illegal migration) from Tana Toraja. After these problems with the

²⁵ See Charras, 1982. More recent transmigration settlements known to have caused violent conflict are the Lara settlements in Kecamatan Malangke. For recent conflicts between local (Dayak) population groups and Madurese migrants in Kalimantan, see Peluso and Harwell, 2001.

²⁶ This does not mean that there was not such an indigenous population. The ethnic group of the Pamona is indigenous to the Kalaena area as well as large parts of Central Sulawesi (see Schrauwers, 1995). However, pre-transmigration Pamona settlements and agricultural activities seem to have been mainly concentrated in the mountains or near the foothills that form the natural boundary of the Kalaena plain to the West and Northwest. The transmigration locations were hardly used by Pamona for shifting cultivation or sedentary agriculture. Many Pamona claimed garden land closer to the main road to Central Sulawesi and along the Kalaena and Tomoni rivers. Further, the Darul Islam period (see chapter 2) led to a massive flight of the local population of North Luwu. Many Pamona refugees ended up in Central Sulawesi, many of them never to return to Luwu again.

²⁷ In the transmigration village of Cendana Hitam, for instance, Bugis settlers largely replaced the initial transmigrants from Lombok, many of whom sold their land and moved away.

authorities, another strategy had to be followed in order to continue settlement in the area without causing further trouble. Therefore, the subdistrict head advised the Patengko leaders that new Toraja settlers should come individually and bring a document from their area of origin stating that they only came to visit their relatives. Having arrived, they could stay there, clear land and build a house. After that, they returned to Tana Toraja to arrange a formal document of change of residence, and had themselves registered in Luwu. In this way, the settlement grew until it had a population of some 450 families.

Generally, the people who settled in Patengko were not the poorest, but those aware of the economic potential of North Luwu and willing to start a new life there. Part of the migrants realized that large-scale transmigrant settlement would also entail the provision of basic facilities like schools, a clinic, a local market, roads and irrigation infrastructure. For some, the high and escalating expenses for Toraja ritual and the pressure put upon them in their homeland to become involved into new cycles of indebtedness seem to have been a push factor.²⁸ Often, before leaving for Luwu, small pieces of hereditary land or cattle were sold, and the money taken to Luwu to be used for land purchases or payment of compensation for land claimed by others (see chapter 4). According to one Patengko farmer: 'I had started breeding dogs. After some time the dogs had become pigs, and later again the pigs became half a buffalo.'²⁹ Before I left for Luwu, the buffalo was sold and the money divided. Thus, we left with Rp. 80,000 for living expenses and land purchases.'

In the late sixties, the field surveys for Kertoraharjo threatened Patengko. The Toraja village overlapped with the layout of the transmigration settlement. However, some years earlier, when GOLKAR tried to increase its support in Luwu, a deal had been made between a Patengko village leader and the subdistrict head. If the village leader could make the inhabitants of Patengko, affiliated to PARKINDO through their membership of the Toraja Church (see chapter 3), shift their votes from PARKINDO to GOLKAR, the subdistrict head promised that, if in the future there would be any groups trying to disturb the Toraja settlement, he would defend its rights. After having been reminded of his earlier promise, the subdistrict head asked the surveyors to adapt the plans for the layout of Kertoraharjo by shifting it South to the Palopo-Malili road. Though some land was lost to the settlement, the Toraja migrants could stay without being seriously disturbed. The rather freakish boundary between Kertoraharjo and Patengko reminds of what happened in the past.

Rantetiku

The land to the South was not empty and unclaimed either. Rantetiku, situated South of Kertoraharjo and Margomulyo, is nowadays part of the village of Manunggal. Part of this village has its roots in the Dutch colonization programme; Javanese settlers arrived in 1938. Nowadays the hamlet also includes spontaneous settlers of Bugis and Toraja origin. Another part was established in the framework of the transmigration programme for natural disaster refugees from Java (the KBA programme). They arrived in the seventies.³⁰ Though they had been promised two hectares per family, they only received 1.25 hectare. Even though the other land had already been surveyed, it was ultimately allocated to the national transmigrants from Bali who settled in Karambua III (Alam Buana; see below). This was due to a total lack of coordination between the Department of Social Affairs responsible for the KBA-programme, and the Department of Transmigration responsible for the general transmigration programme. The area was also inhabited by a small group of Pamona. Finally, two large groups of migrants from Tana Toraja arrived. The first group, living in the hamlet of Rantetiku, consisted of

²⁸ This goes especially for the Rambu Solo' death ceremony (Nooy-Palm, 1979; Volkman, 1985). Expenses for buffaloes, pigs and other gifts, which partly represent debts incurred earlier, may compete with investments in, for instance, land and education. It may even require the selling of land or other resources.

²⁹ In Tana Toraja, buffaloes are often owned by more than one person.

³⁰ (Bah. Ind.) *Korban Bencana Alam*: Natural Disaster Victims.

Catholic farmer families who arrived in the sixties; the second group, living in the hamlet of Karambua, is a group of Protestant farmers who settled in the seventies.³¹ Fleeing DI/TII aggression in the fifties, most Javanese settled under Dutch colonization took refuge in the towns that were under army protection, while the Pamona population fled to Poso in Central Sulawesi or to the boundary area between South and Central Sulawesi. From 1965, many former inhabitants, especially Javanese, gradually returned, cleared the forest cover and continued working their land. Returning Pamona settled along the Malili road and used the forest for shifting cultivation.

In 1966, a small group of settlers from Tana Toraja arrived to settle in what was to become Rantetiku. The group consisted of five male pioneer settlers who came to pave the way for Toraja settlement on a larger scale. The initiative for settlement of Toraja farmers had come from a social organization related to the Catholic church, *Ikatan Petani Pancasila* (Pancasila Farmers Union; see chapter 3). Its objective was to improve the living of Toraja farmers through organized resettlement in Luwu. The settlement location had been determined by two Dutch Catholic priests, probably in cooperation with members of the Luwu royal elite. Settlement took place under direct control of *Ikatan Petani Pancasila* and the Catholic Church; there was no involvement of the district Department for Social Affairs. Candidate settlers had to fulfill a number of conditions: they had to be Catholic and have had no involvement with the PKI in Tana Toraja. Some months after their arrival, the first settlers were followed by their families and forty-nine others. The initial target of resettlement of three hundred families, however, was never reached, mainly due to the political sensitivity of migration in the sixties.

Initially the settlers had no problems. From 1971, when the transmigration programme started, conflicts arose about 200 hectares of land North of the Palopo-Malili road, used by the inhabitants of Rantetiku, but planned by the government for Kertoraharjo I. According to one of the pioneers of Rantetiku: 'When we settled, the camat had said "it is all empty, so take as much as you can work". When transmigration came, a large part of the land had become rain-fed rice fields or was planted with perennial crops.' Ownership titles had not been issued. The land had been registered through working permits issued by the local authorities. After protests by the Rantetiku farmers, compensation was promised but never reached the farmers. In the end, most Toraja farmers gave in and lost their land. Not long after, new conflicts arose between the inhabitants and the transmigration programme, this time about land South of the road. In 1974, preparations for the transmigration settlement Karambua I began. On this location, Toraja farmers had received fifty hectares of land in compensation for the land lost on the other side of the road. The land had indeed been allocated and was worked by the farmers, when in 1974 it was claimed for the transmigration programme. This time, the Toraja settlers did not give in and refused to leave their land. In 1980, the authorities offered new land in compensation in the subdistrict of Malili. However, many farmers refused to leave. Later, some of them accepted alternative offers for resettlement. Those who did not accept such offers were accused of using 'PKI methods', arrested and even imprisoned. Later, they were given a suspended sentence. In the end, all families received land in compensation.

Land conflicts between the Toraja settlers and the transmigrants of Kertoraharjo have never escalated into violence. However, settlers on both sides were confronted with the consequences. Some Balinese of the third group to arrive, unable to work their future irrigated fields because they were claimed by Toraja farmers, received land in the ladang area on the other side of the axis road. Some Javanese transmigrants have never fully received their two hectares of land. Toraja farmers lost gardens and tree crops like durian, coconut trees and mango to the transmigrants, usually without compensation. To this day, Javanese and Toraja farmers contest around ten hectares along the administrative boundary between Manunggal and Margomulyo.

³¹ To complete this ethnic hodgepodge, the village also included the Balinese transmigration settlement of Karambua III, recently split off as Alam Buana Village (see below).

Purwosari

The first post-colonial state-sponsored settler group to arrive was that of the Javanese inhabitants of current Purwosari. In 1969 and 1970, the victims of a volcano eruption in Central Java were resettled in the area West of Kertoraharjo. Being victims of a natural disaster in Java, their resettlement fell under the responsibility of the Department of Social Affairs. According to a village functionary, about ten percent of the 250 settler families were not farmers, but had worked as manual labourers in urban areas. Once the Javanese had arrived, the role of the Department of Social Affairs turned out to be marginal. After allocation of the home yards to the new settlers, they were told to start with forest clearing and development of sawahs and ladangs, the boundary marks of which had not been staked out in the field. Further material support or guidance from Social Affairs was absent. Only after more than a year, when responsibility had been taken over by the transmigration programme, the settlers received zinc roofing material and food support.

The settlers had a hard time. Aside from individual differences in skills and background that played a role, most of them suffered from malaria and lack of food. They felt physically unable to carry out the heavy land clearing labour in a short time span. Some left the settlement altogether, while others left temporarily in search of wage labour in construction, logging or other activities. Delays in land clearing were to have disastrous consequences for part of the Javanese. When the national transmigration programme started its preparations for settlement in 1970-1971, the lack of coordination in land use planning, mapping, and staking out became manifest. Part of the uncleared land belonging to Purwosari overlapped with the area planned for settlement in the framework of the national transmigration programme. Nobody seemed to have bothered about boundaries. To make a long story short: part of the planned agricultural land of Purwosari was lost to Kertoraharjo.

The land available to the Javanese in Purwosari is minimal indeed. From the initial 250 families, the population had grown to 345 families or 1,517 persons in 1997. About fifty families belonging to the initial settler group left the settlement. In most cases they sold their land to Bugis, Toraja, Pamona and, primarily, Balinese farmers.³² The total village area amounts to some 300 hectares only. If ownership is considered, the picture is even worse: while 192 hectares are owned by the population of Purwosari; landowners from other villages like Mulyasri and Kertoraharjo own 108 hectares. Inhabitants of Purwosari own only ten hectares of land in other villages. About fifty percent of the total number of households does not own any land except a home yard. Large landownership, as it has developed in villages like the former colonization settlement Mulyasri and in Kertoraharjo (see chapter 8), does not occur.³³ Those who lost much land in the beginning or by later land sales, have to make a living from sharecropping and other temporary tenure arrangements, harvesting and agricultural wage labour. Notwithstanding the scarcity of land, most offspring and newly established households remain in Purwosari. For most of them, buying land is no longer a feasible option because land prices have risen sharply during the last few years. New households settle on the subdivided home yards of their parents, and earn a living as daily labourer in agriculture. Purwosari is a major provider of planting groups and other agricultural wage labour, as well as of harvesters (*penderep*) for farmers in Kertortaharjo and other villages (see chapter 8).³⁴

³² Balinese from Kertoraharjo own at least forty hectares of land here. In contrast to the other ethnic groups mentioned, the Balinese do not buy home yards in non-Balinese villages because of the absence of specifically Balinese customary institutions in such villages (see below).

³³ The upper class of landowners consists of three families owning between two and three hectares each.

³⁴ Though the loss of land described above definitely is an important cause of the current conditions, land tenure conditions should not be reduced to this issue only. The factors of kinship and patterns of inheritance play an important role here as well.

Those who arrived (too) late: Alam Buana

Finally, I shift to a transmigration settlement that filled up the residual land available for settlement in the right bank part of the Kalaena area enclosed by the roads to Central Sulawesi and Malili, and the rivers Tomoni, Kalaena and Pawesue (see map 7). In 1978, one hundred transmigrant families from Bali arrived in transmigration unit Karambua III, between four to six years after settlement in Cendana Hitam (Kertoraharjo II) and Kertoraharjo / Margomulyo (Kertoraharjo I). In 1983, the unit was transferred to the regional administration as a hamlet of Cendana Hitam. In 1986 it was united with the village of Manunggal, until in 1989 it was split off as Alam Buana.³⁵ The village now has a population of some 130 households (610 people). Its land resources consist of 105 hectares of sawah, 75 hectares of ladang and 30 hectares of home yards. More than eighty-five hectares of the sawah and ladang areas are regularly flooded or too marshy to be used at all.³⁶

Alam Buana is situated in a tail end section of this part of the irrigation system. This means that it is doubly disadvantaged. The northern part of the village and its land resources receive more than their share of drain water due to failure of the drainage system, partly caused by a total lack of maintenance of the main system drainage infrastructure. During dry periods, part of the northern agricultural land of Alam Buana is short of irrigation water. Part of the land was provided with irrigation infrastructure; the Public Works map shows no differences with surrounding villages. However, part of these structures and canals do not function, while construction works never reached part of the land resources of this village. Farmers in this section take water from a drain by means of a small removable weir constructed at the initiative of the local subak. Farmers owning land Southwest of Alam Buana, an area receiving irrigation water from the Northwest, are always confronted with serious shortages associated with their tail end position in the system. This part of the village land receives too little irrigation water from the system, and too late in the season.³⁷

5. Multiple administrative and regulatory spaces and arrangements

From transmigration project to administrative, customary and 'wet' village

Aside from state administrative arrangements at the village level, an important and elaborate domain of Balinese customary institutional and administrative arrangements exists. This co-existence of a diversity of regulatory spaces, arrangements and institutions may once more put into perspective the image of 'the village' as a corporate community.³⁸ Balinese culture and social life are known for their complexity and functional diversity. Some authors (e.g. Warren, 1993) have pointed to the tensions and conflicts inherent in the Balinese system of social organization. It forms an intricate balance between its characteristics of hierarchy, importance of status and status competition associated with the 'caste system' on one hand, and a high degree of collectivism, stress on equality and egalitarianism

³⁵ In 1989 Alam Buana became a *desa persiapan* (candidate village), a status which it still had in 1997.

³⁶ This is borne out by differences between total landownership and the part that can be productively used. For 123 households, the data are (usable land first; total formal landownership between brackets): no land: 39 (15); > 0.00-0.50: 18 (7); > 0.50-1.00: 39 (19); > 1.00-1.50: 12 (19); > 1.50-2.00: 13 (40); > 2.00: 2 (23).

³⁷ For the subak in Alam Buana, see chapter 9.

³⁸ Many authors have criticized this essentialist and idealizing image of village society, the roots of which can be traced to the colonial period and which continues to influence political, administrative and developmental processes to this day. For Java, see Breman, 1987. For Bali, see Guermonprez, 1990; Schulte-Nordholt, 1986, 1991; Warren, 1993.

basic to almost all Balinese social activities and organizations on the other.³⁹ Key corporate social organizations of Balinese society are the customary village (*desa adat*), customary hamlet (*banjar*), irrigators' association (*subak*), kinship group (*dadia* or *soroh*), temple support group (*pemaksan*), and voluntary associations for making music, agricultural labour, mutual support etc. (*seka*).⁴⁰ Generally these collective organizations are mutually relatively independent and functionally specific. Depending on local conditions, they may either have widely differing, or partly and even completely overlapping memberships (Geertz, 1959). How have these corporate organizations been developing outside Bali? Here follows an overview of the development of state- and non-state administrative and regulatory arrangements in Kertoraharjo: administrative village and hamlets, customary village and banjars, *pekaseh* and *subaks*, and *prani*. Together forming an in-depth study of establishment, development, and interaction of *subaks* and WUAs, chapters 9 and 10 will focus on local irrigation management.

Establishment of the administrative village of Kertoraharjo

Initially, Kertoraharjo I was a transmigration project under the administrative responsibility of the (then) Ministry of Manpower and Transmigration. Administrative affairs were in the hands of a KAD (*Koordinator Administrasi Daerah*; Regional Administrative Coordinator), under responsibility of the representative of the Ministry of Manpower and Transmigration. The honorary function of KAD was fulfilled by a transmigrant selected from former group leaders. In 1979, administrative responsibility was handed over to the regional administration: Kertoraharjo I became an administrative village (*desa*), with the former KAD as its first village head. In the mid-eighties the village was split up into the current village of Kertoraharjo with an all-Balinese population, and Margomulyo with a mixed Javanese and Balinese population. In order to create two villages with a balanced population and land area out of the initial transmigration settlement, the village boundary cut right through the large settlement block of former Kertoraharjo I (see above, and map 8).

Before the settlement was split up into two administrative villages, it had five hamlets (*dusun*) in the area of current Kertoraharjo and two in current Margomulyo. After that, *dusun* Mekar Sari split off from Sidekarya becoming the fourth administrative hamlet of Kertoraharjo. This happened in about 1993 or 1994. The *banjar* was split up in the same manner (see below). To complicate matters, in recent years the original administrative hamlet names (*Cempaka*, *Melati*, *Kamboja*) gradually fell into disuse to be replaced with new names which are originally *banjar* names. This is said to have been the policy of a Balinese village head who wanted to do away with the different status of *banjar* and *dusun* in the eyes of the population. Though renaming them did not make much difference for the relative status of *dusun* and *banjar*, the former *dusun* names are nowadays seldom used. I only found them in the printed lists of the land tax administration. Some people explicitly reject this mixing up of administrative hamlet names with *banjar* names, stressing that 'dinas' and 'adat' names should not be mixed up in this manner.⁴¹ Hamlets are administratively subdivided into the smaller neighbourhood groups of RW and RT respectively.⁴²

³⁹ In Balinese society four castes (*kasta / varna*) are distinguished: Brahmana, Satria, Wesya and Sudra (also called Jaba). The three upper castes are often lumped together as Triwangsa. However, the association of Balinese caste with the rigid Indian social system seems to be mainly the product of Dutch colonialism (see e.g. Boon, 1977; Schulte-Nordholt, 1986, 1988). For post-colonial developments, see Warren 1993.

⁴⁰ Warren (1993) includes *banjar*, *subak* and *dadia* into the *seka*, making a distinction between prescriptive and voluntary *seka* (the three forms mentioned are prescriptive).

⁴¹ 'Dinas' (from Dutch *dienst*; administration) and 'adat' refer to the administrative and the customary spheres respectively. See Warren, 1993; for *adat*, see chapter 2.

⁴² RW means Rukun Warga; RT means Rukun Tetangga.

Formation of customary village and banjars

Apart from the government administrative village and hamlet structure, a customary village (*desa adat*) and customary hamlets (*banjar / banjar suka-duka*; Guermonprez, 1990; Schulte Nordholt, 1991; Warren, 1993) were established. The *desa adat*-*banjar* relationship partly parallels the relations between administrative village and *dusun*. However, it cannot be reduced to such a hierarchical model, and certainly not to a mere administrative model. To some extent, *banjars* can operate relatively independent of, and free from customary village intervention. Further, in terms of their functions there may be differences between *desa adat* and *banjar*. Though both have religious (ceremonial-ritual), administrative and social functions, the former is more concerned with the village as a ritual community united through the village temple. Warren, paraphrasing Guermonprez (1990: 62) stresses that ‘the fundamental conception of village territory as sacred space in which the land belongs ultimately to the gods who are ancestors and “real social partners” is central to the meaning of *desa* in Balinese cosmology, irrespective of structural variations’ (1993: 20).

The *banjar* has important social security functions, especially related to death.⁴³ *Banjar* functions related to death - preparation of the deceased for cremation or burial and general assistance to the relatives - are intimately related to religious concerns for ritual purity and avoidance of pollution. Apart from these, the *banjar* has important functions related to religious-ritual village life, primarily ceremonies in the village temples (preparations of offerings for ceremonies, building, maintenance and cleaning of the village temple, fund-raising for such tasks etc.). Warren, disagreeing with both Guermonprez (1990) and Howe (1978) who conceptualize the relationship between *desa adat* and *banjar* in terms of hierarchy and a ritual-civic dichotomy, concludes that ‘irrespective of whether the *banjar* is a civic and ritual subdivision of the *desa adat*, effectively forming a hamlet, or a second corporate association of the same unit with different functions, the *banjar* must be regarded as a practical executor and institutional expression of the *desa adat* itself’ (1993: 21).

In Kertoraharjo, the *desa adat* is the primary guardian of ritual village unity, morals and purity. With the *banjars*, it organizes and implements temple festivals and ceremonies on Hindu festive days, temple inaugurations and ‘birthdays’, and other village-wide ceremonial and ritual events. Further, the *desa adat* generates and manages financial and other resources for temple construction and improvement. In contacts with the above-village levels of PHDI, the *desa adat* is the main point of entry. A major *banjar* function is assistance in times of death of a member to his or her relatives. Further, the *banjar* may assist members in need of labour power for moving a (wooden) house (this function has lost much of its importance with the growing number of permanent brick houses). The *banjars* assist on a rotational basis in the preparation of village temple ceremonies. Each *banjar* is, in turns, responsible for the cycle of rituals and ceremonies held.⁴⁴ As in Bali, *banjars* are known for a relatively strong sanctioning system.⁴⁵ While general customary village regulations exist (*awig-awig desa adat*), the *banjars* make their own (by-)laws. Customary village and *banjars* have a similar organizational structure: the chairman of the former is called *bendesa adat*; the latter is chaired by a *klian banjar*. Both are assisted by a secretary, treasurer and supporting staff.

⁴³ Contrary to ‘mainstream’ approaches, a functional approach to social security takes into account a broad field of state- and non-state arrangements. Kinship relations, neighbour networks, savings and credit groups, and agricultural groups may have important, and often underestimated, social security functions. In Kertoraharjo, for instance, customary village, *banjar*, *subak*, *prani*, *arisan*, and temple groups have such functions. See F. and K. von Benda-Beckmann, 1994; Getübig and Schmidt (eds), 1992; Leliveld, 1994.

⁴⁴ The responsible *banjar* is called *banjar pengamong*. The festive days are Saraswati (twice a year), Nyepi (once), Odalan (once), and also Galungan and Kuningan (for which no large preparations are necessary).

⁴⁵ Repeated disobedience to *banjar* regulations leads to social exclusion. Usually, this total social exclusion leaves no option but leaving. I know of one case, described to me as *ponis banjar* (Du. *vonnis*; sentence).

Initially, the composition of the four settler groups largely determined the pattern of local social organization in Kertoraharjo. The first group of 150 settler families established a customary village, to which the additional groups came to belong as well. The settler groups also formed banjars: the first group (150 families) formed two banjars, the second group (100 families) one banjar, and the third and fourth groups (50 families each) two banjars as well. However, many settlers continued to identify with those sections of their group they were familiar with (by area of origin) rather than with the new banjars. In 1973, when all groups had arrived and the definitive pattern of settlement had become clear, banjars were definitively formed. The banjar structure was no longer based on the original settler groups. For various reasons (e.g. flooding, bad drainage of home yards) people had applied for new home yards and moved there. Thus, members of the various groups had spread over a large number of lanes, and did no longer form compact blocks of settlers. Therefore, the banjars were formed on the basis of the lane structure. Four banjars were formed: Wana Karya, Bali Karya, Side Karya and Sidi Karya (Tampaksiring). Some years later, this pattern was changed again. Banjar Side Karya was regarded as too big (and unruly, as many people continue to stress). Part of Side Karya was split off, and became banjar Mekar Sari. Thus, banjars contained a hodgepodge of settlers of various origins. There was one exception: banjar Tampaksiring. The fourth Balinese settler group had been the only one with a homogeneous composition: all settler families originated from Tampaksiring in Gianyar District.⁴⁶ With the definitive formation of banjars, the status of banjar Tampaksiring was not changed. It covers the Balinese population living South of the Kertoraharjo market. With the administrative separation of Kertoraharjo and Margomulyo, banjar Tampaksiring and parts of other banjars came to belong to Margomulyo. The Balinese inhabitants of Margomulyo feel members of, and identify with, the customary village of Kertoraharjo and their banjar rather than the administrative village of Margomulyo.

Recently, the massive settlement of Balinese families on land bought from the Javanese in Margomulyo has led to the fading of the banjar as a discrete and bounded spatial unit. Initially, the banjars had been defined in such a way as to create spatially demarcated blocks. Nowadays there is a trend among settlers on land bought from Javanese to remain members of the banjar from which they originate (their parents' banjar) rather than associating with banjar Tampaksiring, which exerts customary authority over this part of Margomulyo. People continue to be affiliated with their banjar of origin, partly because of the social and kin relationships in that banjar and partly because of the special character of banjar Tampaksiring (all members of which share the same origin). This trend has set in a process of de-territorialization of banjars, comparable with similar developments in the subaks (see chapter 9).

Banjar membership is obligatory for all villagers who have reached a certain status in their family life and living circumstances. In Kertoraharjo, three statuses are distinguished which determine the position of a person or family relative to the banjar. First, there is the *ngarep* status. This status is usually held by a married son and his family replacing the son's parents and continuing their household, including responsibilities for the family temple and for banjar membership. The eldest marrying son, who takes over full banjar rights and responsibilities from his father, often acquires it. Once a father has been replaced by his son, the father's banjar responsibilities are automatically transferred to the latter.⁴⁷ The second status distinguished is called *ngampel*. This concerns married

⁴⁶ The Tampaksiring subdistrict head had made a request to the Transmigration authorities to keep the group together, using the argument that the group was different from other groups in that it contained all skills necessary in a transmigration setting. The group included artists, wood and stone carvers, gong teachers, a religious teacher, and people with skills in temple building. The request was granted.

⁴⁷ Regulations for banjar membership and replacement of parents by a son have recently been changed. Formerly, the youngest married son replaced his father in the banjar. As the youngest son often marries after a long time, when the father is already physically unable to fulfill his banjar obligations, this rule has been

sons and their families who run a separate household but still live on the premises of the son's parents.⁴⁸ These households have a partial banjar status: they have full rights and responsibilities with respect to collective labour, meetings, voting and assistance in case of death, but are given a fifty percent discount on payments (*urunan*) to the banjar and - through the banjar - to the customary village for ceremonies, construction of banjar buildings or village temple. The third status is *ngerob*. This status is held by those who still form one household (usually expressed as *satu dapur*, 'one kitchen') with the son's parents and share one family temple. As long as this is the case the son and his family have no banjar responsibilities.

Three remarks should be made here. First, the above distinctions are based on the basic pattern of inheritance through the male line and patrilocal settlement (see above), and therefore assume the presence of one or more sons. In the case of parents who have one or more daughters but no son, usually the first son-in-law takes the role of a son (*sentana*). In such cases the daughter and her husband remain on the premises or in the house of the wife's parents. The son-in-law takes over the responsibilities of a son and rights as a heir. Such arrangements have to be ritually and ceremonially confirmed, in the presence of functionaries of the banjar and customary village. Second, the statuses do not always correspond unambiguously with real-life situations. Under the various banjar statuses, a diversity of actual relationships with respect to land, agricultural produce, stocks and income, living patterns and the like exist. Day-to-day relationships do not necessarily correspond to the formal banjar statuses of the households concerned. Especially the second status (*ngampel*, *pecahan KK*) seems to be a hotly debated issue in customary village and banjar politics. Due to the fact that an increasing number of families claim this status, the banjars are faced with an ever larger group of members with only partial responsibilities towards their banjar and the customary village. In the customary village, there is agreement that the concept of 'pecahan KK' should be done away with as soon as possible. Three months after a couple has married, it should take full responsibilities as a separate household, is the general opinion in the customary village. However, this new policy has not yet been accepted by the banjars.

Pekaseh and subak

For the Balinese settlers, the forested land they received was not only a resource to be economically exploited by transforming forest into a clearing and cleared land into irrigated fields or gardens. These processes have a culturally constructed meaning. Forest and land had to be both physically and ritually transformed into irrigated fields. Sawahs have to be maintained not only in a physical, but also in a ritual and ceremonial sense, to maintain the balance between the godly world, human beings, and the resources involved (the field, the water, and the crops). For Balinese, turning forest into agricultural land is more than merely the application of human labour to part of the natural environment to make it a productive resource. Other 'stakeholders' are involved in this process of transformation: the various spirits that, if not treated with care, may become a threat to humans and crops. The clearing of forested land, therefore, entails accompaniment by ceremonies, rituals and offerings (see Charras, 1982).

Once the forest has been turned into irrigated fields and becomes productive, this relationship between the godly and spirit worlds, humans and resources continues. In Bali the cycle of irrigated rice cultivation, from preparatory activities to the last offerings made after harvest, forms a chain of highly ordered and interrelated activities. Balinese conceive of agriculture, and especially of rice

changed. This option is only open to sons who actually live on the premises of their parents. Sons who settle on a separate home yard have their own full responsibility towards the banjar. Thus, if the eldest son moves out after having married, a younger son, once married, takes over.

⁴⁸ Often, the Indonesian term *pecahan KK* is used for this status.

cultivation, as a human activity intimately bound up with the godly world. *Sari*, the essence of rice, originates from the body of the rice goddess Devi Sri, and should be returned to her after harvest to make the cycle continue. Gods subsist on the essence of rice and are the ultimate cause of its substance (the rice) in the human world. Hence, rice cultivation is susceptible to the threats of transgression of ceremonial rules, to ritual pollution and disturbance of the delicate relationship between human beings and the rice goddess. Therefore, the rice cultivation cycle is accompanied by a ritual and ceremonial cycle which suggests an analogy to the human life cycle: 'the production of the rice is therefore not simply a matter of human labour, but takes place within a set of social relations binding humans to gods. Gods (*dewa*) allow humans (*jalma*) to cultivate rice so long as this is done with the required ceremony and in prescribed ways. Rice production is a cooperative endeavour between gods and people' (Howe, 1991: 454).

In Bali, the *subak* performs a wide variety of functions related to irrigated agriculture in the broadest sense, including construction of irrigation infrastructure, operation and maintenance of irrigation systems, agricultural planning, conflict resolution, and the planning, organization and performance of ritual and ceremony. *Subaks* tend to be relatively autonomous from other customary institutions like *desa adat*. In Kertoraharjo, shortly after settlement a village *subak* was established. Later, this *subak* was split up again into four smaller *subaks* coordinated by a *pekaseh*. The *subaks* were defined physically and organizationally by the pattern of land allocation to the four settler groups. In those days, before the irrigation system had reached Kertoraharjo, the *subaks* played a role in the performance of agricultural ritual and, to some extent, in attempts by the Balinese to construct a temporary irrigation canal on their land. The *subaks* in Kertoraharjo, and their changing meaning and function in the process of irrigation development by the state agency of Public Works are extensively discussed in chapters 9 and 10.

Coping with poverty and internal differences: prani

Prani is an organization in Kertoraharjo that seems to be partly a response to the widespread poverty of the early settlement years, and partly a way of coping with the internal diversity of a settler population originating from various regions in Bali (see below).⁴⁹ *Prani* are member-based voluntary mutual assistance organizations. Some *prani* are for males only, others have a male and a female section. They fulfil an important social security function for their members, and were consciously established for this purpose. Without doubt, these are the most active organizations for mutual support in Kertoraharjo, with the exception of the *banjar* in cases of death.⁵⁰ As described above, a major *banjar* function is assistance in case of death of a member (the *duka* function). However, the *banjars* have never taken up the *suka* function associated with rituals for tooth-filing, marriage etc.⁵¹ This function was largely taken over by the *prani*, which tend to operate in a specific area of human activity: the preparation, organization and staging of ceremonies (*yadnya*). *Prani* play a crucial role in the preparations for so-called *manusa yadnya* ceremonies related to the human life cycle (birth and birthday, tooth filing, marriage) but also for *dewa yadnya* and *fitra yadnya* (e.g. the inauguration of a family temple).⁵²

⁴⁹ Also referred to as *seka prani* or *rukun prani*. It is not entirely clear where the term *prani* originates from. According to some it is the same as *patis* or *patus* in Gianyar and Tabanan.

⁵⁰ Note that the *prani* is a voluntary organization, while *banjar* membership is obligatory.

⁵¹ Though in Kertoraharjo the 'ideal' *banjar* is often associated with both functions, in Bali it is common for the two to be separated (personal communication Carol Warren).

⁵² For these ceremonies, see Eiseman, 1996b.

Prani members provide their fellow members with various kinds of assistance: labour power, material contributions in the form of food, ingredients for offerings, money, or other material goods (e.g. chairs, cooking utensils, plates, roofing material). If a women group is active, it concentrates on specific food preparation tasks and the making of offerings.⁵³ The member who uses the services of his group has to provide its members with food, drinks and tobacco during the period of prani activity. Some prani demand financial compensation (*batu-batu*) for the prani funds. These funds are often used to invest in a common stock of goods: cooking pans and utensils, glasses, tables, chairs and *bale* (platforms to sit on), plastic or plaited roofing. Enterprising prani rent out this stock to other prani or private users. Prani funds derive from various sources: batu-batu, fines for absence and late-coming paid by members, and income from the rental of stock. Some prani have a credit and savings function, as do banjars (see above), subaks and farmers' groups (chapters 9 and 10).

Sometimes a prani assists on the occasion of death. In that case, it is regarded as absolutely subordinate to the banjar: prani members have to precisely follow banjar instructions and never act on their own initiative. Prani members can facilitate the banjar by gathering bamboo, firewood and other necessities. After fulfilling those tasks, the prani has to leave the initiative to the banjar again. Prani's are smaller than banjars (Kertoraharjo's largest prani is about as big as its smallest banjar, that of Tampaksiring), but may transcend banjar boundaries. Prani membership can be based on a variety of affiliations like residential location in Kertoraharjo, area or village of origin in Bali, or they can be mixed groups (see e.g. box 4). There are more than thirty such organisations in Kertoraharjo.⁵⁴ If they wish, people can become a member of more than one prani at the same time.

The origins of the prani in Kertoraharjo can be traced to the difficult initial period of settlement and the widespread poverty in those days. The provision of scarce foodstuffs (rice, eggs) and ingredients for offerings (palm leaves, coconuts) used to be the most important prani contribution to the fulfilment of ceremonial-ritual obligations. The chairman of prani Jembrana, the oldest prani:

'In those days, our standard of living was still very low. People mixed their rice with cassava, or made do with cassava alone. Ceremonies were held in the simplest way possible, as most people could hardly afford expenses for rituals and offerings. Once there was a family that could not afford a ceremony. People from Jembrana gathered together to see whether they could help them out. It was then that prani Penyaringan was established as a way out, not only for this family at that specific moment when it needed support, but for all who had gathered and would need it in the future. In its first years of existence, the only things members had to supply were a small cup of rice, a coconut, an egg and some palm leaf. Small contributions, but very important for those preparing a ceremony. Few people could afford more than one cup of rice in those days.'

The socio-economic developments of the last two decades have radically changed the picture (see chapter 8). The majority of villagers are no longer confronted with food shortages and threats to their basic subsistence. However, this did not lead to individualization and the breakdown of prani organizations. On the contrary: the number of prani has been steadily growing. Prani continue to have an important function in the daily life of their members. A prani leader reflects on the changing meaning of prani against the background of changing socio-economic conditions:

'Initially we were very poor, in need of rice and short of money. Therefore, rice played an important role in the first prani groups. I remember that prani members contributed a small cup or a saucer of uncooked rice. But, as land became more productive, the importance of these small cups decreased. Most farmers now fill their own storehouses and sell considerable quantities on the market as well. Gradually, labour power

⁵³ Lawar, a mixture of vegetables, spices, meat and blood indispensable at ceremonies, is prepared by men.

⁵⁴ In my research I identified 6 prani groups with a mixed membership, 6 based on neighbourhood, and 10 based on area of origin in Bali: Gianyar (2); Karangasem (2); Penyaringan, Jembrana (2); Bongan, Tabanan; Babakan, Badung; Payangan, Tampaksiring; Cahu.

became more important in the prani groups. Though many people hire labour power for work in the sawahs, they are still very busy, especially those who engage in cocoa gardening as well. Formerly, there was enough labour power but a shortage of rice, nowadays we have an abundance of rice and an increasing shortage of labour power. So you might say that, from an organization for the procurement of rice for ceremonies, the prani has become an organization making labour power available for its members.'

Box 4: prani ladang

The prani ladang is a good example of the adaptive power of prani. By the nineties, home yards in Kertoraharjo had become scarce and expensive. As the offspring of transmigrants in Kertoraharjo married and there was a growing need for home yards for these newly formed households, the Balinese expanded into the neighbouring village of Margomulyo. Usually, home yards along the road or the ladang plots immediately behind them were bought from Javanese. In other cases, Balinese agricultural land, especially the more elevated parts, came to be used for settlement. Thus, during recent years the pattern of settlement changed from a concentrated village settlement pattern towards a scattered homestead kind of pattern. Socially and organizationally, this did not make life easier for the mostly newly married and resource-poor families. Living far away from their banjar of origin and the dense organizational layout of the village, some of the inhabitants of plots outside the core village felt at a disadvantage in organizing and preparing ceremonies. To cope with this problem, in 1993 a prani ladang was established. The chairman: 'I remember how difficult it was to get support for the preparation of ceremonies. Just looking for people willing and able to help at short notice did not work. With people living spread across the ladang area, often at considerable distance, there was the need for some kind of organization. So I decided to establish a prani ladang, drawing its membership wholly from settlers on or near the ladang area.' The prani ladang now counts sixteen member families. Women and men each have their own chairperson, but a common secretary and treasurer. If the prani is activated, men and women have their own tasks: the men look for firewood, make constructions for roofing and other purposes, prepare the indispensable lawar (see note 53), and perform other jobs as needed. The women help preparing offerings and work in the kitchen. The prani only assists in the preparation of 'suka' ceremonies. It has written regulations. The members meet every Galungan early in the afternoon to discuss requests for assistance for the coming period, financial matters and loans from the funds, plans for investment of prani capital in new stock, and other important matters. Each time the prani is called for assistance to one of its members, the other members have to contribute the following: their labour power from the first preparations until the ceremony is over; two coconuts; two eggs; five hundred Rupiahs; 1 liter of hulled rice; a portion of young coconut leaves for the offerings; 10 pieces of plaited *rumbiah* roofing. The prani member who makes use of the assistance of the prani has the following duties: payment to the prani funds of a financial contribution (batu-batu) for using the prani, and providing the prani members with food, drinks and cigarettes during the period they contribute their labour power. Prani funds derive from batu-batu contributions, fines for absence, and interest on cash loans by the prani members. They are primarily used for two purposes: cash loans to the members for six-months' periods against an interest of five percent per month, and investments in prani stock needed for organizing ceremonies: cooking utensils, cups, plates, glasses, spoons, and roofing.

Source: fieldwork

Several alternative explanations of the continuing relevance of prani are given. First, many people state that the banjars are too large, and family groups too small, to assume this mutual assistance role in preparing ceremonies. Though these ceremonies are relatively simple, kinship and family networks are (still) so small that they do not provide a solution to acute labour problems associated with their preparation. Therefore, mutual assistance groups larger than kin groups and smaller than the banjars developed. Another explanation, given especially by those who are more outspoken and

open-minded about the difficult history of unification of the transmigrants of various areas of origin, stresses the initial tensions and conflicts between the various origin groups. Adat differences between these origin groups initially played (and to some extent still play) an important role. Differences surfaced most openly in the banjar sphere with its important functions pertaining to death and ritual (the preparation of village temple ceremonies, the making of offerings) and related tasks involving all members, and seriously lamed banjar functioning.⁵⁵ Thus, while customary village and banjars went through a difficult process of unification under the external guidance and homogenizing influence of PHDI, the prani continued to provide some measure of discretionary space for people to organize and engage in arrangements for mutual assistance on whatever basis they liked, including area of origin and affinity with people from the same area.

6. Multiple areas of origin: adat differences and local power struggle

The Balinese were, of course, keenly aware of differences between them and their non-Balinese neighbours. However, the differences between Balinese from various areas of origin seem to have been at least as sensitive and problematic. Due to differences in origin, a mixed bag of local customary and religious-ritual practices came together in Kertoraharjo. In referring to these differences, people often used the terms *dresta* (stressing the complex of customary traditions and practices), *sima* (stressing the normative and legal aspects of such differences) or *adat*.⁵⁶ Though all Kertoraharjo settlers are Hindu, the integration of all these different origin groups, each with its own customary practices, normative conceptions of 'us' and 'them', and ambitions of members of these groups to come to power in the new settler society seems to have been a very sensitive and problematic process full of tensions.

As ceremony and ritual received greater attention, and customary institutions became more important in daily life, the settlers became more aware of differences in their customary and religious-ritual backgrounds. These differences were clearly felt, for instance, in the way offerings (*sajen*; *upakara*) were made and ceremonies were held; in how people behaved in matters of purity, avoidance of taboos, and the like. After banjars had been formed, a meeting was held for the election of a customary village leader. Every banjar was asked to push forward one candidate, but only one banjar did so. Internally divided as the banjars were between various origin groups, it was impossible for them to decide upon the candidature. For fear of being rejected by the other banjars, the candidate that had emerged did not accept the function. Then it was decided to establish a special village council to solve the problems between the various origin groups, to prevent members from imposing their own way, and to elect the first leader of the customary village. This council, DMDA, consisted of representatives of all origin groups, who could give their opinion on the process of unification.⁵⁷ The leaders of the various origin groups gathered in DMDA were the first to realize that, in order to reach greater unity among settlers, these would have to be convinced of the need to leave behind their local customary norms, rules and practices and strife for unification under completely new circumstances in Sulawesi.

⁵⁵ Except the banjar of Tampaksiring. It is striking that Tampaksiring has only one prani. These differences did not surface to such an extent in the subaks. First, subak is not about something as emotionally charged as death; second, in the subaks there is not the kind of massive member participation characteristic of banjar in cases of death. Third, large subak ritual activities have become institutionalized as 'public' functions of the *pekaseh*, while small rice ritual is a 'private' affair of individual households.

⁵⁶ Warren distinguished between *dresta* (*adat*), *sima* (*awig2*) and *tata krama* (community practice), together covering and referring to a complex of social, legal, moral and religious relations, local and embodied in Balinese institutions.

⁵⁷ *Dewan Masyarakat Desa Adat*; Customary Village Population Council.

Initially there was not much support for that option. Even if they had not become a resource in local power struggles, these problems were serious enough. Differing norms, rules and practices of the various origin groups with respect to clothing, food in offerings, and the making of offerings were a major problem. Such differences could cause serious irritations between the groups. People from Jembrana are said to have often eaten food items like meat sticks (*sate*) being prepared for offerings, or to have taken them from the offerings when the ceremony was still going on. Some people used to come to the temple in plain clothes like trousers instead of wearing the cloth (*kain*) obligatory for visits to the temple. Or they used to eat offerings meant for the evil spirits after a ceremony (*sajen carung*). Another difference was the way various groups used *taur*.⁵⁸ People from Nusa Penida are said to have had the habit of using the same offerings for different places to be freed from evil spirits (the entrance to the home yard, the house or a lane), while people from the eastern part of mainland Bali tend to make separate offerings for each place. Further, the degree of elaboration of offerings made in the various groups was a source of irritation and conflict between, for instance, the Tampaksiring and Jembrana groups. It led to mutual accusations like ‘they do not know how to make offerings’ or ‘they accuse us of having an adat which is inferior to theirs’.

The most crucial issue in banjar unification concerned the various ways of coping with death and the ceremonial, ritual and taboos associated with it. These differences touched the core functions of the banjar. Differences between transmigrants from East Bali and those from West Bali (Jembrana) existed about the day the ceremony for the dead should be held and about the period during which relatives and fellow banjar members of the deceased are not allowed to enter the village temple for reasons of purity (*cuntaka*). As to the first: while transmigrants from eastern Bali tended to hold on to the third day, those from western Bali preferred the twelfth day after death for their *ngengorasin* ceremony. As to the second: transmigrants of various origin groups differed in their definitions of the periods during which relatives and banjar members (for the latter the period is shorter than for the former) should observe the prohibition on entering the temple. This was, of course, a very sensitive issue.

These differences between ‘us’ and ‘them’, ‘our ways’ and ‘their ways’, ‘right’ and ‘wrong’ also became weapons in the struggle for power and monopolization of positions in village institutions. Especially the larger origin groups that were numerically more or less in balance, those of Gianyar and Jembrana, included members with strong ambitions for holding positions in the customary village. As these private agendas were normatively legitimated in terms of objective group differences, such ambitions seem to have received rather massive support in the various groups. An initial settler, formerly active in the sphere of the customary village administration:

‘The people felt uneasy because of the many adat differences between the settlers. People did not know one another, nor were they familiar with different traditions. Initially, such differences surfaced in the ways of making and naming offerings. Because of these differences it was almost impossible for us to prepare for certain ceremonies. Everybody retreated to his own way of doing things, all groups regarded their own way as the best and only way to do it, including the makers of offerings. If preparations for a ceremony were made, and the offering specialist from Jembrana came to prepare offerings, the people from Gianyar said ‘she does not know how to make offerings’, and the other way around. In banjar and customary village meetings, the opinions of representatives of all these groups could not be reconciled. The dividing line was mainly between those from East Bali and those from West Bali. What it came down to was that members of the different groups distrusted one another. People of one group were bent on preventing people from the other group from coming to power in the village and becoming too influential in decision-making. People who tried to use the differences between adats to come to power in the village had many followers. Only when we received regular guidance from a Balinese official from the Hindu-Buddhist section of the Department of Religion in Ujung Pandang (Makassar; D.R.), from about 1975 onwards, these problems were gradually solved. This man started to tackle the problems

⁵⁸ Taur is a ‘salary’ for the *bhutas* (evil spirits), ‘paid’ in the form of offerings that should keep them away from human beings and avoid disturbances of human life (Eiseman, 1996a).

and conflicts in Kertoraharjo: the various local adats, temple construction, offerings, death ceremonies and the like. With his input, the mutual distrust, the ambitions and the conflicts gradually wore out, though many differences continue to exist until this day. However, nowadays we use general guidelines as a basis for rituals in Kertoraharjo, at least for ceremonies in the village temple.’

And another inhabitant, a former adat leader:

‘The various groups did not only want to stick to their own adat but to enforce it upon other people as well. Every time differences became manifest, people said: ‘you should not do it that way, we do that in a different manner’, and another conflict had been born. This led to severe problems, especially during the first five years, but it took more than ten years to overcome them. Quarrels, people angrily leaving meetings, and the like. Only with help from outside could these tensions be overcome. An official of the provincial section of the Ministry of Religious Affairs spoke to us during meetings, and advised us to forget all those local rules and traditions. He stressed that Balinese in Sulawesi should no longer behave as Balinese from Bali but as Balinese from Sulawesi. We had left Bali and, sooner or later, would have to unite through discussion into one general adat. After some time even the most fanatic among us admitted: ‘we have become inhabitants of Sulawesi’. But even though people have gradually adapted to this new reality, differences between groups have remained to this day.’

Once the settlers had more or less accepted the advice to forget their *adat kecil* (lit. ‘small adat’; local adat) and construct a new adat fitting Kertoraharjo rather than Bali, the problems could be overcome. In the course of the seventies, when PHDI had been established in South Sulawesi, this organization was asked to play an advisory role in the issue of unification in Kertoraharjo. It started providing the Kertoraharjo population with documentation and religious books about Hinduism. Setting the standards for Balinese transmigrants, PHDI came to play a central role in the normative regulation of religious and customary practices in transmigration settlements throughout the region. Without, by the way, being able to fully determine the local dynamics of processes of adaptation and change in religious-ritual and ceremonial matters. According to a religious specialist in Kertoraharjo:

‘PHDI was very important for us. Once it had been more or less agreed upon that we should no longer orient ourselves to Bali but to the new reality of living in a mixed settlement in Sulawesi, it could provide us with the documentation to unify our traditions. They still have a unifying function for the religious community throughout Indonesia, giving guidance in religious matters and advising the religious community as to how to practice religion in the various regions. But down here in the village we will always have our own logic: *desa, kala, patra*.’⁵⁹

7. Kertoraharjo: from transmigration settlement to Balinese village in Sulawesi

In this chapter I have discussed the main aspects of the settlement history of Balinese transmigrants in Kertoraharjo. As in all pioneer settlements, the early years were difficult and characterized by poverty, food shortages, and suffering. Rain-fed agriculture provided the settlers with a meagre subsistence. In thirty years, Kertoraharjo was transformed from a pioneer settlement in the forest to a relatively thriving village. In contrast to many transmigration settlements in Indonesia, large-scale conflicts about land between indigenous and settler populations were absent in Kertoraharjo. Thus, the transmigrants

⁵⁹ See note 10. Note that such general principles can be used in contradictory ways. In Kertoraharjo, members of various origin groups used it to legitimize their sticking to local practices, while those in favour of unification used it to stress the need for settlers to adapt to the new circumstances of a transmigrant settlement in Sulawesi.

could clear and develop their land without being disturbed by such conflicts. However, competition for land resources between various settler groups from Java, Bali and Tana Toraja in the area around Kertoraharjo did play a role. The Kertoraharjo settler groups emerged from this struggle relatively undamaged, especially when compared to the Balinese transmigrants in Alam Buana and the Javanese natural disaster victims in Purwosari. The absence of land conflict, the farming background of most settlers, and the availability of irrigation infrastructure from the eighties were important factors in the way the settlement and its inhabitants developed.

Some years after its establishment, the transmigration settlement of Kertoraharjo I, with a mixed Javanese and Balinese population, was split up into two administrative villages: Margomulyo and Kertoraharjo. The administrative village of Kertoraharjo has an all-Balinese population. In the process of establishment of administrative villages, the Balinese customary village came to belong to both administrative villages. Apart from the customary village and its banjars, the Balinese established other specifically Balinese institutions like pekaseh, subak and prani. Thus, Kertoraharjo became an intricate mix of government-administrative and specifically Balinese regulatory spaces and arrangements. Due to differences in local customary backgrounds between Balinese of various origins and the use of these differences in struggles for power positions in the village, the process of establishment of customary institutions and unification of the Balinese settlers was very difficult. Gradually, a *modus vivendi* was found, when the settlers realized that there is a difference between Balinese in Bali and Balinese in Sulawesi.

Land in Kertoraharjo: social differentiation and agricultural diversification

1. A village in flux

In July 1999 I am the guest of a Kertoraharjo cocoa farmer. The exchange rate of the Rupiah against the dollar has improved after many months of economic crisis. ‘Do you think we will have another crisis?’, Sumarto asks hopefully. ‘Let the crisis return to Indonesia, I’ll be glad if it strikes again’. We discuss the development of cocoa prices since 1997. That year’s harvest, just before the crisis, had been good, as were the prices received by farmers. Sumarto now calls these prices ‘low’, though he cashed 20 million. The next season was good as well. However, it was the plummeting exchange rate of the Rupiah against the dollar that caused the 1998 cocoa harvesting season - coinciding with the all-time low point of the Indonesian crisis - to be remembered by many as a period of unprecedented revenues and spending. Cocoa became the *mas hijau* (green gold) of Sulawesi. In the ‘crisis’ season, Sumarto made 120 million. He invested in a motorbike, a pickup truck, and land: ‘land is everlasting capital. I have no savings, my money is continually being used’. This large landowner is not wholly representative. Farmers were influenced by the crisis in different ways and to different degrees. However, for the majority of villagers it did not represent the kind of disaster it was elsewhere. Cocoa cultivation proved to be an important buffer against the crisis.

In the foregoing chapter I have described the history of settlement in Kertoraharjo. In this chapter I explore how the settlers make a living now. As access to, and control of land is crucial for livelihood, the analysis focuses on land. Economic life has undergone important changes during the last decades. Transformations in Balinese landownership and agriculture are major causative factors behind these changes. Economically, the settlers have been relatively successful. The rapid economic development of Kertoraharjo is evidenced by the expansion of landownership into neighbouring villages, the quality of houses and family temples, and the many capital - and consumer goods, not to speak of the investments in offerings and ceremonies, and construction, expansion and improvement of village temples and other customary village infrastructure. The relatively good economic prospects have also functioned as a pull-factor for migrants from Bali.

Processes of diversification of resource basis, farming system, and economic activities are one part of the story, but gradual socio-economic differentiation is another. Transmigrants started from a relatively egalitarian economic position determined by equal access to land resources.¹ Economic stagnation is the fate of part of the village population. Within the limited space of this chapter I will focus on the various positions relative to the major resource (agricultural land) held by various

¹ However, some were ‘more equal’ than others. Examples are unmarried male children who administratively ‘married’ their sister and received the full package of land and facilities, or the special right to choose land rather than being dependent on a lottery for those who played a leading role in the transmigration process.

categories of settlers. The most marked differences with respect to access to land exist between initial transmigrant families and families with a different relationship to land: spontaneous migrants and the offspring of transmigrants.² In this chapter I give an account of the role of land in Kertoraharjo. I will specifically discuss developments in irrigated agriculture, and the recent emergence of cocoa gardening as a source of agricultural income. Further, development and current conditions of Kertoraharjo landownership, with a focus on the distinction between transmigrants, migrants and offspring, will be discussed. Other topics are the emergence of new destinations for migration in search of cocoa garden land, and the important role of non-ownership forms of access to land: sharecropping (*bagi hasil*) and pawning (*gadai*). A short recapitulation of findings and additional remarks on the impact of the Indonesian crisis concludes this chapter.

2. Making a living in Kertoraharjo: an overview

The basis of Kertoraharjo livelihood is a combination of irrigated agriculture and cocoa gardening with animal husbandry (primarily pigs), supported by various off- and non-farm economic activities.³ Irrigated rice cultivation and cocoa gardening are, without doubt, the most crucial components. In the seventies, transmigration was based on a pattern of irrigated rice and rain-fed seasonal crops (*padi-palawija*). Often, bad conditions for agriculture made full development of this pattern impossible. In such cases, settlers had to subsist on rain-fed agriculture under difficult agro-ecological conditions. However, Kertoraharjo is different: almost all land could be irrigated; not only its sawahs but also its 'ladang' areas. Hence, after an initial period of rain-fed agriculture, the introduction of irrigated agriculture in the eighties ushered in a shift towards monocropping of irrigated rice. This shift more or less coincided with a gradual transition away from subsistence agriculture. In the late eighties, most farmers came to have considerable marketable surpluses. Rice became a crop with subsistence - as well as an increasingly important market value.⁴ Rice farming in Kertoraharjo now fulfils both functions. Not long after the introduction of a farming system based on irrigated rice cropping, diversification into a combination of irrigated rice cultivation and cocoa gardening set in. Another cash crop introduced into the farming system of Balinese farmers in the course of the eighties is oil palm (*kelapa sawit*). Though relatively few families were engaged in oil palm cultivation by the end of the nineties, its popularity was growing.⁵

Various other crops support farmer livelihood. Tubers, vegetables, peppers or other crops may be grown on patches of elevated land. Home yards and gardens are a rich source of perennial crops for

² For some migrants who came at their own initiative, the disadvantage of arriving as a spontaneous migrant without state-guaranteed access to land, seems to have been more than balanced by the advantage of not being tied to irrigated agriculture, and hence of being able to make alternative choices and fully engage in cash crop cultivation.

³ Often the term 'farming system' is used, referring to 'the allocation of certain quantities and qualities of basic types of inputs (land, labour, capital and management) by farming families to three processes (crop, livestock and off-farm enterprises) in a manner which, given the knowledge they possess, will maximize the attainment of their goals' (Meindertma, 1997: 21). I use the term 'off-farm' (in contrast to 'on-farm') here in the sense of 'all agricultural and non-agricultural income earning activities undertaken by members of a farming household outside their own farm (that is land owned or rented)' (Meindertma, 1997: 1).

⁴ 'Subsistence' includes the use of agricultural produce for ritual-ceremonial purposes, maintenance of social security networks and exchange relationships as in banjar and prani.

⁵ Some farmers explained that they like oil palm gardening because its income is *seperti gaji pegawai* (like an official's salary). Farmers, organized in producers' groups, deliver their harvest to the processing factory and get a monthly payment on a bank account, in accordance with the quantity harvested.

subsistence, market, or both. Coconut trees, for instance, are providers of many products: fruits can be used in food preparation, for the production of coconut oil, and in pig food. Both can be either used for subsistence or marketed. The (young) leaves are crucial for making offerings, while they can also be used for making brushes, brooms and roofing. While coconut trees are most prominent on the home yards, many fruit tree crops can be found in the gardens. Often, these crops remain 'hidden' behind major subsistence crops and cash earners like rice, cocoa, and, to some degree, oil palm. However, their role as providers of food and non-food products for subsistence as well as a source of additional income - though hardly quantifiable - should not be underestimated.

From the seventies, the settlers engaged in animal husbandry: pigs, cows, and fowl like chicken and ducks. After the difficult initial period of settlement and land development, pigs became increasingly important in the ritual-ceremonial sphere. Pig meat and blood are important ingredients of lawar, the food used for offerings and served to guests during a ceremony. However, pig breeding also has another important function. The Balinese need for additional cash income in the initial period coincided with a growing demand for pigs in Tana Toraja. Under the influence of the quest for status among the new rich in this district, Toraja death ceremonies required an increasing number of pigs for slaughter at ceremonies. As local pig production fell short of demand, Luwu became crucial as a pig supplier. This was a good opportunity for the Balinese: pig breeding became an important safety net and source of income. While in times of bad harvests and food shortage the Balinese could compensate for income loss by selling one or more pigs, their (Islamic) Javanese neighbours started selling land, often to the Balinese.⁶ It is no coincidence that many Balinese characterize the function of pigs (Bal. *celeng*) in their farming system as *celengan* ('piggy bank')! Cows were of particular importance in the relatively short period between the introduction of irrigated agriculture (1983) and mechanized ploughing in the late eighties. Though many farmers continued using cows for land preparation, cow traction is definitively on the decrease, in favour of two-wheeled hand ploughs. Moreover, cow fodder has become scarce in or near Kertoraharjo; collecting it has become a time-consuming affair. Letting one's cow stray around untended may easily lead to conflicts with water users, crop owners, farmers' groups, or village administrators. The other side of the coin is, of course, that cows may have the same savings bank function as pigs. Finally, most farmers keep fowl (chicken, ducks and geese) on a small scale. Selling fowl may generate additional income to meet relatively small but unexpected expenses for education, routine health care, transport or other purposes. If bred on a larger scale, fowl are an important source of income through the daily sales of eggs on one of the local markets or to itinerant buyers.

Off-farm agricultural labour is another important source of income. Those who have invested in a two-wheeled plough may generate considerable income from its rental to other farmers during the land preparation period. But even for farmers who do not own such capital goods and for whom labour power is the only resource they can offer, possibilities for generating additional income are many. There is a high demand for labour in land preparation, transplanting, weeding, fertilizer and chemical application, and harvesting in irrigated agriculture (the latter usually paid in kind with a harvest share). There is also some demand for labour in the cocoa gardens (planting, trimming, harvesting, harvest processing). Most agricultural labour has, of course, a seasonal character.

Many inhabitants are engaged in non-farm employment in Kertoraharjo or at a greater distance. Major occupations are crafts like carpentry, wood carving, making cement relief blocks (*batako*) for temples or walls, bicycle and motorbike repair, construction, trade and shop keeping, operation of rice mills and transport, repair of electronic appliances, and daily wage labour. A limited number of transmigrants or their children have found employment as officials (teachers, a health officer, and a district telecommunications office employee). They find themselves in a relatively advantaged

⁶ Balinese in Kertoraharjo and Margomulyo have taken over much land from Javanese in these villagers.

position compared to farmers. In addition to their land and its produce, they derive a dependable money income from their employment, enjoying additional benefits like monthly rice rations, health insurance and a pension. Much non-farm employment has a seasonal character: house and temple construction takes place after the rice harvest, when people have cash and time. For a small number of officials (primarily teachers), income from non-agricultural employment forms an important element of their total income. The same goes for shopkeepers, rice millers, and other entrepreneurs.⁷ For the large majority of families, however, agriculture is by far the most important provider of staple food and source of income.

The following general impression of Kertoraharjo livelihood is based on a random sample of families on one hundred home yards. I have taken the home yards and the families living on them rather than the smaller units sometimes discernible inside them - usually nuclear families - as a unit of research. Where more than one nuclear family inhabit one home yard, usually a variety of social and economic relationships exist between the various nuclei, especially with regard to land. Only in cases where there was an outstanding absence of such relationships between the various nuclear family units living on one home yard, I have deviated from this point of departure.⁸ A more extensive analysis of landownership and other forms of access to land will follow below.

Fifty-three sample families were transmigrants, thirteen spontaneous migrants, and thirty-four families headed by offspring. Most sample home yards were inhabited by single nuclear families. Multiple and augmented nuclear family groups are quite common as well, while some home yards were inhabited by multiple augmented groups. Households of the augmented nuclear type consisted of a nuclear family and a parent of one of the spouses (six cases), one or more grandchildren (three cases), a brother (one case) and a stepchild (one case). Households of the multiple nuclear type consisted of combinations of two nuclear families (twenty cases) or three nuclear families (two cases). Finally, households of the multiple augmented type consisted of two nuclear families and a parent (one case) or a nephew (one case) of one of the spouses. The multiple nuclear family type is quite common; often the family additional to the core nuclear family is the one that is going to take over home yard, house and family temple, and the associated religious and ritual duties.⁹

The families on forty-five home yards have a rice-based (sawah) farming system. In forty-four cases it is based on a combination of irrigated rice and gardening (sawah-kebun), and in eleven cases on gardening (*kebun*) only. Oil palm gardening is practiced in two cases; in one case as part of a sawah-kebun farming system, in another as part of a kebun farming system. All other cases concern cocoa gardens or mixed gardens with a strong predominance of cocoa. Generally, farming families hold the land they work in private ownership. In ninety-one cases, land for agricultural

⁷ Some millers combine milling and rice trade with trade in building materials. They provide cash loans to farmers who need building materials for house or family temple, to be repaid from their harvests (sold and processed in the rice mill of the lender). Some farmers also deposit their proceeds from rice harvests with millers, who function as a (no-interest) savings bank until the farmer has saved enough cash to start building.

⁸ I found three nuclear families that temporarily used a parcel of land for settlement on the home yards of their relatives, but had no further relationships with these families. Two were landless, the third owned some agricultural land. Though I am aware of the pitfalls, for my purposes this approach most clearly reflected existing conditions and relationships pertaining to land. Relationships between the constituent cores on home yards inhabited by more than one nuclear family hardly ever seem to correspond to the extremes of, on the one hand, fully separate nuclear family households and, on the other, completely integrated households.

⁹ Sixty-five home yards were inhabited by single nuclear families, 11 by augmented nuclear families, 22 by multiple nuclear families, and 2 by multiple augmented nuclear families. Thirty-three home yards had 4 inhabitants, 18 yards had 6, 16 yards had 5, 13 yards had 3, 7 yards had 2, 6 yards had 7, 4 yards had 8, 2 yards had 10, and 1 yard had 9 inhabitants.

production on which the characterization is based, is held in private ownership.¹⁰ The remaining nine cases, in which no agricultural land is held in private ownership, are also sawah-based, with sawahs worked under tenure arrangements like sharecropping (*bagi hasil*), pawning (*gadai*) and rent (*sewa*). Ownership of, or at least access to, a home yard is very important as well. Six out of the nine cases own a home yard; the remaining three have a small home yard parcel in temporary use. The inhabitants of thirty-five home yards have additional access to agricultural land through sharecropping, pawning, or rental, while the inhabitants of eighteen home yards had temporarily lost access to part of their land through such arrangements.

The inhabitants of ninety-three yards engage in small-scale pig husbandry. Only twenty-six families engage in cow breeding. On almost all yards chicken or ducks can be found. However, only four families breed fowl on a larger scale, mainly for egg production. Inhabitants of fifty-eight home yards are engaged in some kind of additional (and largely seasonal) off-farm agricultural work for other farmers (land preparation, ploughing, transplanting, weeding, fertilizing, harvesting and harvest processing). Inhabitants of forty-three home yards are engaged in non-agricultural labour, mainly crafts and construction, small trade, rice milling, work as an official (mainly teaching), and daily wage labour. All but four family heads (three teachers and a rice miller) of the core families gave farming as their major (that is: economically most important) occupation. However, agriculture continues to be an important source of income for them. For those who primarily identified as farmers, farming is by far the most important source of income indeed. On market days, many women engage in trade, an important source of additional cash income.

3. The agricultural basis: irrigated rice farming and cocoa cultivation

Irrigated agriculture in Kertoraharjo

Before finalization of the irrigation system, most farmers cultivated various seasonal crops. In the 'future sawah' areas, rain-fed rice was combined with palawija crops like soybeans and maize. The same crops were cultivated on the ladangs, combined with perennials. Initially, land preparation was restricted to removing weeds and tree remains. Land was prepared using a hoe; for sowing a digging stick was used. Through the seventies, agriculture had remained subsistence-oriented. Often, yields were below subsistence level due to pest damage. Since the irrigation system reached Kertoraharjo, agricultural practices have rapidly changed. Cow traction for ploughing spread and became common. The rice-palawija pattern was soon replaced by a pattern of continuous cultivation of irrigated rice, with two harvests of irrigated rice a year. Most farmers, who had planted perennials on their ladangs, shifted to irrigated rice as well.

Changing agricultural practices were reflected in changing relationships with the market. Irrigated agriculture brought about a radical transformation from subsistence-oriented production in which market exchanges played a secondary role, towards the current pattern in which rice harvests are used for a variety of market and non-market purposes. Though nowadays the lions' share of rice harvests is sold on the market, part is still stored for subsistence needs, tax payment to the subak, consumption during feasts and rituals, and for exchanges in networks with a social security function

¹⁰ Two families were landless, 14 families owned an area in the 0.01-1.00 range, 27 were in the 1.01-2.00 range, 38 in the 2.01-4.00 range, and 19 owned more than 4.01 hectares. A more detailed account of landownership and access to land will be given in section 4 of this chapter.

like prani and banjar. Nearly all families have a rice storehouse on their home yards, which is intensively used.¹¹

These transformations have also deeply influenced labour arrangements in agriculture. There is a clear trend away from mutual assistance and labour exchange, and at certain stages of cultivation also from family labour, towards wage labour. In the early eighties, just before irrigation started functioning, labour exchange groups (*seka*) still existed for several tasks. Such groups were often formed spontaneously and for one season. Tasks were carried out in turns on the fields of each of the group members. Without any financial compensation; the owner only had to provide food and drinks, and take his share of working the land of the other group members. After irrigation had reached the village, things began to change. Under the disciplining pressure of increasingly tight opening and closure schedules of the system, the load of work on sawah and 'ladang' at each stage of the cropping cycle had to be performed in a short period of time. Wage labour became the alternative to collective labour arrangements. Demand for labour being high during the peak periods, the bargaining position of daily wage labourers is relatively strong, and wages are high.

Mechanized ploughing

In the nineties, ownership and use of two-wheeled ploughs has rapidly spread.¹² Few farmers use cow traction for all stages of land development (ploughing, harrowing, and levelling). For final levelling, it is still widely used if not included in the arrangements made with a tractor owner. Farmers also use cows on plots that are hard to reach or inaccessible to tractors. Generally, tractor owners do not like to be contracted for such locations because of the distance, entering problems, and hard work. Finally, those who want to save money and do not know severe time or labour constraints, continue using cow traction (see boxes 5 and 6).

Most tractor owners charge a lower price to farmers paying directly than to those who pay after harvest. Those who opt for after-harvest payment will have to do so immediately, at the risk of exclusion from future ploughing services. Because of the high demand for tractors, there is still a shortage. Not all tractor owners use their tractor as a source of income. Some owners restrict its use to their own land and perhaps the land of a limited number of relatives. Moreover, tractor owners tend to pick and choose their customers on factors like soil condition, distance from the village and accessibility of the land. Plough owners tend to look for opportunities to serve groups of farmers whose sawahs are not too far apart or, even better, form one block of adjoining plots. They tend to have a regular relationship (*langganan*) with these farmers. Such an agreement is to the advantage of both.¹³ Working for groups of farmers owning adjoining land also has a regulating and coordinating influence on transplanting schedules, making it easier for the tractor operator to bring his machine into the field without damaging crops in adjoining sawahs on which the rice has already been transplanted.

¹¹ Study of the role of rice farming in 32 sample families shows that 30 families had enough rice to cover their consumption needs. Thirty families sold considerable amounts of rice on the market every season (several small households even sell their whole harvest and cover consumption needs with the proceeds from harvesting labour paid in kind with a *derep* harvest share, see below). Families marketing their rice sold minimally 50 percent, and a mean of more than 70 percent.

¹² These ploughs are generally called *traktor*; hence I call them tractor as well. Some farmers jokingly call them *sapi Jepang* (Japanese cows). In 1997 there were at least 60 families owning a tractor in Kertoraharjo.

¹³ Twenty hectares is about the maximum a tractor owner can handle in one season. The stages in the work are, per hectare: ploughing (*ceko*; 1 day), harrowing (*lendrong*; 0.5 day), and levelling (*meratakan*; 0.5 day). To prepare one hectare for planting (*siap tanam*), two days are needed. Often, land preparation is divided into two stages: first, ploughing and harrowing; second, shortly before transplanting, land levelling is done.

Box 5: basic data on rice cultivation for 32 sample farmers

Activity	Labour options	Cases
Initial preparatory work	<ul style="list-style-type: none"> • Family labour • Family and daily wage labour combined • Daily wage labour 	30 1 1
Land preparation	<ul style="list-style-type: none"> • Tractor • Cows • Tractor / cows combined 	31 - 1
Seedbed making	<ul style="list-style-type: none"> • Family labour • Wage labour 	32 -
Final levelling before transplanting	<ul style="list-style-type: none"> • Included in tractor contract • Cow traction / tractor • Cow traction 	21 3 8
Extraction and bundling	<ul style="list-style-type: none"> • Family labour • Labour exchange • Family labour and wage labour combined • Wage labour 	5 5 4 18
Transplanting	<ul style="list-style-type: none"> • Wage labour • Other 	32 -
Weeding	<ul style="list-style-type: none"> • Family labour • Labour exchange • Wage labour 	28 2 2
Harvesting	<ul style="list-style-type: none"> • Harvest share (<i>derep</i>) • Family labour 	30 2
Harvest share (<i>derep</i>; for 54 fields owned / worked by 32 farmers)	<ul style="list-style-type: none"> • 1:6 • 1:7 • others (e.g. badly drained fields) 	36 15 3
Harvest transport	<ul style="list-style-type: none"> <i>a. from sawah to farm road:</i> <ul style="list-style-type: none"> • Family labour • Labour exchange • Wage labour • Taken care of by the buyer <i>b. (farm) road to village:</i> <ul style="list-style-type: none"> • Family labour • Labour exchange • Wage labour • Taken care of by buyer 	6 1 23 2 2 - 25 5

Source: fieldwork

Extracting, bundling and transplanting

Not long ago, extracting and bundling rice stalks for transplanting was carried out exclusively by family labour and inter-household mutual aid arrangements. In recent years, this activity has also gone through a process of rapid commercialization. However, labour exchange arrangements still exist on a small scale. Often, the job is done by a combination of family labour and wage labour. Wage labour is paid according to the number of bundles (*ikat*) transplanted. Commercialization began in the eighties. Labour exchange groups, usually formed by owners of adjoining fields,

existed until the early nineties, when commercial planting groups rapidly replaced them.¹⁴ Some planting groups, consisting mainly of young unmarried men and women who regard planting labour not only as an opportunity for earning money but for social intercourse as well, come from Kertoraharjo. However, most groups come from the Javanese villages of Mulyasri, Purwosari and Margomulyo, and provide an income opportunity to those with limited or no access to land (see chapter 7). These groups follow the rhythm of transplanting, starting off in their own villages, then shifting to Kertoraharjo and Margomulyo, to end up in Patengko and other areas where transplanting tends to start late. Fifteen planters can finish one hectare in half a day, and after the afternoon break continue with another hectare.

At the peak of transplanting, labour is very scarce. Therefore, groups have to be contracted several weeks before the actual transplanting date. A complicating factor is that it has to be coordinated with the starting date for transplanting determined by the leader of all subaks, the pekaseh (see chapter 9), with personal preferences based on the Balinese calendar, and with tractor availability. If transplanting has to be postponed because of problems with tractor or transplanting group, Balinese Hinduism allows for considerable pragmatism, like transplanting just a few bundles in one corner of the sawah. In that way, transplanting is considered to have taken place on the planned day. Rice plants are less flexible: postponement may be disastrous for the rice, especially if the young stalks have already been torn out and bundled.¹⁵

Weeding and harvesting

Another task in which labour exchange used to play an important role was weeding. Nowadays, weeding is usually performed by family labour or on a daily wage labour basis. Sometimes, small labour exchange groups can still be found. Spraying has always been an activity performed by wage labour. The only activity in the rice cultivation cycle that has resisted commercialization is harvesting. Harvesting groups based on labour exchange (*seka manji*) have disappeared, the old harvesting knives (*silet, ani-ani*) still used in the seventies and early eighties have been replaced by the sickle (*arit*), and the practice of storing the rice in sheaves has been replaced by foot-pedal threshing on the sawah. However, harvesting labour is seldom paid in money. Most farmers harvest using *derep* harvesters who receive a harvest share for their labour. Sometimes it is difficult to gather enough harvest labourers in time. First, during the peak period of harvesting harvest labour power is scarce. Second, the willingness of harvesters to join depends on the location and condition of the land to be harvested. Especially sawahs that cannot be sufficiently drained and dried are not popular. The heavy work, the slow pace of work, and the lower quality of the rice make harvesters shrink back from working under such conditions. If people who are willing to join can be found at all, they will demand a higher harvest share than is usually paid under better conditions: 1:4 or 1:5 instead of 1:6 to 1:7. If harvesting conditions are very bad, the owner has to pay in money. In periods of peak demand, there is said to be a slight trend towards payment in money.

Aside from *derep* labour two other arrangements exist. Farmers generally refer to both by using the term *tebasan*. In the first, a pre-harvest estimation determines the price paid by the harvester-buyer; in the second, the harvester-buyer pays the crop owner on a per-kilo basis. In both systems the buyers originate from outside Kertoraharjo, often even from outside Luwu. The exact role of these arrangements in Kertoraharjo harvesting practices is not clear. According to many farmers new harvesting practices have been on the increase during the crisis period (that is: the harvests

¹⁴ Balinese call both *seka tanam*. Some prani groups are said once to have engaged in transplanting as well.

¹⁵ The only thing farmers who have fixed relationships with tractor owners still need to worry about is the coordination of land preparation with labour power for extracting, bundling and transplanting. One tractor owner cooperates with a planting labour group. Control over tractor availability and transplanting group has the advantage of being able to react flexibly to unforeseen situations like tractor breakdown.

from 1998 onwards). Several factors may play a role. Many rice farmers are dissatisfied with the prices paid by local millers and with the system of immediate versus postponed payment and the price differences related to it. This makes them look for alternative opportunities for selling their crop. Further, in the rainy season it seems to be more difficult to get derep labour than in the dry season. Thus, there may be a seasonal component involved in the decision to sell the crop to outside traders. On the other hand, the general farmer preference for storing part of their crop for household consumption, and the practice of many farmers to sell hulled rice and use the skins as food for the pigs induces them to continue selling their crop in the village. Further, traders from outside who buy on a per-kilo basis are said to be cheating with weighing. In the end, farmers gain little by selling to these traders. Finally, though feelings among farmers about the prices paid by the rice traders are ambivalent, many farmers maintain good relationships with millers, who give loans (sometimes without interest) for house improvement and temple construction.

Box 6: irrigated agriculture: labour inputs, expenses and product prices (hectare / season)

Activity	1996-1997 (pre-crisis)	1999
Bund repair / improvement	Family / wage labour Wage: Rp. 5,000-6,000	Family / wage labour Wage: Rp. 15,000
Land preparation (ha.)	<i>Cash:</i> Rp. 100,000-120,000 <i>Post-harvest:</i> Rp. 115,000-140,000	<i>Cash:</i> Rp. 200,000-250,000 <i>Post-harvest:</i> Rp. 250,000-300,000
• Tractor (all stages)	Rp. 10,000- 12,000	Rp. 25,000- 30,000
• Cows for levelling		
Seedbed making	Family labour	Family labour
Seed extraction and bundling	Wage labour: 50-60 bundles = Rp. 1,000	Wage labour: 25 bundles = Rp. 1,000
Transplanting (ha.)	Wage (planting group): Rp. 45,000-55,000	Wage (planting group): 120,000
Fertilizer application	Family or wage labour	Family or wage labour
Pesticide application	Family or wage labour	Family or wage labour
Weeding	Family or wage labour	Family or wage labour
Harvesting	Harvest share 1:5 – 1:7	Harvest share 1:5 – 1:7
Transport		
• Field to road	Rp. 300-1,000 per sack	Rp. 1,250-4,000 per sack
• Road to mill / house	Rp. 7,000 / pick-up truck ride	Rp. 1,000 per sack
Price paid by miller		
• Gabah (unhulled)	Rp. 320-350 per kilo	Rp. 1,100-1,150 per kilo
• Beras (hulled)	Rp. 625-675 per kilo	Rp. 2,200-2,250 per kilo
Drying floor labour (if the farmer sells hulled rice)	Family labour on miller's floor	Family labour on miller's floor
Miller's share (if the farmer sells hulled rice)	1:9-1:12	1:9-1:12
PBB land tax (season)	Rp. 3,000-4,000	Rp. 3,000-4,000
Irrigation service fee (season)	Rp. 5,000	Rp. 5,000
Contributions to P3A / farmers' groups (if any)	Rp. 2,500-7,500	Rp. 2,500-7,500
Subak tax (ha./ season)	Rp. 3,500	Rp. 10,000

Source: fieldwork

Prospects of rice cultivation

After the shift towards intensive cultivation of irrigated rice, increased use of inputs, and harvest increases from the eighties, in the nineties rice harvests seem to have stabilized at a mean level of around four tons unhulled rice (gabah) per hectare per season.¹⁶ Under the existing climatic and soil conditions, farming and irrigation practices, prevalence of pests like stemborer, rats, and snails (*keong mas*), and forms of government extension and support, sustainable forms of production seem hardly feasible in the near future.¹⁷ In the late nineties, the regional government started experimenting with the introduction of a padi-palawija pattern in parts of Kalaena. However, after two decades of government pressure for rice monocropping, farmers were hardly interested in such a programme. Returns of the rice crop (in terms of the ratio between unhulled and hulled grains) are still very low in Kalaena: between fifty-two and fifty-four percent.¹⁸ This leads to relatively low producer prices. Even before the crisis, rising prices of chemical inputs (especially fertilizer) were seen by many farmers as problematic. During the crisis, further price increases and the breakdown of input subsidies have worsened the situation and turned the tide against rice farmers. An additional disadvantage and disincentive to farmers who invest much labour and capital in the treatment of their crops is the fact that individual quality differences in rice are hardly expressed in price differences on the local rice market. Finally, there is the ambivalent role of the mills. Thanks to the system of deferred payment millers can engage in rice trade almost without capital. Farmers complain, but are also dependent on the millers because of their geographical proximity and the multiple ties that sometimes exist between millers and farmers. Considering all, prospects for a more sustainable and productive irrigated agriculture were not really bright around the year 2000.

*The emergence and expansion of cocoa gardening**A booming cocoa market*

Cocoa gardening emerged quite recently as a major source of income for farmers in Kertoraharjo. In the eighties, Indonesian cocoa production rapidly increased. This production is largely realized in Sulawesi.¹⁹ In 1994, Sulawesi accounted for seventy-seven percent of smallholder production.²⁰ Smallholder cocoa production in Sulawesi is among the cheapest in the world. Contrary to the clove market, the cocoa market is characterized by fierce competition between traders and middlemen, and little government intervention.²¹ In the case of cocoa this has resulted in a high farm gate price.

¹⁶ Considerable differences exist between the wet and dry season crop harvests, the former being between 25% and 50% lower than the latter.

¹⁷ According to some rice millers, rice harvests were higher around the early nineties than they are now.

¹⁸ Compare to Lamasi (Luwu): 55-60%; Sidrap (S. Sulawesi): 60-65%; Java: 65-70%.

¹⁹ For the Sulawesi boom, see Akiyama and Nishio, 1996; Ruf, 1993; 1995; Ruf et al., 1995. For Indonesia, the first authors mention an average growth in 1980-1994 from 10,284 tons in 1980 to 271,127 tons in 1994. For Sulawesi, production increased from 1,085 tons in 1980 to 196,235 tons in 1994. With an export value of US\$ 166 million, Indonesia has become the third producer in the world, after Ivory Coast and Ghana.

²⁰ Especially South Sulawesi (40% of Sulawesi output) and Southeast Sulawesi (28% of Sulawesi output), where smallholder acreage and production increased from 13,125 hectares and 1,058 tons in 1980 to 389,946 hectares and 196,235 tons in 1994 (Akiyama and Nishio, 1996). In the nineties there is a clear expansion to Central Sulawesi, as is also evidenced by Balinese, Bugis and Toraja migration to this area.

²¹ Government policies are important for their effects on cocoa production: investments in infrastructure and transmigration (e.g. Luwu); the currency rate (which was kept low to stimulate non-oil exports from the eighties); subsidy policies (fertilizers were subsidized to stimulate rice production but were often used for cocoa production) (Ruf, 1995).

Thanks to its high returns for farmers, cocoa is a very attractive smallholder crop. Cocoa from Sulawesi is exported largely in un- or partly fermented form (Akiyama and Nishio, 1996).²²

The rapid development of smallholder cocoa in Sulawesi cannot simply be explained in terms of market prices. The cycles of booms and recessions, as well as marked geographical shifts in cocoa production are more aptly described in terms of the 'forest rent and cocoa cycles model' (Akiyama and Nishio, 1996; Cirad-Askindo, 1997; Ruf, 1995; Ruf et al., 1995).²³ Cocoa becomes productive between two and four years after planting, and can remain so at least twenty years under favourable conditions.²⁴ When harvests start declining, the options are felling and replanting on the same land or shifting production to land newly cleared from forest. As a consequence of forest rent, farmers establishing new gardens or faced with production decrease of old ones tend to prefer the relatively low development costs of new clearings to the much higher capital and labour investments for replanting land under cultivation or using fallow land.²⁵ This explains the expansive character of the booms in the cocoa cycle. Therefore, the basic factor determining the geographical shift of cocoa production centres is the availability of tropical forests.²⁶ Apart from forest rent and access to land under a favourable property regime, other socio-economic, demographic, political and other factors play a role. Price is a factor in farmer decision-making. However, in the absence of the crucial factors of the cocoa cycle (forest, land, migration) price increase will not automatically lead to an increase in production and a regional boom. Migration to, and pioneer settlement in Luwu (and Central and Southeast Sulawesi) illustrate this crucial interaction between favourable physical conditions (alluvial soils, a short dry season), migration in search of cheap land under favourable property conditions, and migrant labour needed for smallholder cocoa production (Ruf, 1995).

Smallholder cocoa production entails distinct threats and uncertainties. Pests like the cocoa pod borer are a major threat to the crop. Further, there is the dependence on the world market and its prices in combination with the time gap between investment of land, labour and capital and the productive stage of the crops. Cocoa also forms a long-term threat to the sustainability of forest resources and biodiversity. According to Ruf (1995: 49), cocoa monoculture 'is a way of "pumping out" forest rent as rapidly as possible'. As long as cocoa production takes place in newly cleared forest locations rather than by replanting and conversion of degraded land, the forest will be the major loser of cocoa cycles (Cirad-Askindo, 1997; Ruf et al., 1995). Forest resources are over-utilized and depleted, after which a shift to another production centre occurs.

In Kertoraharjo, diversification into cocoa cultivation took place largely under the influence of the remarkable success stories of a small number of spontaneous migrants who started experimenting with cocoa cultivation rather than engaging in rice cultivation (see box 7). As migrants, they had no immediate access to sawahs. Sawahs in and around Kertoraharjo were far more expensive than garden land bought at greater distance from Pamona, Bugis, or Toraja farmers. Most of these

²² Private and government estates are relatively inefficient. The smallholders' share in production increased from 10% (1980) to 72% (1994). Its advantages are the availability of family savings and labour, ways of generating cash, risk sharing and cost reduction through pawning, sharecropping, and land development contracts (Ruf, 1995).

²³ Ruf (1995: 6-7) defines forest rent as 'the difference in cost between a ton of cocoa produced on a plantation created after forest clearance and a ton of cocoa produced by replanting on fallow land or after felling of the first plantation'. These differences can be attributed to the ecological changes and the reduction of the initial benefits of a newly cleared forest environment.

²⁴ The average is about 25 years (10-15 years in Ivory Coast to some 80 years in Brazil (ICCO, 1995).

²⁵ Decreasing farmer incomes, labour demand and supply, postponement of decisions about replacement of old trees by new ones, and the growing scarcity of forest lead to shifts in production (Ruf, 1995).

²⁶ Forest rent is one of the major explanatory factors behind the competitiveness of new cocoa producing countries like Indonesia on the world market.

‘success stories’ concern farmers from Jembrana in western Bali where gardening is a crucial component of the farming system. Thus, they also had the necessary gardening experience.

Often, Balinese cocoa gardens are located in forest zones at greater distance from the village. Land bought in these zones tends to be forest-covered or recently cleared.²⁷ It is difficult without close monitoring to get a clear picture of the costs and benefits of cocoa gardening, and of its real contribution to farmer income. Many gardens have often been bought quite recently: partly planted, planted but not yet productive, or productive but not yet reaching full productivity. However, on the basis of production data and accounts given by farmers of how cocoa harvesting income contributes to their purchases of new land, capital goods, luxury goods, to building or improvements of houses and family temples, it can be concluded that its contribution must be important.²⁸

Box 7: the story of a successful Balinese cocoa farmer

Ketut Dana was born in Jembrana in 1954. In 1973, still unmarried, he decided to leave for South Sulawesi. One of his brothers, as well as a cousin from his mother’s side, had left as transmigrants the year before. Dana had finished primary school but his parents, who had to feed eleven children, could not afford secondary education. Though they owned land - one hectare of garden land and 0.4 hectare of sawah - prospects were far from bright for Dana. Therefore, all children tried to create their own basis of subsistence. Dana had once attended an information meeting about transmigration but, being unmarried, was not allowed to register. Later he received a letter from his brother in Sulawesi, stating that there were no disturbances, that there was a lot of forest, and that the soil was fertile. After reading this, he decided to leave Bali. He left with Rp. 30,000 in his pocket, and arrived in Kertoraharjo with Rp. 20,000 left. For Rp. 13,000, he immediately bought a piece of garden land in Patengko, partly planted with coffee, from a Pamona farmer. Dana planted more coffee as well as bananas. He married in 1974. Three days after the marriage, Dana and his wife moved from Dana’s brother’s house to a small shack in their garden, where they lived for five years. In the meantime, yields from his coffee garden increased. Every month they could harvest ten sacks of coffee, which provided them with sufficient income. In 1986, a co-villager from Bali, who had arrived five years after Dana, advised him to cut down his coffee trees and replace them all with cocoa. The Luwu plain, this man had told him, was not the ideal place for a favourable coffee market to develop. Dana took the advice to heart and, having no other land and crops to make a living from, gradually replaced his coffee with a local cocoa variety, the seedlings of which he had bought in a nearby Bugis settlement. After three to four years, his cocoa trees became productive. Soon they were able to move from their garden dwelling to a home yard in Kertoraharjo, bought with the proceeds of the first cocoa harvests. In that same period, Dana began to invest in more garden land, either fallow or planted with cocoa. In 1997, the family owned seven hectares of garden, six of which productive. Being able to invest in land after each cocoa harvest, Dana also bought six hectares of sawah, all worked in sharecropping arrangements. In 1998, in the midst of the economic crisis, he bought another three hectares of irrigated fields from Toraja farmers. In 1999, he bought another 0.75 hectare of cocoa garden from a Bugis farmer. Dana and his family perform most of the garden work themselves. In the harvest peak period daily labourers are hired in. Dana estimates that his 1996 harvest yielded some Rp. 20 million. In 1998 he sold for a value of Rp. 120 million.

Source: fieldwork

²⁷ Of a total of 130 cocoa garden owners asked about the condition of their land upon purchase, 50 (38%) had bought uncleared land, 8 (6%) partly cleared land, 23 (18%) recently cleared land, 16 (12%) recently cleared and partly planted land, and 34 (26%) had bought land which was wholly planted.

²⁸ Farmers (excluding the big cocoa farmers) reported a mean gross harvest income of Rp. 1.6 million per year in 1996-1997 (before the crisis), which more or less equalled the income generated by selling four tons of unhulled rice before the crisis.

The cocoa market and prospects of cocoa gardening

Cocoa farming involves risks that may become a threat to its long-term ecological and economic sustainability. Cocoa diseases, dependence on the international market, and shifting centres of production co-determine the fate of cocoa farmers in a not too distant future. In the nineties, farmers in Kertoraharjo have become mainly acquainted with the sweet taste of cocoa and they seem to have liked it. The competitive cocoa market has favoured smallholder producers, providing them with a considerable additional source of income. Even before the crisis, cocoa prices were relatively stable at a level attractive for smallholders. Farmers can easily sell their harvests and receive high prices in a competitive market. The crisis year of 1998, its soaring cocoa prices and the 1999 price drop have led to great confusion among Kertoraharjo farmers. In 1999, many farmers were in great doubt whether to invest in cocoa gardens or not, and whether to do so at the cost of activities in irrigated agriculture or to continue to play it safe and diversify rather than shift to cocoa monoculture. The crisis seems to have given a new stimulus to the clearing of forested land for cocoa cultivation. There is evidence from Kertoraharjo that farmers who recently engaged in such expansion into state and protected forest areas in times of political turmoil run the risk of insecurity of tenure, conflicts between competing claimants, and non-recognition of land claims and investments.²⁹

4. Kertoraharjo land tenure: development and current situation*Irrigated fields and garden land: spatial expansion of Kertoraharjo land tenure*

The growing importance of cocoa gardening as a farming component entailed a geographical expansion of Balinese control of land resources. Four major zones can be discerned, mainly based on distance from Kertoraharjo but with, in some cases, different agro-ecological characteristics as well. Irrigated land allocated to the Balinese or bought from other transmigrants is located in Kertoraharjo and Margomulyo. In this first zone, gardens only exist on pockets of land that cannot be irrigated. Irrigated land bought by the Balinese is located in other villages (Patengko, Purwosari, Cendana Hitam, Mulyasri) around Kertoraharjo, in the area enclosed by the road to Central Sulawesi, Tomoni and Kalaena. In this second zone, extensive pockets of cocoa garden land exist, especially in the floodplains along Tomoni and Kalaena, often outside the embankments. Regular flooding makes this land extremely fertile but susceptible to river erosion during and drainage problems after flooding. Some Balinese who own land here see parts of it disappear after each major flooding. Many Balinese own gardens in the plain West of the Wotu-Poso road, between this road and the foothills some kilometres West of it, and in the foothill zone between the plain and the steep mountains that enclose the Kalaena plain to the West. From the eighties, massive land clearing and development of cocoa gardens by smallholders of various ethnic backgrounds took place in the higher foothills. From the same decade, a belt of oil palm plantations, partly of the nucleus estate smallholder type, was established in the lower foothills. Most Balinese own cocoa gardens in this third zone, some have bought oil palm gardens. Lastly, there are the locations at an even greater distance: in other parts of Luwu, in other districts, or even crossing the provincial boundary (zone 4; see below).³⁰

²⁹ The outbreak of large-scale violent conflicts in Central Sulawesi (Poso) has, no doubt, further added to this insecurity (see also below).

³⁰ Almost all garden land recently acquired by Balinese is located outside the zone of irrigable land in the command area of the irrigation system. Increased cocoa production is largely the result of expansion of Balinese agriculture outside the irrigated areas, where forest has been converted into gardens. This has

Cocoa cultivation has attracted many Balinese farmers, and fundamentally changed life. It offered a new opportunity for investments in land that would - at least on such a scale - have been impossible in irrigated rice farming. It also contributes considerably to the family income for daily consumption needs, education and healthcare, luxury goods and other uses. It has made people less dependent on their irrigated crops and the seasonal pattern of rice harvests. Further, it marks the end of the 'old' pattern of full-time rice farming, providing a new model for farmer families to orient themselves to, either partly or wholly. Farmers now have to divide their physical presence and labour power between irrigated rice farming and gardening. In this respect, it is important that Balinese control of land is no longer restricted to the initial settlement and neighbouring villages. To get a picture of this and other aspects of Balinese control of land, in this section I present data on landownership and other forms of control of land in Kertoraharjo.³¹ Data presented here are of two qualities: data about landownership, buying and selling of land are both diachronic as well as reflecting the current situation, together giving a clear picture of the development of landownership. Data on other forms of access to land like sharecropping and pawning represent the situation at the time of the research. I discuss the role of sharecropping (*bagi hasil*) and pawning (*gadai*) more extensively below.

Some remarks should be made about the concept of 'landownership' as used here. If full ownership supported by a state title reflecting field conditions is meant, hardly any land will qualify. Initial transmigration land was, for the greater part, titled immediately after settlement through routine distribution of land titles, which seldom reflect actual field conditions. Titles for part of the land have never been issued. Ownership changes resulting from transactions (exchanges, buying and selling, splitting up or inheritance) have never been registered. Often such transactions merely entailed the transfer of the initial title document to the new owner, written declarations between the parties directly involved, and sometimes declarations issued by the village administration.³² For land outside the transmigration area, the picture is different. Much land was never titled at all. Transfers in these villages also entail declarations between the two parties, sometimes also filed at the village administration. As the owner, as registered in the village land tax files, is responsible for payment of the PBB land tax, it is in the seller's interest to report any transfer of land to the village administration and have his or her name replaced by the name of the new buyer. But there is no such stimulus for land titling. On the contrary, spatial and bureaucratic distance, procedures for surveying, mapping and titling, time and travelling expenses to be invested in visits to the district office, and the unexpected expenses involved are strong barriers against farmers' engagement in formal titling procedures (see chapters 4, 5 and 6).

It is not possible to acquire a full ownership title for gardens outside river embankments in the floodplains. Due to its location, no land titles are issued for this land. In the villages, the land is

important consequences: Balinese landownership is now spread over a much wider area than until the mid-eighties. This has also consequences for the allocation of labour between irrigated and garden farming.

³¹ I collected these data through a village census and in-depth interviews. The village administration could not be relied upon for complete data on land resources. Land registration for tax payment purposes takes place in the village to which the land belongs (the PBB land tax has to be paid to the village administration of this village). Thus, neither irrigated land owned by Kertoraharjo farmers in neighbouring villages nor garden land in the more distant zones appear in this administration. Relying on the village administration, therefore, would have resulted in a considerable under-estimation of landownership and the almost total exclusion of cocoa gardens from the analysis.

³² At the time of this research, a land-titling programme was implemented as part of the Provincial Irrigated Agriculture Development Programme (PIADP; not to be mixed up with the Pompegan case in chapters 4 to 6!). Though farmers are interested in receiving a land title, there is a general fear of the bureaucratic aspects and expenses of land registration and titling.

registered for land tax payment. Part of the gardens in this zone will, sooner or later, be washed away by flooding. In the meantime, farmers claim the land in this zone as theirs. In the zones West of the Wotu-Poso road the situation is more complex again. Hardly any land owned by Balinese in this zone has been formally titled. The most common proofs of ownership are declarations signed by seller and buyer, or issued by the local administration. The zone between this road and the oil palm belt seems to be quite safe in the sense that smallholder gardens are not threatened by investment plans of plantation companies. The foothills between the oil palm belt and the mountains are riskier. Here, much land that is formally state land has been sold to smallholders by local Pamona who claimed customary control over the land. The future function and ownership status of land in this zone is not clear. In expropriation procedures, farmers without formal land title will find themselves in a weak negotiating position relative to the state or enterprises establishing plantations (see Tanaka, 1997). Deviations from ‘full ownership’, then, are most marked in the cocoa smallholder sector in the foothills. Commercial exploitation of this zone may become a threat to the current users of the land. In the irrigated areas of the Kalaena system, with its stabilized land tenure, the absence of up-to-date titles reflecting field conditions does not pose a serious threat to the owners of the land.³³

Landownership in Kertoraharjo

The status categories of transmigrants, spontaneous migrants, and offspring are an important distinguishing characteristic in land tenure. Before differentiating these categories, in table 1 I give general data concerning landownership for 239 families. What stands out is, first, the emergent differentiation as evidenced by the upper and lower landownership classes and, second, the large number of families in the fourth (1.01-2.00) and fifth (2.01-3.00) classes. Breaking down these general data into the status categories mentioned above, the relationship between status and landownership becomes clear (see table 2).

Table 1: total landownership for families on 239 home yards

Category	Landownership	Frequency	Percentage	Cumulative
01	0.00	4	1.7	1.7
02	0.01-0.50	20	8.4	10.0
03	0.51-1.00	14	5.9	15.9
04	1.01-2.00	79	33.1	49.0
05	2.01-3.00	60	25.1	74.1
06	3.01-4.00	28	11.7	85.8
07	4.01-5.00	17	7.1	92.9
08	5.01-6.00	7	2.9	95.8
09	6.01-7.00	3	1.3	97.1
10	7.01-	7	2.9	100.0
Total		239	100.0	100.0

Source: fieldwork

³³ Land in the smallholder section (*plasma*) of the oil palm plantation belt is a special case. Some Balinese have bought land here, taking over the rights and obligations towards the enterprise. Once they have fulfilled their financial obligations by paying off the debt to the enterprise, they will receive an ownership title. As long as the bank loan has not been repaid, the owner remains tied to the company through certain regulations and restrictions on the land and its produce. It cannot be converted to another crop, and oil palm harvests have to be sold to the company that owns the core plantation area (*inti*).

Table 2: landownership and the three status categories

Cat.	Ownership	Trans-migrants	Spontaneous migrants	Offspring	Total
01	0.00	-	1 (3.4)	3 (5.0)	4
02	0.01-0.50	3 (2.0)	9 (31.0)	8 (13.3)	20
03	0.51-1.00	2 (1.3)	3 (10.3)	9 (15.0)	14
04	1.01-2.00	50 (33.3)	8 (27.5)	21 (35.0)	79
05	2.01-3.00	44 (29.3)	4 (13.7)	12 (20.0)	60
06	3.01-4.00	24 (16.0)	2 (6.8)	2 (3.3)	28
07	4.01-5.00	13 (8.6)	1 (3.4)	3 (5.0)	17
08	5.01-6.00	5 (3.3)	1 (3.4)	1 (1.6)	7
09	6.01-7.00	3 (2.0)	-	-	3
10	7.01-	6 (4.0)	-	1 (1.6)	7
Total		150 (100)	29 (100)	60 (100)	239

Source: fieldwork

First, the 0.01-1.00 classes show a remarkable difference between transmigrants on one hand, and spontaneous migrants and offspring on the other. Second, the somewhat lower representation of the two latter groups in the higher ownership categories is striking.³⁴

As the area initially allocated to the transmigrants was two hectares, the ownership category 1.01-2.00 ha. was split up for the cases of families who own exactly two hectares of land. Forty out of seventy-nine families in this category (thirty-six transmigrant and four offspring families that have inherited house and land of a transmigrant family) still own exactly two hectares. What about transmigrants or their offspring who have inherited the initial land resources, and who now own less than the initial two hectares? To what extent are they 'losers' in terms of their *total* landownership? Ten cases on a total of fifty-nine are offspring families in which the land had already been transferred. Landownership data for this group of fifty-nine families show that almost sixty percent of those with less than two hectares of transmigration land left have a *total* ownership of more than two hectares. This means that the large majority of those who do no longer own all their transmigration land, have at least not lost in terms of total ownership. Concentrating on the forty-nine initial transmigrant families, it can be seen that for most families *total* ownership has increased. The replacement of transmigration land by other land that must have taken place can be related to diversification into gardening. Often, (part of) the transmigration land was sold to buy garden land. If landownership of members of the transmigrant category who own less than two hectares of initial transmigration land is split up into the main farming systems options, the role of the shift to gardening becomes clear: twenty-four families (out of forty-nine) have shifted to either the sawah-garden (sawah-kebun) or the garden (kebun) pattern.³⁵

³⁴ Some of the biggest cocoa farmers who arrived spontaneously and are now large landowners (the largest among the migrants; all in the category > 7 hectare), are not represented here. I approached them at an early stage of the research to interview them on their experiences with cocoa gardening and because their choice for cocoa made them rich farmers who could invest much capital in additional land. They were not in the random sample. Including them here would have distorted the random character of data collection.

³⁵ Twenty families (41%) have shifted to the sawah-kebun pattern, 4 (8%) to the kebun pattern; 22 families (45%) stuck to the sawah pattern, while another 3 (6%) own neither sawah nor kebun, but a home yard only. If these same families are classified according to land worked (rather than land in ownership), the latter category of three landless families disappears into the category of those having access to sawah (through sharecropping or pawning; see below).

Considering total landownership of the twenty-four families who shifted to sawah-kebun or kebun, the picture becomes clear: while seventeen percent of the families fall in the 1.01-2.00 ownership class, eighty-three percent own more than two hectares of land.³⁶ It will be clear that the emergence of the cocoa market has become a stimulus for farmers to do away with part of their irrigated land and shift towards a sawah-kebun or kebun pattern. For families that have less than two hectares of their transmigration land left and do not own gardens, the following picture emerges: ten out of the twenty-two families with less than two hectares of transmigration land left and belonging to the sawah farming system category, own two hectares of land or more. That means that they have invested in other irrigated fields.

Farming choices

The data give a clear picture of the main farming choices (rice, cocoa, rice and cocoa; sawah, kebun and sawah-kebun) distinguished above. The data concern land held in ownership (except the home yard) and access to land respectively. Again, the statuses of transmigrant, migrant and offspring are distinguished (see table 3). While relatively few families engage in gardening only (most of them migrants or offspring), many farmers have left the sawah pattern and shifted to the pattern of irrigated rice farming combined with cocoa gardening (92 families; 38.5 percent). Differences between transmigrants and migrants are also striking, reflecting the sawah-based settlement pattern of the former as against the higher dependence on the purchase of garden land of the latter.

Table 3: farming choices for 239 families according to status categories, on the basis of ownership of / access to land

Status	Farming system choice				Total
	Sawah	Kebun	Sawah-kebun	No sawah or kebun	
Transmigrants	79 / 82	4 / 4	64 / 64	3 / 0	150
Migrants	6 / 14	6 / 6	8 / 8	9 / 1	29
Offspring	23 / 30	9 / 9	20 / 21	8 / 0	60
Total	108 / 126	19 / 19	92 / 93	20 / 1	239

Source: fieldwork

In the Kertoraharjo context, non-ownership access to land means access to irrigated fields through various arrangements. As can be seen from the comparison between data on ownership and on access, the three transmigrant families who own no land have access to irrigated land through sharecropping and / or pawning. The same goes for eight out of the nine spontaneous migrant families without land in ownership. The ninth case concerns an old craftsman who had belonged to the household of his transmigrant son, and was thrown off the latter's home yard after a quarrel. Hence he has no access to any land apart from a small home yard. The offspring families show the same pattern (seven families with access to sawah, one with access to sawah and garden).

Data about land purchases reflect the increasing purchasing power of the settlers, the growing popularity of cocoa gardening, and the opportunities for access to new frontier land.³⁷ While sawah purchases remained more or less constant between the early seventies and the late nineties, purchases of gardens were rare until the mid-eighties, while far exceeding sawah purchases in the

³⁶ Twenty-five percent of the latter own more than four hectares of garden land.

³⁷ The census identified 399 land purchases: sawah: 177 (44.4%); cocoa garden: 147 (36.8%); home yards: 69 (17.3%); oil palm gardens: 6 (1.5%).

nineties.³⁸ Purchases of oil palm gardens emerged in the eighties. This shift towards cocoa gardening has important consequences for the location of the land owned by Balinese, and thus the distance between house and agricultural land. This distance has considerably increased (see the four zones described above). Initial land transactions were restricted to the core area of Kertoraharjo and Margomulyo, characterized by irrigated agriculture. Land was bought from transmigrants who had decided to move away or from those who sold land in distress sales. Gradually, purchases of irrigated and garden land in the second zone of neighbouring villages increased. From the eighties, when land became more productive and Balinese agriculture had shifted away from subsistence, farmers could increasingly afford land purchases from inhabitants of other villages. Gradually, garden land in the second zone became increasingly scarce and expensive. Attention shifted to the plain and foothills West of the Wotu-Poso road, both characterized by the cocoa gardening pattern and located at a seven to fifteen kilometres' distance from Kertoraharjo. The lower foothill zone had been opened up earlier for logging and the establishment of oil palm plantations. Balinese control of land is still expanding here (see Tanaka, 1997). Land transactions in this zone often concern parcels of land that have already been cleared and developed by the former owner. With cocoa prices relatively stable at an attractive level since 1994, the demand for garden land has rapidly increased, as did land prices. Partly in response to land price increases associated with the cocoa boom, Balinese farmers started looking for garden land in an even more distant zone: northeastern Luwu, Mamuju District in the northwestern part of South Sulawesi and, across the provincial boundary, the Meko-Toinasa area in Central Sulawesi, more than one hundred kilometres away (see below).

Analysis of the land purchases reported by 239 families shows that almost fifty percent of the number of land purchases and sixty-five percent of the total area purchased is located outside the Kertoraharjo-Margomulyo area (see table 4).

Table 4: Kertoraharjo land purchases in four zones around Kertoraharjo

Zone	No. of purchases	Percentage of total	Ha.	Percentage of hectares
1	197	49.3	123.00	36.00
2	128	32.1	103.70	30.00
3	50	12.5	71.95	20.00
4	20	5.1	42.90	13.00
unknown	4	1.0	3.50	1.00
Total	399	100.0	345.05	100.00

Source: fieldwork

If land purchases are broken down into the zones in which the land is located and by the time period in which land was purchased, the trend of an increasing number of land purchases as well as the growing importance through time of the more distant agricultural zones become visible. Thus, while purchases in zone 1 and zone 2 were reported from 1972 onwards, the first purchase in zone 3 is reported in the 1979-1983 period, in zone 4 in the 1994-1997 period (see table 5).³⁹

³⁸ Census data show an increase in the number of land purchases (sawah, garden, and home yard) from 33 in the 1972-1978 period, through 43 (1979-1983), 54 (1984-1988), 79 (1989-1993) to 101 in the 1994-1997 period.

³⁹ Distinguishing actual land use as well, we get the following picture: in zone 1, 93 sawahs, 6 gardens and 52 home yards were bought; in zone 2, 31 sawahs and 63 gardens; in zone 3, 5 sawahs, 38 gardens and 5

Table 5: Kertoraharjo land purchases by year categories and main zones

Period	Main zones				
	Zone 1	Zone 2	Zone 3	Zone 4	Total
1972-1978	22	10	-	-	32
1979-1983	32	10	1	-	43
1984-1988	33	20	3	-	56
1989-1993	35	32	11	-	78
1994-1997	29	22	33	17	101
Unknown (year)	46	34	2	3	85
Unknown (zone)	-	-	-	-	4
Total	197	128	50	20	399

Source: fieldwork

New Balinese migratory movements: the temptation of Meko and Toinasa

Early in the morning, near the village temple many people crowd around an old bus, stuffed to the brim with passengers and their luggage. The name of the bus service, *Meko Jaya*, discloses its destination: the Meko-Toinasa area near lake Poso in Central Sulawesi. The departure of 'Meko Jaya' has become a regular occurrence since 1991. In that year, the steep and muddy road between South and Central Sulawesi was asphalted. With this main bottleneck in the Trans-Sulawesi highway removed, transport of goods and persons became much cheaper and easier.⁴⁰ Soon, the Balinese realized the enormous potential of the area that had come within reach. From the early nineties they started migrating to the Meko-Toinasa area, and until the late nineties they did so on a rapidly increasing scale.⁴¹

Why looking for garden land that far away? First, possibilities of acquiring land near Kertoraharjo have rapidly decreased in the last few years. Within a fifteen kilometres' distance, gardens can still be bought but prices have sharply increased (see above). Second, the life cycle of Kertoraharjo families has now reached a stage where offspring families with a high labour potential are in search of cheap land resources to be developed into productive land.⁴² The long journey to the Meko-Toinasa area enforces rigorous decisions with regard to the migration of labour for cultivation. The majority of inhabitants of Kertoraharjo who bought land in Central Sulawesi either sold their land in Kertoraharjo and migrated, or found a solution through divisions of labour and residence in the sphere of nuclear household or family (see box 8).

home yards; in zone 4, 14 gardens and 3 home yards. This shows the growing importance of garden purchases through time in all zones but the first one, where sawah purchases remain dominant.

⁴⁰ This has also affected the tourist sector. Before 1991 tourism remained largely restricted to either North Sulawesi (Manado) or the South (Tana Toraja). Since that year Lake Poso and its surroundings became a major destination. More recently, the violent Poso conflicts have turned the region into a no-go area.

⁴¹ Balinese expansion into the area around lake Poso took place from the Northwest with its considerable Balinese population in the Poso-Parigi area (Davis, 1976) and from the South, including North Luwu. Lake Poso has become a new linkage in a chain of Balinese settlements stretching from South into North Sulawesi, with important consequences for the presence and organization of Balinese society in Sulawesi.

⁴² Balinese from Kertoraharjo have also tried to gain access to new locations in North Luwu, especially in the subdistricts of Malili and Nuha, where land is still cheap. Such attempts have not been very successful. Some Balinese told that often payments to local officials have to be made. Others complained about the quality of the land and crop damage by the polluting effects of large-scale nickel mining in Soroako.

Migration to Central Sulawesi is not only a last resort for the poor with no access to land in Luwu. It is also an option for those who are well-off but looking for opportunities to strengthen their economic position, for farmers grown weary of the repetitive stress of the cycle of intensive rice cultivation, or disappointed about its proceeds. Many farmers, well off in Kertoraharjo compared to Bali, are aware of the limitations of their current economic position as the basis of livelihood for the next generation. They have enough to eat, can save money to improve house and family temple, and can even afford a flight to Bali. However, with rapidly rising land prices, they cannot expand landownership to create better prospects for their children. Therefore, if they are physically capable of standing the hardships of leaving Kertoraharjo and starting anew in Central Sulawesi, they seize the opportunity and leave. Inhabitants with all imaginable backgrounds and positions, successful or not, old and young, decide to widen their economic horizon and buy land in Central Sulawesi: transmigrants, their offspring, and spontaneous migrants, large and small landowners, and landless farmers entirely dependent on sharecropping, lease, or pawning contracts.

Box 8: expansion of cocoa gardening into Meko, Central Sulawesi: two cases

Guru Distra and his wife are spontaneous migrants who arrived from Tabanan in 1982. Their three children were all born in Kertoraharjo. In Bali, Distra had worked as a farmer and carpenter in house construction. He owned only 0.3 hectare of sawah inherited from his father and a small home yard. He and his brother decided to sell the land and migrate to Sulawesi. His brother led the way, bringing more than three million Rupiah, which were invested in land in Kertoraharjo. One year later, Distra and his wife followed. As a settler, Distra again combined his activities as a farmer and carpenter. Important additional income came from sharecropping and animal husbandry (pigs and cows). He felt himself to be rich, owning 1.25 hectares of sawah and a 0.25 hectare of home yard. He likes the relatively egalitarian society of Kertoraharjo, in which he and his wife have been able to lay the basis for the future of their children. However, with increasing land prices, Distra, his wife, and Distra's brother and his family find the long-term economic prospect too uncertain. Hence, their family history repeats itself: Distra's brother pioneering into the Meko area, and Distra following. In view of the conditions of irrigated agriculture in Kertoraharjo, both have decided to shift from irrigated rice to cocoa gardening. Distra has sold his sawahs for Rp. 11.5 million. Just before departure he will also sell his home yard. The proceeds of land and cattle were invested in two hectares of productive cocoa garden, bought from a Pamona farmer and planted with a hybrid variety. He also bought a home yard and a house.

Ketut Sudarsana and his wife are transmigrants from Jembrana. In Bali they had worked a small 0.5 hectare piece of garden owned by Sudarsana's parents. Prospects were not good: upon inheritance, the small piece of land had to be shared with another brother. Therefore, they decided to leave as transmigrants. Two of their three unmarried children, both girls, work in Makassar but still belong to the household. The third one, a boy of seventeen, moved to Meko to take care of the cocoa gardens Sudarsana has bought there. Sudarsana and his wife have been able to keep all their transmigration land. Some years after arrival they were even able to buy a hectare of mixed garden land in Patengko. Two years ago the family decided to buy land in Meko. They bought 2.5 hectare of forested land and a small home yard with a simple shack on it, all together for Rp. four million. Part of the expenses could be covered from the proceeds of their rice harvests and from the sale of pigs. Another part had to be covered by pawning their 0.75 hectare ladang for six seasons against a Rp. two million pledge. With much land clearing and development to be done, the one-hectare sawah in Kertoraharjo was contracted out to a sharecropper. Sudarsana's oldest son, economically belonging to the Kertoraharjo household, has now taken up permanent residence in Meko to do the lions' share of land clearing and development.

Source: fieldwork

Finally, farmers react to these new economic opportunities through a variety of choices and organizational arrangements pertaining to labour and distribution of the benefits of agricultural production. They may decide either to diversify into a system based on irrigated rice cultivation and cocoa gardening, or to sell sawahs and shift to cocoa gardening. They may migrate as a nuclear family leaving activities in Kertoraharjo to a son, send an unmarried or married son to take care of the gardens in Central Sulawesi, or enter into a kind of sharecropping arrangement or land development contract. Especially in families with enough labour power available, divisions of labour tend to develop between the initial transmigrant family and children still dependent on them who stay in Kertoraharjo, and other (male) children, married or unmarried, who move to the Meko area to take care of land clearing, development, and maintenance of the cocoa gardens. Whatever arrangements are chosen, the massive migration of Kertoraharjo farmers to Central Sulawesi marks a new phase in the socio-economic development of this village. The outcome is either a diversified rice-cocoa based farming system spread geographically over a wide region, or a system based on cocoa monoculture, often involving migration from Kertoraharjo and permanent settlement in Central Sulawesi.⁴³

Temporary access to land

Apart from ownership, other forms of (usually temporary) access to land are important. The main tenure arrangements are land development contracts, usufruct for a limited period, rent (*sewa*), sharecropping (*bagi hasil*), and pawning (*gadai*).⁴⁴ As sharecropping and pawning occur most frequently, I will concentrate on these. Land development contracts were regularly used in the past, especially on transmigration land. Nowadays, such arrangements can be found in the garden sector. Land development arrangements for irrigated land usually took the form of the temporary transfer of usufruct rights over the land to the farmer performing the land development labour from uncleared fallow land into a sawah. This can only be profitable for the worker if his usufruct right stretches out over a considerable period of time. A six to seven years' period was common. In the cocoa gardens such arrangements seldom occur. Some farmers engage in land sharing (*bagi tanah*), in which the farmer who develops the land into a planted cocoa garden is not paid with a temporary use right but with ultimate ownership of part of it. Once the garden has become productive, the same farmer may continue maintaining it for a share of the harvest or proceeds. Thus, the initial arrangement may continue into a sharecropping arrangement on the remainder of the land after division between the two parties. Land rental is the least popular arrangement among farmers. This is mainly caused by the fact that lease does not involve a proportional division of proceeds among owner and worker (as in sharecropping) but a fixed sum independent of harvest results. Farmers point to the risks of this, especially in the rainy season and in case of severe plague damage.

⁴³ The Poso conflicts will probably also have had a negative impact on this Balinese migratory movement.

⁴⁴ Such land development contracts occur under different terms and names depending on whether the usufruct right of the land is given to the worker for a certain period of time (*kontrak pembukaan*) or whether the resource itself is shared (*bagi tanah*). I have left out inheritance (which leads to ownership rather than temporary access) and other gifts of land. Temporary access to the parental land by one or more future heirs is also quite common. It usually takes the form of arrangements in which the son(s) who temporarily work(s) the land can fully use its harvests at one extreme, or of arrangements in which the proceeds in kind and / or money are shared, with the common 2:1 sharecropping arrangement at the other extreme.

Sharecropping

Sharecropping arrangements are quite common, primarily for irrigated fields.⁴⁵ On irrigated land, the most common arrangement entails a 2:1 distribution of the harvest proceeds between sharecropper and the owner. Usually the former pays for the inputs and the latter for fixed charges like land tax and subak tax, while harvest transport costs are shared.⁴⁶ It is not always easy for a farmer who wants to sharecrop to find a partner (the more so during the recent crisis; see below). Many people are looking for sharecropping opportunities, while the number of farmers who offer their land is limited. Moreover, landowners tend to pick and choose reliable sharecroppers. Sharecropping is not always a purely contractual affair between parties coincidentally meeting on the land and labour market. The need for certainty about the capacities and reliability of the other party gives sharecropping relationships with relatives an added value. Such sharecropping relations are part of more encompassing social and economic security ties based on kinship, of which the invitation by transmigrants to their relatives from Bali to join them may also be part.

The differential position of various categories of farmers with regard to land is evidenced by their engagement in sharecropping. Distinguishing between owners (who have their land sharecropped) and sharecroppers in the three status categories, the following picture emerges, starting with those who sharecrop land (see table 6): forty-two families (sixteen transmigrants, twelve spontaneous settlers, and fourteen offspring families) engaged in forty-six sharecropping relationships. Those who have their land sharecropped (sixteen families engaged in twenty-five sharecropping relations) can be split up as follows: fifteen transmigrants and one offspring family (which had inherited transmigrant land). It is striking that, with one notable exception, the spontaneous settler and offspring families do not have their land sharecropped by others, while transmigrants in almost all ownership categories occur as owners as well as sharecroppers.

Table 6: Sharecropping and (total) landownership for three status groups of farmers

Ownership category	General transmigrants		Spontaneous migrants		Offspring	
	Share-cropper	Owner	Share-cropper	Owner	Share-cropper	Owner
0.00	-	-	-	-	-	-
0.01-1.00	4	0	10	0	5	0
1.01-2.00	6	4	2	0	5	0
2.01-4.00	4	3	0	0	4	0
4.01-6.00	2	4	0	0	0	0
6.01-	-	4	0	0	0	1
Total	16 (16)	15 (24)	12 (13)	0 (0)	14 (17)	1 (1)

Source: fieldwork

NB: the subtotals between brackets refer to the number of sharecropping *relations*.

Once relatively egalitarian in terms of landownership, now Kertoraharjo has its landed class of 'new rich', mostly transmigrants but sometimes also spontaneous migrants or offspring. Some had

⁴⁵ In contrast to pawning (see below), sharecropping is found on Balinese oil palm gardens and cocoa gardens, where it has its own arrangements.

⁴⁶ The study identified 58 farmers engaged in a total of 71 sharecropping agreements, 25 of which had a negative and 46 a positive impact on their access to land. Of the 71 arrangements, 64 concerned irrigated fields, 3 cocoa gardens, and 2 oil palm gardens.

to start from scratch, others were socially and economically advantaged through specific functions, skills, or access to transmigration facilities. Engaging productively in a variety of agricultural and non-agricultural economic activities, many were able to expand their landownership. Some of them did so to such an extent, or became so deeply engaged in other economic activities, that they were no longer able to (fully) work their own land. Landowners have various motives for having their land sharecropped: some are transmigrants who bought additional land but do not have the labour power to work it themselves. Others help relatives by having their land sharecropped by them. Further, there are those who, as a consequence of sickness, death or old age, are forced to have their land sharecropped. For the sharecroppers, the picture is different, of course. However, for twenty out of forty-two families, sharecropping seemed to be part of a pattern of gradual economic advancement rather than a sign of stagnation or decline. In combination with other agricultural and non-agricultural activities, it generated savings for engaging into pawning arrangements, made possible land purchases, or replaced the harvests from rice fields held in ownership when such land had been pawned to buy new land or consumer goods, or sold and replaced with garden land which was not yet (fully) productive. What stands out in the data on sharecropping is its importance for offspring of transmigrants and spontaneous settlers as a means to get access to land. However, sharecropping is far from restricted to these categories, as can be seen from the number of transmigrants who become sharecroppers. The latter are not only those with little or no land. For those who own land themselves it may be a way to strengthen their economic position or to bridge periods of reduced income due to investments or temporary loss of access to land through pawning.

Pawning

Pawning plays an important role in Kertoraharjo. Pawning transactions are restricted to irrigated rice fields. All pawning cases reported concern contracts for irrigated fields. All land pawned is located in Kertoraharjo, Margomulyo or its surroundings.⁴⁷ Pawning differs from sharecropping in several ways. Contrary to sharecropping, which couples land to labour and routine financial investments for inputs, pawning contracts couple land to relatively large amounts of capital. In a sharecropping relationship, during the contract period the landowner receives a share of the harvest, and therefore keeps a definite interest in the way the land is worked and in which the sharecropper invests labour and capital in the land. In a pawning relationship, the landowner has no stake in the crops harvested during the contracted period. If the farmer does not do so efficiently and profitably, this does not directly damage the landowner. Pawning involves a deal between a landowning party in need of money, and a money-owning party in search of access to land. The landowner seeks loan capital rather than labour; he has no stake in its productivity during the contract period. This seems to make pawning a more contractual and 'anonymous' kind of relationship than sharecropping.

In the village census, forty-two families reported to be engaged in forty-six pawning transactions (table 7). Twenty-six families were engaged in pawning transactions as pawnees (that is: providers of capital to the owner of the land, and temporary users of the land given in pawn), which increased their access to land. Twenty families were pawners (that is: owners) of the land, access to which they had temporarily lost in exchange for loan capital. The amount of land pawned is largely concentrated in the 0.75-1.00 hectare range. The majority of pawning transactions falls within this range. As to amount of money and period of repayment, a great variety of arrangements exist that result mainly from ad-hoc agreement between the parties involved rather than from standardized norms and pawning regulations. There is no clear direct relationship discernible between price and area, nor between price and period of repayment. When expectations of both parties with regard to contract period, amount of money, and quality of the irrigated fields meet, the deal is made. It

⁴⁷ Thirty-four of these irrigated fields were located in Kertoraharjo or Margomulyo, 8 in Patengko, and 1 in Purwosari and Mulyasri each.

becomes clear from the data on pawning prices that, with a few exceptions, the *minimum* amount of money needed to enter into a pawning relationship for not too small a piece of land, whether among Balinese or between Balinese and farmers belonging to other ethnic groups, was Rp. one million in 1996-1997, and much more in the crisis years.⁴⁸ The popularity of pawning agreements makes that it is not always easy for those with land and in need of money to find a counterpart with money and in search of agricultural land. The growing availability of capital among Balinese has, according to many farmers, the effect of pushing up the amount of money demanded and needed to engage in a pawning relationship. Pawning agreements usually cover a period of between two and six agricultural (rice) seasons, exceptional cases involving ten or twelve seasons. Sometimes this happens under the force of circumstances: as money could not be paid back within the specified period, the lender is entitled to continued use of the pledged land. What stands out is the high degree of flexibility in pawning practices, depending on the appointments or re-negotiations made between landowner and provider of capital.⁴⁹

With regard to the parties to pawning agreements, there is a difference between the transactions that lead to increased access to land, and those leading to a decrease in access to land. There seems to be an ethnic element involved here. While the latter transactions concern agreements between Balinese (sixteen) or between Balinese and Javanese (four), the former also feature many transactions between Balinese and Toraja farmers (fifteen transactions among Balinese, two between Balinese and Javanese, and seven between Balinese and Toraja). This may reflect the great need for cash - often for ritual purposes - on the part of Toraja farmers, that can be met by Balinese farmers who are known to be always looking for ways to productively reinvest their capital rather than keeping it idle at home. The other side of the coin is, of course, that Toraja farmers do not play a role as cash providers for Balinese farmers. There is another difference between those who pawn their land for a loan and those who seek access to pawned land: while the large majority of farmer families that pawn their land belong to the group of transmigrants, those who work pawned land are spontaneous migrants and offspring, but also some landowning transmigrant families (see table 7).⁵⁰ This reflects the difference between the firm resource base of the initial transmigrants on one hand, and the struggle for access to more land characterizing the economic life of spontaneous migrants and the households of offspring on the other.

Though the data suggest a greater dependence on pawning among spontaneous migrants and offspring than among transmigrants, most people who depend partly or wholly on pawned land do not seem to associate this dependence with socio-economic stagnation. On the contrary, most accounts of farmers who work pawned land indicate that such arrangements are part of an upwardly mobile process of economic development of the households concerned. Pawning is the stage that comes after sharecropping (or is still combined with ongoing sharecropping activities). An amount of capital has been saved that is still too small for a first land purchase (or an additional purchase after a first small land purchase; most spontaneous migrants as well as offspring buy a home yard first) but sufficient for investment in a pawning relationship.

As to pawning transactions that lead to a temporary decrease of access to land, the reasons for pawning land given by the seventeen owners involved in these relationships give a good picture of

⁴⁸ The majority of transactions are found in the Rp. 1.5-2 million range.

⁴⁹ While some arrangements end before the specified period because the landowner can pay back the loan and the worker of the pawned land needs his money, others stick exactly to the period specified when the arrangement was concluded, or extend the period when the owner of the land is not able to pay back the loan after the period initially specified. Some farmers agree not to determine the period of redemption.

⁵⁰ The former group is made up of 16 transmigrant families and 1 offspring family; the latter group contains 8 independent households of transmigrants' children, 8 transmigrants, 4 spontaneous migrants and 3 heirs to transmigrants' land.

the role of pawning in the Kertoraharjo village economy. The major motive for pawning, given by eight farmers one of which pawned two plots of land at the same time, is the instantaneous need for cash money to buy additional land. Another motive for pawning land, given by four farmers, is the improvement of houses or family temples, or the purchase of expensive capital goods like a tractor, a motorbike or a television set. But life is not all entertainment, nor pawning part of a strategy for economic improvement and emergent consumerism only. Sometimes people suddenly find themselves in situations in their life where pawning land is the last straw they can clutch to. For one farmer, the sudden expenses that came with serious and life-threatening illness could only be met by pawning all his irrigated land, a last resort that temporarily left him and his family with access to a home yard only.⁵¹

Table 7: Pawning and (total) landownership for three status groups of farmers

Ownership category	General transmigrants		Spontaneous migrants		Offspring	
	Pawnee	Owner	Pawnee	Owner	Pawnee	Owner
0.00	-	-	-	-	-	-
0.01-1.00	-	-	2	-	3	1
1.01-2.00	2	3	2	-	6	-
2.01-4.00	6	5	-	-	2	1
4.01-6.00	-	4	-	-	1	-
6.01-	1	3	-	-	-	-
Total	9 (10)	15 (17)	4	-	12	2 (3)

Source: fieldwork

NB: the subtotals between brackets refer to the number of pawning *transactions*.

With the exception of cases in which pawning is the only solution possible to face a sudden unexpected crisis, it is mainly a strategy for those on the safe side of economic life. Only in a few cases those who have pawned their land have no direct access to other productive land during the pawning period. Apart from one family left with a home yard only, two families have direct access to one hectare, five families to an area of land between one and two hectares, three households to between two and three hectares, and six households to an area of land of more than three hectares. Some farmers, moreover, compensate for the temporary loss of access to land, harvest and income by entering into sharecropping arrangements.

Both sharecropping and pawning are important in economic life in Kertoraharjo, and signs of socio-economic differentiation and disappearance of the relatively egalitarian initial conditions of transmigrant settlement. However, rather than being forms of access to land to which resource-poor farmers remain condemned during their life, both are often stages in a process of gradual economic advancement of those categories of the village population with the weakest position relative to land resources: spontaneous settlers and the offspring of transmigrants. In this process, sharecropping, (agricultural) wage labour and additional income from animal husbandry tend to provide the capital basis on which farmers are able to engage in pawning contracts. The availability of land resources in North Luwu still enables farming households to improve their economic situation through a strategy in which pawning plays an important role. It gives farmers the option to invest their capital productively with few risks rather than just hoarding or spending it, until sufficient capital has been gathered to buy land. But even for relatively well to do landowning farmers, most of them

⁵¹ Four farmers chose not to specify their motives for generating cash by pawning their land.

transmigrants, sharecropping and especially pawning remain important elements in their strategies of economic advancement. Especially pawning remains an important option, either in farmers' strategies for increasing landownership, for coping with all kinds of expected or unexpected expenses or, conversely, for using savings productively in order to get temporary access to additional land and harvest income. Sharecropping and pawning, then, are widely regarded as the first stepping stones towards landownership, and associated with the chances of upward mobility rather than with stagnation. And indeed, for many farmers who once belonged to the economically weaker groups, sharecropping and pawning have fulfilled that function. It is this opportunity for upward economic mobility that made Kertoraharjo a popular destination for spontaneous migrants.

5. Expansion, diversification, differentiation

Land and socio-economic development in Kertoraharjo

In this chapter I have explored the role of land resources in the livelihood of the Kertoraharjo population. Irrigated rice cultivation and cocoa gardening have become crucial components in a farming system based on a variety of on-farm, off-farm and non-farm activities. Socio-economic differentiation of the, initially, egalitarian village population is another characteristic. One important dimension of differentiation is the difference between the categories of transmigrants, spontaneous migrants and offspring with regard to control of land. The different positions of these categories relative to land become clear from data on landownership, on investment choices for irrigated agriculture, gardening or both combined, and in the different role of sharecropping and pawning. In combination with arrangements like rice harvesting for a share of the harvest, these non-ownership forms of access to land tend to fulfil an important function, especially for spontaneous migrants and offspring of transmigrants. In Kertoraharjo, sharecropping and pawning arrangements are often steps in a process of improvement of the economic position of farmers belonging to the categories mentioned, ultimately leading to landownership.

The booming cocoa market has opened up new opportunities for the Balinese. Spontaneous Balinese migrants were the first to engage in cocoa gardening, in a period when transmigrants were still focusing on irrigated agriculture. Gradually, increasing investments in garden land by many Balinese led to a marked trend away from irrigated agriculture towards a combination of irrigated rice farming and cocoa gardening (*sawah-kebun*). It also meant that landownership of the Kertoraharjo population became geographically spread across an increasingly wide area, from the nineties even extending into Central Sulawesi. While irrigated land is characterized by a high degree of tenure security, property rights to garden land may be less secure, at least in some zones where many Balinese have acquired such land. From the late nineties, mass conflicts in Central Sulawesi have become a threat to the new opportunities for cocoa gardening in this province.

The crisis in Kertoraharjo: some final observations

The booming cocoa market in the nineties and unprecedented cocoa harvesting incomes in 1998 have had an enormous impact on farmers' perceptions of opportunities and constraints in agriculture, of 'the market', and on crop choices they make on the basis of these perceptions. Farmers were completely surprised by the price developments in agriculture during the crisis. Even before the crisis, irrigated rice cultivation had a negative image due to crop failure, input price

increases, and low farm gate prices for rice. The image of cocoa, on the other hand, was much better. Cocoa gardening was widely regarded as a more relaxed, less risky and more profitable agricultural activity than rice farming. A farmer:

‘The direct impact of the crisis is not too great here. We are not dependent on the government or on wage labour for our incomes. We are farmers and not officials or labourers. We live in a village and not in a town. Talking about the crisis: after every harvest season at least five to ten new motorbikes and a few new tractors enter the village. But there is another important way in which the crisis has influenced us. It made people seriously reconsider their agricultural activities. When in the midst of crisis cocoa reached a per-kilo price of Rp. 18,000 to 20,000, farmers compared such developments with their experiences in rice cultivation even more than before. A major complaint made by farmers is that input price increases are not balanced by increases in the prices they receive for their harvests. While the price of unhulled rice increased from Rp. 700 to Rp. 1,050 only, the per-hectare price for ploughing increased from Rp. 100,000 to Rp. 250,000. People were confused by such developments. Farmers who were dependent on irrigated rice cultivation were economically beaten by those who owned productive cocoa gardens. For rice farmers, life during the crisis was *tutup lobang gali lobang* (throwing good money after bad; D.R.), while those with cocoa gardens did not feel the crisis, or even profited from it.’

As a consequence of the coincidence of these trends, and changing perceptions and agricultural choices based on them, in late 1998 and early 1999 there was a rush on garden land. Many Balinese pawned, and some sold their irrigated fields to invest in cocoa gardens. Even more than before the crisis, the rich cocoa farmers of Kertoraharjo, with their continued conspicuous spending on additional land, house and temple improvement, and luxury goods, served as an example for those still practicing irrigated agriculture. To discover a few months later that market price trends in times of crisis cannot be relied upon for decision-making about future farming strategies. Hence, though the 1998 cocoa harvest has increased the interest of farmers in cocoa gardening, in the end most farmers stick to (or aspire) a combination of rice and cocoa farming. Apart from the choice between investing in sawah or in garden land, sometimes farmers have the option of conversion of irrigated rice fields into land for cash crops. On a limited scale, elevated fields in the irrigated areas of Kertoraharjo and Margomulyo that were difficult to irrigate have been converted into garden land for cocoa or pepper. The latter crops experienced a sharp price increase during the crisis as well.

The economic crisis has also had its impact on pawning and sharecropping. Farmers dependent on these forms of access to land were most negatively affected. In 1998, the massive need for money to buy cocoa gardens led to a sharp increase of the number of farmers offering irrigated land for pawning. Not much later, when cocoa prices normalized again and rice harvests were not bad at all, the willingness on the part of landowning farmers to pawn their land decreased again. The more so, as the effects of the crisis came to be more clearly felt in their own daily lives. The abolishment of subsidies led to sharp price increases of food and other daily necessities. Further, it was more difficult than before for children of transmigrants to find jobs in the cities or for their parents to carry the burden of expenses for advanced education. Many youngsters returned to the village to work the land of their parents. Hence, in 1999 it had become very difficult to find people willing to pawn their land.⁵² Whenever pawning contracts are offered, the amount of money needed has also sharply increased compared to the pre-crisis period.⁵³ One farmer formulated these changes as

⁵² Referring to the changing farmer perceptions during the crisis period, one farmer says: ‘last year people bought cocoa gardens without asking the price. But now it is all over. Cocoa prices have normalized. Everybody returns to his sawah disappointedly. After bathing in money, people came to their senses again’ (*habis mandi uang, petani kembali sadar*). Though this man certainly does not speak for all his fellow villagers, his remark points to one important aspect of the crisis as it was experienced in Kertoraharjo.

⁵³ Rp. 5-6 million is a normal price now for one hectare of irrigated land.

follows: 'before 1998 it was sometimes difficult for land to find money. Now it is much more difficult for money to find land. There is no land, but lots of money and labour power!'

A similar story can be told for sharecropping. In mid-1999 there was a tendency among farmers who, before or in the initial phase of the crisis, had had their land worked by sharecroppers, to terminate contracts or not to engage in new ones and work the land themselves or have it worked by family labour. Though the Kertoraharjo population at large is not that hard hit by the crisis, access to additional harvests may be crucial to cover expenses for health care, education, clothing, and religious ceremonies. As a consequence of these trends in pawning and sharecropping, life has become much more difficult for farmers who are dependent on such arrangements to find land. Those hardest hit by these developments are the newly married offspring of transmigrants and recently arrived migrants. This means that the road of upward mobility taken by many farmers belonging to these categories before the crisis - from agricultural labour and sharecropping through pawning contracts to land purchases - has become much more difficult as a consequence of the crisis. Even in relatively prosperous Kertoraharjo, this reminds us of the fact that the difference between being on the safe side and being on the wrong side of the poverty line may be very slight indeed in times of crisis. The outbreak of conflicts in Central Sulawesi has turned migration to Meko and Toinasa from a major opportunity into a much less attractive, even potentially dangerous option, thus closing off alternative roads to economic improvement.

The hybrid world of subak

1. A subak meeting in Kertoraharjo

It is the day after *Galungan*, the day on which regular meetings of subak Utus Sari (also called subak 150) are held.¹ From eight o'clock in the morning, the subak members come trickling into the meeting hall of banjar Wana Karya. When the first farmers arrive, the subak leaders are already present to prepare for the meeting. Sitting on the floor behind a low writing desk on which a small offering, notebooks and a pile of bank notes are placed, they are busy preparing their financial account of the subak. When the meeting hall has filled up with farmers, the meeting is opened and the chairman (*klian subak*) reads the agenda. In the meantime, the members form small groups. After checking the attendance list, the treasurer starts collecting the seasonal contribution to the subak funds (*urunan sarin tahun*), fines (*dosan*) for absence from collective labour or meetings, and the loans from the subak funds and interest on these loans to be repaid by the members. For the members, waiting for their turn to pay after having been called by the subak leadership, this part of the meeting rings in an agenda of relaxation, social talk, joking, smoking, and playing cards or dominoes.² While the subak leaders are busy with notebooks, money and a pocket calculator, the members play for small amounts of money. Some of them stress the importance of the informal character of such meetings: 'if the meeting would be too formal, it would only make us get bored and not feel at ease'. When all debts have been settled, the treasurer gives a financial account of subak expenses for ritual, income from diverse sources, and the balance. Subak funds amount to Rp. 3.6 million. The subak leadership proposes to hold a lottery to distribute among the members thirty shares of Rp. 20,000 each, using the *arisan*-system: winners are registered and excluded until all members have had their turn. A lottery is held whenever the cash amount administered by the subak is soaring. The subak leaders do not like to be responsible for too large an amount of money.

As preparations for the lottery are going on, the meeting is interrupted by the chairman of a farmer credit group who has an announcement to make to the farmers attending the meeting. The credit group chairman informs the farmers about procedures for ordering a package of agricultural inputs from the village cooperative KUD.³ Having a long experience with the KUD, the farmers are not really impressed, and continue talking and playing. The announcement is quite late. What I hold first to be an announcement of registration for the next season's orders, turns out to be meant for the current season; transplanting began almost ten days ago. A farmer explains that he has lost all faith

¹ The Hindu religious festive day of Galungan is celebrated once in 210 days. It is the most important Hindu Balinese festival, celebrating the return of the deified ancestors to their former homes (Eiseman, 1996a).

² Playing cards, dominoes etc. during meetings is not allowed in all Kertoraharjo subak organizations. In subak Nadi Sari (Tampaksiring), for instance, it is strictly forbidden.

³ Koperasi Unit Desa; see chapter 7.

in the KUD, the leadership of which does not keep its promises and never accounts for its policy and financial results. Many farmers have turned to the market for their purchases of inputs.

After this interruption the lottery brings the farmers to life. Members and leaders stress that subak capital is a binding force for the subak. It makes farmers feel having an interest in the organization, and is made even more attractive by the regular lotteries. Each farmer whose name is read aloud by the secretary draws a lot. Dominoes and group talk have stopped; all attention is focused on the lottery now. Excitement, laughing and joking after every drawing of an 'empty' lot fill the banjar hall. In the end, the lottery takes a course that is quite embarrassing for the subak leaders: while all lots have been drawn, only twenty-eight out of the thirty prizes have come out. As soon as it becomes clear what has happened, excitement turns into chaos. All farmers shout at each other and at the subak leaders, sitting behind their table. Taken aback, they let the derogatory jokes and remarks about their administrative capabilities come down on them. Then, the leaders propose to award the two remaining prizes to the last two farmers who had drawn an empty lot. After the proposal has won general support by the members, peace returns. Now time has come for the last activity on the agenda: distributing loans from the subak capital among members and registering the cash loans for the next period of six Balinese months. To avoid the responsibility for large amounts of stored money and to maximize subak income from interest on loans, the subak has a policy of lending out the whole capital not earmarked for expenses on ritual and offerings. The amount that can be borrowed depends on the total number of borrowers. Members with a high cash need are allowed to borrow not only on their own name, but also on the names of other members. Hence, during the meeting farmers can be seen lobbying, composing name lists in preparation of the allocation of loans. Those, whose names are used, stay around with a keen eye for the proper registration of loans and the presence of witnesses. I ask two farmers who borrow on more than one name about the destination of their loans: the first needs money to support his child in Bali; the second intends to use it to buy a motor driving license.

This short impression of a subak meeting illustrates some of the functions of the subaks in Kertoraharjo: collection of taxes for rice ritual and provision of credit to members. In addition, the subaks can sometimes be used as media for spreading information about government programmes. However, anybody familiar with subak will immediately be struck by the fact that one well-known function of subak is absent from the above account: its irrigation management function, which has made the subak so well known an example of 'traditional' farmer-managed irrigation. How did this come about? As I have shown in the foregoing chapter, irrigated agriculture has become a crucial element of Balinese livelihood in Kertoraharjo. This raises the question how the subaks and local irrigation management have developed since settlement, and especially since the Public Works irrigation system reached the agricultural land of Kertoraharjo.

In combination with the next one, this chapter focuses on the role of the Kertoraharjo subaks, their coordinating organizational arrangement of the pekaseh, and the WUAs in Balinese irrigation management. The present chapter traces the changing role of pekaseh and subaks as formal organizations. The next one will take the TUs and WUAs of the irrigation system as point of departure for an exploration of local irrigation practices developing at the interface of the influences of subak and engineering approaches to irrigated agriculture. Together, these chapters form a case study exploring the complex ways in which Balinese knowledge and practices, norms, regulations and organizational arrangements pertaining to irrigation management have articulated with engineering approaches represented by the Public Works irrigation system, its TUs, and its organizational arrangements at the tertiary level, the WUAs. The core questions are: what was the impact of the introduction of WUAs on pekaseh and subaks, and of the latter on WUAs? What is the impact of these processes of articulation on local practices of irrigation management?

This chapter consists of the following sections. In the next section I give an account of the history of subak formation in Kertoraharjo against the background of processes of settlement and land allocation. In the third section I analyze the development of subaks from the period when the Public Works irrigation system and its arrangements for irrigation management entered the village. In the fourth section, I pay attention to key dimensions of subak in this specific setting. The focus shifts to a field of interaction in which subak laws and regulations articulate in a complex way with the irrigation and agricultural policy of government agencies, as well as with farmers' needs and practices: determination of the irrigation season and the transplanting date. In the fifth section, I put into perspective the image of subak as a stable organizational arrangement for a well-defined group of farmers in a clearly delineated location. Subak authority is sometimes contested, due to the fact that the initial definition of subak, the scope of its authority over land resources, and responsibilities of the landowners has become outdated and subject to contradictory interpretations. In the final section of this chapter I draw short conclusions about the development of subak in kertoraharjo.

2. The establishment of subak in Kertoraharjo

As described in chapter 7, the first period after arrival of the transmigrants was very difficult. The settlers had found themselves in the midst of primary and secondary forest. Only a small part of their future agricultural land had been deforested in preparation of their arrival. In the initial period, the settlers were fully engaged in clearing and developing their land. It had to be made productive in the first year, when the settlers received a living allowance from the Department of Transmigration. Rumours of plans for irrigation development with water from River Kalaena had, of course, rapidly spread among them. However, with the heavy and dangerous physical work of forest clearing and land development just getting started and work on the irrigation system still very far away, such stories must, at least for the Balinese settlers, have referred to a very distant future indeed.

Even though part of the land still had to be cleared and agriculture was rain-fed, the first settler groups had established a subak soon after their arrival from Bali: *Subak Desa Ulun Sari* (Ulun Sari Village Subak). Under the influence of the circumstances in which it was established, it had the character of a voluntary organization (*seka*). After some years, when all Balinese settler groups had arrived and made progress in developing their land, the initial village subak was split up into four separate subaks for reasons of organizational efficiency. The composition of the four settler groups that had arrived in Kertoraharjo defined subak membership. The subaks were spatially defined by the boundaries of the blocks of land allocated to the settler groups. Nowadays, the organizations are still primarily known among the population by reference to the settler groups that had initially formed their membership (see chapter 7): subak 150KK, subak 100KK, subak 50KK, and subak 50KK Tampaksiring.⁴ Each of the four subaks was headed by a *klian* subak, assisted by other functionaries. Together, the four subaks formed a *pekaseh*, headed by a functionary with the same name.⁵ Subak regulations taken from Bali were adapted to the local situation. These included religious-ritual issues as well as those related to irrigation and water management.⁶

⁴ KK (Kepala Keluarga) means 'household head'. The second group of 50 households (from Tampaksiring) is often referred to as 'Tampaksiring', to distinguish it from the other group of 50 settler families.

⁵ See chapter 2 for the variation in subak and *pekaseh* organizational terminology.

⁶ According to former subak leaders, these regulations were about issues like planting, agricultural ritual, labour for repair and maintenance, taking water, the minimal distance to be kept between settlement area and irrigated fields, and the presence of cattle and ducks in the sawahs.

Thus, contrary to what is usually the case in Bali, the subaks in Kertoraharjo were not defined by hydrological or physical boundaries. Rather, the pattern of land allocation by the state to the four Balinese settler groups became the defining criterion of the subaks in Kertoraharjo (see map 8). As I will show below, this definition of the subaks became a major threat to their functioning in the nineties. It came to be used as an important 'resource' in conflicts and negotiations about the boundaries of legitimate subak power and authority, especially the right to collect subak tax and to determine the day on which Balinese are allowed to start transplanting their rice.

The following table gives an overview of the basic data of the subaks in Kertoraharjo. The area indication attempts to relate the subak areas to the current pattern of TUs and WUAs of the irrigation system, introduced when the irrigation system started functioning (see map 8).⁷

Table 8: basic data about the four subaks of Kertoraharjo

Subak name ⁸	Known as	Members	Area indication (TUs; see map)
Utus Sari	Subak 150 KK	135	PS3, KL1ki/ka, R2
LugraSari(Merta Sari)	Subak 100 KK	93	R5ki/te/ka, R4
Ukir Sari	Subak 50 KK	50	R3, R4, R5te/ka
Nadi Sari	Subak 50 KK Tampaksiring	46	KL1ki/ka, R5ki/te/ka

Source: fieldwork

In those days, construction activities for extension of the Kalaena irrigation system beyond the works left by the Dutch had not even started. Why, then, were subaks established at all at that stage of agricultural development? First, the establishment of subaks before finalization of the Public Works irrigation system and the availability of irrigation water points to the central importance of the religious-ritual functions of subak, in addition to its irrigation management functions in a more restricted sense. Former subak functionaries and farmers associate the establishment of subaks primarily with the need for organizational arrangements to stage agricultural rituals. In those days, only part of the forest surrounding the village had been cleared. The area was still full of destructive forces and evil spirits. During the first cropping seasons, the crops of the settlers had been heavily damaged by plagues. Such destructive influences from the spirit world can, in the eyes of Balinese, be effectively prevented and combated through the appropriate rituals. Thus, as land clearing among the Balinese progressed and agricultural activities started, the need arose for organizing and executing collective agricultural rituals for crop protection by establishing a subak. Related to this, subak was essential in controlling the optimal planting date by determining a propitious day for planting. Thus, the subak also contributed to the establishment of a degree of planting discipline.

Second, in the accounts of some farmers the Kertoraharjo subaks are associated with early attempts by the settlers to build a provisional irrigation canal. As land development progressed, it became clear that it would take a long time for the Public Works irrigation infrastructure to reach Kertoraharjo. However, the Balinese were not the kind of farmers just to sit and wait for the

⁷ With the exception of the land allocated to the settlers in Tampaksiring, for whom land allocation took another form than for the other settler groups (see chapter 7), the indication is an approximation based on information and accounts of farmers, WUA leaders and subak leaders, a comparison of subak membership lists with those of the WUAs (many farmers are not familiar with the formal names of TUs), and my own observations. At the time of my research no land maps existed of the land belonging to Kertoraharjo farmers.

⁸ To complicate matters, the names are also used for the (largely inactive) farmers' groups or *Kelompok Tani*, which ideally consist of the members of TUs.

government to provide them with water. Therefore, plans were made for the construction of a dam in a small stream crossing the settlement, and of a canal to convey the irrigation water to the Balinese plots located South and Southeast of Kertoraharjo. Construction of the provisional irrigation system, which consisted of a stone and wooden weir built in the drain mentioned above and a canal transporting water from the dam in a southward direction to the land of the Balinese, started around 1975. For at least half a year the Balinese seem to have worked on it. The canal reached quite far southward, and then turned to the East. It is not clear whether any of the subaks played a central role in regulating labour for construction of the provisional irrigation canal. The field conditions in that period - with partly cleared and partly developed land predominating - were not yet conducive to collective efforts on a large scale. Rather, farmers seem to have reacted flexibly to local opportunities: wherever farmers, or small groups of farmers, found themselves within reach of small water sources, they tried to use them, either on their own or collectively. The provisional canal was one of the larger collective attempts to exploit water resources at an early stage of settlement. As the water source was located near the land allocated to the first settler group (subak 150), farmers of this subak seem to have been most actively involved.

In the end, this provisional irrigation system was never intensively used. As far as it had been cleared, land had not yet been sufficiently levelled and was still full of tree stumps. A land development programme in which large tree stumps were removed by using heavy equipment was implemented in the beginning of the eighties. Further, maintenance of the non-permanent dam proved to be a heavy job. Every time the area had been struck by heavy rains and flooding, the dam was in need of repairs that demanded collective labour and new building materials. Another problem was the location of the dam near the village. Especially after floods, farmers whose home yards or crops had been damaged by the high water level behind the dam are said to have raised objections against the construction, which impeded drainage of the home yards in the village. Last, water from the drain in which the dam had been built was not sufficient anyway to irrigate a large area of land.⁹ Thus, the land remained rain-fed until 1983 when the Public Works system reached Kertoraharjo.

Though the above factors of ritual and provisional irrigation development have certainly played a role, some settlers give a less instrumental account of the establishment of subaks. According to such accounts, subak must be there simply because it is part of Balinese identity:

‘We are Balinese and we had just settled here in Kertoraharjo. Balinese, whether in Bali or here in Sulawesi, must do things together, having the joy and bearing the burden of collective labour, of meeting and discussing our problems of agriculture together. In Bali we had our subaks, so we needed to have subaks here as well, even though there was no irrigation system yet. Wherever Balinese are, there has to be a subak. Without subak, our village would not have been complete.’

Thus, even before the construction of the Public Works irrigation system, there was a crucial difference with subak in Bali. While in Bali the flow of water largely shapes the subaks, under the pioneer settlement conditions prevailing in Kertoraharjo the pattern of land allocation by the state to the various settler groups determined subak membership and spatial boundaries. However, the developments described above also make clear that the subaks in Kertoraharjo potentially showed the same wide variety of functions as known from Bali. The subaks covered ritual, agricultural practices and decision-making, construction as well as ‘irrigation management’ in the more restricted and instrumental sense in which it tends to be used by officials of government agencies, administrators and engineers.

⁹ Accounts on the early efforts to construct a provisional irrigation system differ.

3. Restricting subak: the establishment of TUs and WUAs

Finalization of the irrigation infrastructure

By the end of the seventies, the Public Works construction programme reached the area around Kertoraharjo. Construction of tertiary infrastructure was not restricted to the planned sawah area East of the road bisecting Kertoraharjo, but also covered the 'ladang' area West of this road (see map 8).¹⁰ The transmigrants generally welcomed the irrigation system as a major contribution to their further socio-economic development. However, some farmers had resented the pressure put on them to convert their ladangs, which had been planted with coconut trees and other perennials, into irrigated fields. They would have preferred a more diversified farming system, which included gardening. Irrigation water from the new system actually reached Kertoraharjo around 1983.

The introduction of the Public Works system was to have serious consequences for the Balinese subaks. How did the introduction of the TUs and WUAs interact with the pre-existing arrangements based on 'traditional' Balinese irrigation management: subak and pekaseh? As I have explained in chapter 2, the organizational arrangements for irrigation management at the tertiary level of the new system - the WUAs - came as one 'package' with the physical infrastructure of the TUs. Lay-out and construction of the TUs and establishment of the WUAs for the TUs were fully based on irrigation-technical criteria, and did not take into account pre-existing social-organizational, settler group or ethnic boundaries.¹¹ The TU boundaries (based on design criteria) cut across the pre-existing subaks which, based on the pattern of land allocation, had never been directly linked to irrigation in the past. After finalization of the infrastructure, the cross-cutting boundaries of TUs and subak areas, in combination with the obligatory establishment of WUAs, made the subaks lose their relevance as organizations with a potential for fulfilling irrigation management functions in the new system. Nor could the new TUs, with their sometimes ethnically heterogeneous farmer population, play a role in fulfilling that other important subak function: organizing and carrying out the necessary rituals associated by Balinese with irrigated rice cultivation.¹²

Thus, when Public Works started establishing WUAs in preparation of operation and maintenance of the new TUs, the broad field of agronomic-agricultural, irrigation-managerial, and religious-ritual activities of irrigated agriculture were torn apart. This rigid separation was based on completely different perceptions of irrigated agriculture between the government-administrative and engineering worlds on the one hand, and the lifeworld of Balinese farmers on the other. Engineering and bureaucratic understanding of 'management' (Ind. *manajemen*) as a separate category of activities includes the organization of water users in a TU for performing routine operation and maintenance tasks like canal cleaning and small repairs, but excludes the agronomic and religious-ritual dimensions of irrigated agriculture. While the former formally belongs to the field of activities of PERTANIAN (Agricultural Service), the latter is classified as belonging to the domain of *agama* (religion). Neither of the two is associated with irrigation management. In Balinese perceptions of irrigated agriculture, such distinctions are not very relevant. Balinese generally do not use a term like 'management' to refer to the complex domain of irrigated agriculture. They tend to use *persubakan* to refer to the wide variety of activities related to irrigated rice agriculture. 'Irrigation management', narrowly conceptualized as operation and maintenance of the tertiary infrastructure, became the formal responsibility of the

¹⁰ For the use of 'sawah' and 'ladang', see chapter 7.

¹¹ Design, construction and transfer to the WUA's of the tertiary infrastructure was, moreover, a process in which farmers did not participate at all.

¹² Examples of ethnically mixed TUs are PS3 (Balinese / Toraja), KL1ki and KL1ka (Balinese / Javanese); see chapter 10.

WUAs. Belonging to the domain of government policy and authority, it was delegated by Public Works to the WUAs. Agricultural planning belongs to the government domain as well (with an important role for PERTANIAN and the district Irrigation Committee; see below). Hence, activities of the Kertoraharjo subaks were formally restricted to the religious-ritual sphere. As *organizations*, the subaks were forced to retreat to their religious-ritual functions and to refrain from any interference with irrigation management functions as defined by the government agencies. As I will show in the next chapter, a different story can be told for subak as an *institution* - regularized patterns of behaviour between individuals and groups (see Leach et al., 1999; Meinzen-Dick and Pradhan, 2001; Scott, 1995). Even where subak authority was formally reduced to the religious-ritual sphere, there remained real-life interaction settings in which subak and pekaseh continued to influence matters formally belonging to the spheres of policy of government agencies, especially PERTANIAN and the Irrigation Service of Public Works.

Application of subak rule to the WUAs

In the first years after establishment of WUAs and the forced separation of religious-ritual and 'management' functions, when the irrigation system was already fully functioning and farmers were adapting to the new TU infrastructure and WUAs, the subaks continued to play an important role in irrigated agriculture. The Balinese had loyally accepted government regulations for tertiary irrigation management. However, from the accounts of many Balinese it becomes clear that they had great difficulty in making WUAs function in an acceptable way without having recourse to the normative-legal, technical and organizational elements of subak. This led to attempts to copy organizational arrangements deriving from subak to the WUA domain, renaming them using the idiom of the WUAs. After the establishment of TUs and WUAs, the Balinese created an organizational structure in which the pekaseh of the Kertoraharjo subaks also took function as 'WUA coordinator' of all WUAs in Kertoraharjo. The pekaseh of the Kertoraharjo subaks occupied this position between 1985 and 1989.¹³ According to the stories of farmers, subak functionaries and a Public Works functionary locally involved in those days, the mainly subak-derived regulations pertaining to water distribution, maintenance, collective labour and planting discipline, expressed in subak-like regulations, were quite successfully applied to the TUs and WUAs with a (mainly) Balinese farmer population. TUs showed a rapid development: farmers invested capital and labour in their TUs, and the WUA coordinator annex pekaseh maintained regular contacts with a functionary of the Irrigation Service. The former pekaseh:

'To make the WUAs function better, I wanted to use subak regulations for water distribution, maintenance, collective labour and planting discipline in the WUAs with Balinese farmers. Starting from the date of the transplanting ritual, farmers were given two weeks to plant their sawahs. Late planters were fined, and the fine went to the WUA. We also had a maintenance programme for canals and drains. Every season the farmers were given the task of cleaning part of the drain. After the plan had been approved by the Kertoraharjo village administration, subak regulations were put on paper and applied to the TUs. We also made improvements to the irrigation system, the water of which did not reach all farmers. Funds were raised by collecting eight kilograms of unhulled rice from each farmer. We have placed more than one hundred culverts in the WUAs, where the constructors had not provided crossings of canals, drains, and farm roads.'

¹³ The fact that in Bali a distinction is maintained between the administrative spheres of the 'dry' (customary) village and the 'wet' village (subak) may have played a role (see Geertz, 1972; see also below). In government administration, the village head is responsible for the WUAs in his village.

The plans were also supported by the Javanese branch head for the Kalaena right bank branch of the Irrigation Service. The former pekaseh:

‘I formally asked permission for all our plans and changes in the TUs, for instance placing culverts or improving a canal. He said, “it is all up to you down there what you want to do with the TUs and the WUAs, as long as what you do makes the organization function more smoothly without disturbing other farmers”. Indeed, things ran smoothly in those days. There were regular contacts with the Irrigation Service. Relations with pak *ranting* and pak *subranting* (primary and secondary branch heads; D.R.) were frequent and good.’

The branch head, who was actively involved in irrigation development and establishment of WUAs, confirms this view of developments in local irrigation management in Kertoraharjo:

‘Introduction of the WUA coordinator was an initiative of the farmers of Kertoraharjo, meant to make the relationship between the Irrigation Service and the local organizations more efficient. The coordinator could create understanding about government policy among Balinese farmers and, by using the language of the farmers themselves, was closer to them. The system functioned well under the WUA coordinator. If there was a meeting or another activity, he was always there, so that the relations with the Irrigation Service were smooth. The WUAs in Kertoraharjo were among the better functioning ones, with an active farmer population. If there were activities like collective labour on the canals, all Kertoraharjo farmers joined. And because the WUAs were involved all farmers, including the Javanese transmigrants, accepted the structure.’

Final divorce of subak and WUA

This happy marriage between subak and WUA turned out to be short-lived. After about two years the pekaseh was accused by the then (Javanese) village head of Kertoraharjo of sabotaging a government organization and its regulations. After a conflict between the WUA coordinator annex pekaseh and the village head about the financial resources controlled by the farmer members of the WUAs, subak regulations were confiscated and their application in the WUAs forbidden. The function of WUA coordinator was discontinued, and the pekaseh annex coordinator summoned to the subdistrict police to account for what was called ‘undermining WUA regulations’.¹⁴

After this forced retreat of the pekaseh from the WUA domain, the TUs and WUAs are said to have gradually degraded. The WUAs did not function, maintenance was neglected, infrastructure disappeared (drains, farm roads), and regulations for water distribution inside the TUs were no longer followed. Contacts between farmers (through their WUAs) and the Irrigation Service

¹⁴ Kertoraharjo had hosted a group of students from Makassar. The (Javanese) village head had decided, without consulting the WUA chairmen or coordinator, that the costs for a farewell party for the students had to be paid from WUA funds. Under the WUA coordinator, the WUAs were rich, transparent and well-functioning organizations. The WUAs were confronted with this decision after the farewell party, when the debt had already been incurred. The WUA coordinator and chairmen were enraged by the fact that, as one farmer formulates it, ‘the meat went to a certain group of people belonging to the village administration, while the bones were left for the WUAs. We were willing to pay for the WUA funds, on the condition that the money was controlled by the WUA and the coordinator. We did not agree if the money would be drained away to other people and uses that had nothing to do with irrigation.’ The WUAs and the coordinator refused to pay. Later, the village head took his revenge: on a public meeting he said that it would be better just to dismantle the WUAs and do away with their coordinator, because he blocked the national WUA regulations. Both parties took the conflict to the subdistrict head, where the version of the village leader was accepted by the authorities. The subak regulations applied to the WUAs were confiscated. The subdistrict administration concluded that there was no reason for using subak regulations. After the conflict, the WUA coordinator stepped down and refused to take any further responsibility for irrigation matters.

gradually diminished until what remained was the current situation, in which there is no contact at all between agency and farmers. Thus, the functional separation between subak and WUA was reasserted. The subak regulations made for the WUAs disappeared after confiscation, and were gradually replaced by new regulations specifically made for each of the four subak organizations and restricted to those issues for which the subaks were allowed to be responsible. The pekaseh was no longer actively involved in tertiary irrigation management.¹⁵ How did the Balinese experience these developments? Can the many interrelated functions associated with 'subak' actually be artificially separated in such a way? The former pekaseh:

'Since many years there is no contact at all with irrigation officials. We rarely see them around the village. The only place where we meet them is at the *tudang sipulung* meeting at the subdistrict level. But for the rest, they never come out of their offices to visit us here. The WUA leaders, functionaries and farmers do not go to the Irrigation Service because it is too far away. Almost all Irrigation Service officials who have a task in this part of the system live quite far away from their working area. So nowadays none of the two knows what the other is doing Indeed, it is difficult for us Balinese to separate water, plants, working on the canals and doing our religious offerings. Water is one of the primary sources of life, including of the rice plants. The three are also related in the way we manage irrigation and agriculture, at least in Bali. We have to follow the regulations of the government here. The separation between pekaseh and WUA itself did not generate much trouble. Though the farmers supported me as their pekaseh, in the end we all had to accept the fact that conditions here are different from those in Bali. But see what has come of it: the bad condition of our TUs, the farm roads that are never repaired, the canals that are poorly maintained, and the farmers who never turn up for collective labour. Such things would never have happened under subak rule.'

In the perception of farmers and leaders of WUAs, subaks and pekaseh alike, this division does not seem to have rooted. When referring to the WUA, they often use 'subak' (though they would never mistake a subak meeting for a WUA meeting). While farmers exactly know the name of the subak they belong to, they often have great trouble in making clear in which TU their land is located. They can sometimes give the name of the leader of their WUA, but usually they do not know the formal name of their TU. Further, the way in which qualifications for leadership functions in the domain of subak and pekaseh are defined conveys the impression that the spheres of WUA and subak are actually to be regarded as one 'wet' sphere, more or less interchangeable, and requiring the same type of knowledge, leadership qualities and characteristics. The former pekaseh about the crucial qualities of a subak leader or pekaseh:

'He has to be an all-round person. He should have knowledge of the weather, the position of the stars and the Balinese calendar, but also of leadership and administration, of water and water distribution, inputs and the characteristics of the rice variety that is going to be planted. He should also know the subak ceremonies. He should have field knowledge and be diligent in keeping an eye on field conditions. He has to be conscious (*sadar*) and patient (*sabar*), a person who does not do damage to other persons and is capable of composure (*jaga diri*). If it were all about planting only, being pekaseh would be easy.'

¹⁵ In the neighbouring Balinese village of Alam Buana such a separation of functions between subak and WUA has never taken place. As a consequence of the tail-end position of Alam Buana in the irrigation system and resulting irrigation and drainage problems, construction and WUA formation have never reached those parts most affected by the problems mentioned above. The subak of Alam Buana meets once every Balinese month. Irrigation and agriculture, as well as ritual are discussed, planned and implemented in the subak. However, the limited water control resulting from the tail-end position of the area leaves little scope for an effective subak role. See box 12.

And indeed, there are crucial linkages between the various subak functions, the disconnection of which may well have important consequences for current irrigation management (see chapter 10). Engineers and officials, with their instrumental perception of irrigated agriculture, classify and differentiate this Balinese 'wet' world into categories like 'water management', 'agriculture' and 'religion'. In this process of classification important interrelationships between the various dimensions of subak may have been lost, as the remarks by a farmer and subak functionary comparing the Kertoraharjo subaks with those in his place of origin clearly illustrate:

'Why has the condition of irrigation so deteriorated? The major cause is the separation of subaks and WUAs, of water and collective labour for construction, repair and maintenance from the offerings. Take, for instance, the ceremony of *mapag toya* (ceremony for welcoming the first irrigation water of the season; D.R.). What does it mean in Kertoraharjo? It has lost its meaning and importance for irrigation here. In Bali, the canals are cleaned and repaired before the agricultural season starts. Once the canals are ready for use, the *mapag toya* ceremony is held and the water can be used. In Bali, these are important occasions. Usually people are rather massively present at *mapag toya*. Here it is different: *mapag toya* belongs to the subak, and canal cleaning is a task for the WUA. Often, when *mapag toya* is held, the canals have not even been cleaned and repaired. If offerings are brought to the places where water enters the subaks at all (R2, BR5 and PS3; D.R.), hardly anybody is present. Often, offerings are made in the ulun suwi temple only.'¹⁶

Or a more or less similar observation by another Kertoraharjo farmer:

'The situation here differs so widely from Bali. When I still lived in Bali, I was a member of a subak in Mengwi. Take maintenance and repair of the canals. The members of my subak started doing repairs of the canals as soon as the rice was ripe and the canals could be closed off. After harvest, if the time for land preparation had come, everything was ready. Here, both the Irrigation Service and the farmers themselves are always late. Take the recent repairs by Public Works on the secondary canal, for instance: they started working on it a long time after harvest, just when it was getting time to start preparing for a new agricultural season. As a consequence, last season started very late, and the next season will also be very late.'

4. Pekaseh and subak now

Pekaseh and subak in Kertoraharjo

The organizational characteristics of pekaseh and subaks in Kertoraharjo show many similarities with the subak in Bali (see chapter 2).¹⁷ The pekaseh has a board consisting of chairman (pekaseh), vice-chairman (wakil pekaseh), secretary (sekretaris), and treasurer (bendahara). Pekaseh elections are held once in five (Balinese) years; re-election of sitting functionaries is possible. As each of the functionaries has to originate from a different subak, each subak nominates one member. The ultimate distribution of functions is determined by deliberation between the klian subak, the retiring pekaseh, priest (pemangku), and customary village leadership. In case of calamities, special meetings can be held. The pekaseh has a very rudimentary set of regulations which all focus on the issue of ritual purity and avoidance of desecration of the irrigated areas under control of the pekaseh.

¹⁶ This remark is corroborated by my own observations in 1999: one week after the ceremony had been held, canal cleaning was still going on in the majority of TUs.

¹⁷ Since its establishment, the organization of pekaseh and subak has undergone no changes. Sometimes, instead of pekaseh, the term subakgede ('big subak') is used.

A major pekaseh task is collection of the funds for subak rituals. As in Bali, members pay a seasonal subak tax (*sarin tahun*) per area irrigated. The tax is collected by the subaks in money or in kind. Part of the collected funds, often referred to as *target* and determined in proportion to the number of hectares of irrigated land under control of each subak, flows from the subaks into the pekaseh funds. This capital is used for the preparation and staging of the necessary rituals related to rice cultivation. Rituals are performed by a priest who specializes in rice rituals. He is assisted by a (female) specialist in the preparation of offerings (*sutri*, *tukang banten*). In Kertoraharjo, as in Bali, some such rituals have a public (mass) character. Such rituals are organized at the pekaseh or subak level, and carried out in the subak temple, on customary village land, or in a subak field shrine. Others have a private (family) character, and are performed in the sawah or in the rice barn on the premises of the house. Finally, some rituals have both a public and a private dimension. Contrary to Bali, subak rituals in Kertoraharjo with a mass character tend to be attended by very few members.

Box 9: Kertoraharjo pekaseh regulations

1. For those who own a house or a small hut in the rice fields, the land on which it stands should be clearly demarcated from the rice fields. Before it is used, the appropriate ritual should be held.
2. Duck tenders who sleep in the rice fields, whether Hindu or non-Hindu, are not allowed to invite any women to sleep with them.
3. In case of adultery in sawahs or ladangs, a sanction in accordance with Hindu religion is necessary.
4. If members of the subak transplant before the *pengawitan* (transplanting ritual; D.R.) or transgress the *penyepian pengawitan* (ban on agricultural labour on the day of the transplanting ritual; D.R.), they are given the following sanctions: first, they will be fined; second, they have to organize a *macaru* (cleansing; D.R.) ritual on the location where the transgression has occurred.

Source: fieldwork

On the slope of Karambua Hill, East of Kertoraharjo, stands the ulun suwi irrigation temple. It is still a very simple construction, consisting of the most basic necessities for religious ritual as well as a small hall (*bale*) providing some roofing for those attending prayer. Its location has been strategically chosen near a small spring, which is the source of holy water (*tirtha*) needed for religious ceremonies in Kertoraharjo, including those unrelated to the subak. The four subaks of Kertoraharjo own, improve and maintain the temple, the spring and its surroundings including the access road which leads through the rice fields for about one kilometer before winding up the slope of the hill. Collective labour parties for maintenance and improvement are generally well attended. Two of the four subaks, Ukir Sari and Luga Sari (now renamed Merta Sari) own a small offering place for subak offerings. These shrines stand on a small parcel of customary land (*pelaba desa*), lent out to the subak and worked by a subak functionary.

The subak board consists of chairman (*klian subak*), vice chairman (*wakil klian*), secretary and treasurer. Each subak board is seconded by two or more assistants / messengers (*juruarah*), who channel important information (e.g. the date and time of a subak meeting) from the leadership to the members. Subaks are subdivided into smaller groups of members usually based on residence, so as to make mobilization for subak tasks or meetings easier. These groups are called *arahan*. All subak functionaries, except the *juruarah*, are chosen by the members for a three (Balinese) years' period. After this period, re-election is possible. Subak leaders are rewarded for their functions in a number of ways. First, they are entitled to part of the subak income from interests on loans (ten percent divided by the members) or from the amount of money collected as seasonal contribution. Second, they only pay the seasonal tax for irrigated land exceeding two hectares. Third, they are exempted

from payment of additional contributions. Lastly, they are exempted from collective labour duties. A comparable system exists for the pekaseh leadership.

As can be seen from table 8 above, membership of three of the four subaks shows a slight decrease over time.¹⁸ Land transactions between Balinese are the main cause of this decrease. Farmers who own land in various subaks remain members of one subak only (the one of which they initially became a member). They pay their subak tax for the additional land they bought to their initial subak, even if the purchased land is located in another one. Thus, land bought in this way disappears administratively from the subak to which it once belonged. As a consequence, slight imbalances have grown over time between the subaks. Those subaks in which members of other subaks have bought relatively much land, have lost members and their tax contributions. This arrangement is a consequence of the non-involvement of subaks in irrigation management.

Each subak has its own regulations, usually of a very rudimentary character, written down in a small school notebook in which later additions, agreed upon during subak meetings, are also written down.¹⁹ Routine subak meetings (*rapat patokan*) are held in the banjar halls of Kertoraharjo, preferably on the day after Galungan. During these meetings, primarily financial matters are settled, and the leadership accounts for subak funds. Funds originate from different sources. First, there is the seasonal tax of ten kilogram of unhulled rice (or its counter-value in money) per hectare of irrigated land, which is largely handed over to the pekaseh. As a consequence of the economic crisis, the counter-value in cash has followed the price trends for rice. In 1999 it amounted to Rp. 10,000 per hectare.²⁰ Second, there are revenues from fines paid by the members (especially for absence from collective labour and subak meetings; Rp. 500 for each absence)²¹, payment for not participating in subak tasks due to prolonged absence from the village (*beli ayah*; 'buying work', see chapter 10).²² Third, if the subak has a lending function, interest paid by members on loans from the subak funds is an important source of subak income. Subak loans are provided for a period of six (Balinese) months, against an interest determined by the members, usually amounting to five percent per month. Once a considerable capital has been built up, the leadership may propose temporary reduction of the interest on loans.²³ Usually the demand for loans exceeds the total amount of cash available, so that the subak funds are completely lent out each period and interest revenues are maximized. In subak Utus Sari, for instance, interest collected each meeting amounts to between Rp. 600,000 and 1 million. If a member cannot pay back loan and interest, the latter is doubled until the total amount has been returned.²⁴

¹⁸ From such subak data it can also be concluded that land concentration or fragmentation has been slight.

¹⁹ Characteristically, such regulations and additions to cope legally with emerging subak problems have often disappeared (eaten by ants a long time ago or not survived the humid weather conditions).

²⁰ A distinction is made in the subak between 'development funds' (*kas pembangunan*), to be handed over to the pekaseh, and 'subak funds' (*kas subak*), administered by the subak itself. In the 1995-1996 season, subak tax was increased from 8 to 10 kilograms. In 1997, subak 150 decided to accept only its money value.

²¹ Absence without prior notice is relatively low (compared to meetings and activities of the WUA). In subak Utus Sari, for instance, for a variety of subak activities during the last four years, absence rates were generally between nine and twelve percent, the majority of absence cases pre-notified and for clear reasons. It is not unusual for WUA meetings, if they take place at all, to have an absence rate of 50 percent or more.

²² Generally, this is only allowed in case of prolonged absence from the village and is not accepted from wealthy farmers who want to buy off their labour obligations. In subak Utus Sari the right of 'beli ayah' has been granted to one old transmigrant farmer who now lives in Bali but still owns land in Kertoraharjo.

²³ I once attended a meeting in which the suggestion by the subak leaders to reduce the interest rate from 5% to 2%, in view of the large capital built up, was turned down by the members, who preferred further growth of the funds by maintaining a high interest. Subaks with a lending function are Utus Sari and Nadi Sari; Luga Sari and Ukir Sari had no lending function.

²⁴ The savings and credit function of subak, banjar and other organizations are highly valued by members.

Box 10: basic data and regulations of subak Utus Sari*General data:*

Initial number of subak members: 150
 Current number of subak members: 135
 Hectares of irrigated land in subak registration: 197
 Income sarin tahun: 1,448 kg. gabah / 463,360 Rp.*
 Meeting place: banjar hall of banjar Wana Karya
 Meetings: day after Galungan
 Board election: every two years
 Interest on cash loans: 5% per month
 Subak capital: Rp. 3.6 million

* the difference between actual income and the income calculated on the basis of the number of hectares can be explained from a variety of factors: exemption from tax payment for subak board members and other customary village officials, deduction of rain-fed parts, and tax payment problems associated with land bought by subak members.

Sources of subak capital:

1. fines (dosan) for not attending collective labour activities or subak meetings;
2. interests paid by subak members on loans from the collective capital;
3. seasonal contributions by the subak members: the sarin tahun subak tax of 10kg. unhulled rice per hectare (irrigated) per season, or its equivalent in money (largely transferred to the pekaseh in order to finance subak ritual);
4. beli ayahan (only for those residing outside the village).

Regulations (awig-awig) of subak Utus Sari:

1. All Hindu farmers who own irrigated fields in the area covered by subak Utus Sari have to become members of the subak.
2. The subak organizes a pengawitan planting ritual. Those members who transgress the planting regulations by early planting are fined.
3. The subak organization must own capital to strengthen subak unity. Further, on certain days collective labour will be organized. Those members who do not attend will be fined Rp. 500 for each absence. This money will be gathered and lent out to the subak members.

Source: fieldwork

Apart from aspects of land use that have a direct bearing on the maintenance of ritual purity and avoidance of pollution, pekaseh and subaks have no say in what farmers do with their land. There are no subak laws on land transactions to exclude non-Balinese or non-Hindu buyers.²⁵ In the case of other arrangements regulating access to land like lease, sharecropping, and pawning, the owner remains in principle accountable to the subak for the various duties and contributions. Parties to such an agreement are free to make their own arrangements. Responsibilities can also be divided

The subak funds were often described to me as a 'binder' (*pengikat*) necessary to make the organization function and to stimulate involvement and interest of the members in its functioning.

²⁵ It is striking, though, that hardly any land is / has been sold to non-Balinese in the initial subak areas. Rather, there is a tendency towards Balinization of TUs; in one TU the option of offering non-Balinese owners to buy their land rather than working it for many years under a pawning contract was openly discussed by Balinese farmers as good policy in view of the sometimes strained relationships between Balinese and non-Balinese farmers in irrigation matters (see chapter 10).

between the owner and the worker of the land, the former attending meetings and contributing labour, and the latter paying subak tax to the owner. Though there is no written regulation on this point, it is clear that non-Balinese (non-Hindu) tenants of land in the initial subak areas (e.g. sharecroppers) are expected to respect pekaseh decisions about the date from which transplanting of the rice stalks is allowed. Field observations make clear that Balinese WUA staff are engaged in the active enforcement of conformity to such rules on transplanting (see below).

Tudang sipulung desa: determining the next cropping season

For Balinese Hindus all stages in the rice cultivation cycle are accompanied by ritual obligations. Of all subak ritual, the transplanting ritual (*pengawitan*) forms the main point of interaction between pekaseh and subaks on one hand and the sphere of government policy on the other. It also deeply influences the agricultural practices of the Balinese farmers.²⁶ Determining a suitable transplanting date is a focal point of village planning and decision-making on the cropping season. The beginning of transplanting, marked by the transplanting ritual, is accompanied by strict pekaseh regulations on transplanting and agricultural labour in the irrigated fields on the day of the ritual. Transplanting before the ritual is regarded as a polluting act that seriously disturbs the harmonious relationship between nature, human beings, and the divine world. Hence, it is strictly forbidden. While farmers are allowed to start transplanting directly after the ritual, other agricultural labour in the sawahs is strictly forbidden on that day. Rules are strictly maintained and enforced by 'spies' in the fields. Transgressors are fined by the subak, and must finance a cleansing ritual (*macaru*).

The pekaseh is not completely free in determining the date for the transplanting ritual. He has to take into account many complicating factors and competing interests. The same goes for farmers and their agricultural activities. First, there is the government schedule for system opening and closure, and government indications for various stages of cultivation (ploughing, seedbed making, transplanting, harvesting). District agencies and administration try to increase cropping discipline among water users. District policy on irrigated agriculture is based on the latest advice given by provincial research centres about crop resistance against pests and diseases, expected seasonal influences, and rainfall. In view of crop damage caused by the stemborer (*penggerek batang*) and other pests, agencies and administration cooperate in shifting forward the beginning of the dry season cropping period to as early a date as possible. The most powerful instrument to reach this goal is choosing an early opening date of the irrigation systems, while strictly adhering to the planned closure date (having no pity on late planters).²⁷ The impact of this policy could be clearly seen in the 1995-1996 period. While in the 1995 dry season cropping period the system was opened on 15 July, in the 1996 dry season period it was opened on 10 June. For the wet seasons 1995-1996 and 1996-1997 the data were 10 January 1996 and 25 November 1996.

²⁶ In the case of the transplanting ritual, the character of subak as a normative-legal order is most clearly visible. The ritual accompaniment of other stages of the rice cycle is either left to the farmer to decide on, depending on the growth stage of the crop or the harvest moment, or taken care of by the subak in a routine way without influencing farmer behaviour.

²⁷ However, other factors play a role here. The 1996-1997 rainy season cropping period was extremely dry. For late planters, the situation in some parts of Kalaena was problematic. While closure of the system had been planned for March 25th, it was decided to extend the water allocation period until April 15th. However, the dry weather was not the only factor influencing decision-making on closure of the main system. The May 1997 national elections (resulting in the last GOLKAR-Suharto victory before Reformasi) played a major role here. According to a Public Works official: 'Elections are approaching. In order to avoid negative feelings among the farmers, possibly resulting in a loss of GOLKAR votes, we could not be too strict'.

Box 11: major rituals and ceremonies associated with rice cultivation**Special ceremonies:***Nangluk marana:*

This 'rat cremation' is held only once in twelve Balinese years. After a massive rat hunt in the sawahs, rats are ceremonially cremated in the presence of pekaseh, subak leaders, priest and subak members.

Odalan pura ulun suwi :

Celebration of the anniversary of the ulun suwi temple on Karambua Hill, East of Kertoraharjo. This ceremony, with the purpose of ritually cleansing the temple, is held once every Balinese year, on *purnama kedasa* (the tenth full moon of the Balinese Saka calendar), and attended by subak and adat functionaries, priest and offering specialist, and the majority of the population.

Each cultivation cycle:*Mapag toya:*

Welcoming the water; held at the beginning of each irrigation season, when the first water reaches the fields. Offerings are made in the ulun suwi temple, in the small subak shrines, and where major canals enter the fields of Kertoraharjo. It includes prayer for a good rice season by the priest, and is attended by pekaseh and subak staff, priest, offering specialist, and (a small part of the) subak members. Small offerings are also made on the day field preparation starts.

Pengawitan:

Transplanting ritual, which marks the beginning of transplanting. Before this ceremony, transplanting is strictly forbidden. On the day of the ceremony, all field labour except transplanting is forbidden. The ritual is performed by the priest, in the presence of pekaseh, subak staff, and offering specialist. Prayer for a good agricultural season; no subak members present.

Ngaci / Yadnya bulanan / Nunas ico / Tanduran :

Ritual and prayer to beg for a good harvest (12, 42 days, and three months after the transplanting ritual), performed in the ulun suwi temple by the priest, assisted by the offering specialist. Pekaseh and klian subak are present. After the ritual, bottles are filled with holy water from the spring on Karambua Hill. The water is taken to the customary village land, where farmers can get a share for their rice offerings.

Biukukung:

Prayer and offerings on the individual sawahs, to be held sixty days after planting, when grains have developed; no role for the pekaseh here.

Ngusaba:

Offering to the rice goddess Dewi Sri; prayer and offerings by the priest on the land of the subak and in the ulun suwi temple. This ritual is held at the final stage of ripening of the rice, shortly before harvesting. Attended by pekaseh, subak leaders, priest, offering specialist and some subak members.

Mantenin:

Thanksgiving ceremony after harvest. Offerings are made at the level of the individual family: in front of the rice barn, after the harvest is stored. The essence of rice (Sari) should be returned to the Gods. Recently, a rice barn for the subak was made and given a place in the village temple. Probably mantenin ceremonies will be organized there by the pekaseh / subak.

Source: fieldwork

The (district) Irrigation Committee (Panitia Irigasi) determines the schedule of opening and closure of the irrigation systems in Luwu. These dates, a schedule for agricultural activities, and instructions on rice varieties and inputs to be used are passed down hierarchically to the subdistrict (staff of agencies and organizations involved: Irrigation Service, Agricultural Service, Cooperative) and administrative village (WUAs, farmers' groups, and village head) through the so-called tudang sipulung meetings (see introduction).²⁸ After the subdistrict-level tudang sipulung, ideally a village-

²⁸ The term refers to a Bugis tradition of collective decision-making on the rice-cropping season. Its is a good

level meeting (*tudang sipulung desa*) is held.²⁹ Whether this is the case, and what exactly happens at these meetings, depends on the ethno-religious background of the village population. In villages for the inhabitants of which the beginning of the agricultural season is not so closely related to ritual obligations as for Balinese, no such meeting is held. For the Balinese it is crucial. In Kertoraharjo it provides a forum for discussion and decision-making on how to match the government schedule with Balinese preferences for a day for starting land preparation, receiving the first irrigation water and especially transplanting, based on the Balinese calendar.

Other factors play a role as well: first, crop conditions and expected planting behaviour in neighbouring villages, from which Balinese farmers do not want to deviate too far. Second, the availability of tractors and labour power (for land preparation, extracting and bundling, and transplanting) during peak periods.³⁰ As I have shown in chapter 8, irrigated agriculture depends primarily on wage labour in all stages except harvesting. Appointments with tractor owners and transplanting groups have to be made for weeks up to more than one month in advance. The land preparation schedule, especially the last stage of levelling, must be attuned to transplanting.³¹

Pengawitan: the date on which transplanting begins

The transplanting ritual on the village customary land (*pelaba*) is organized by the *pekaseh*. He instructs a Hindu priest specializing in rice ritual to enact this ritual on the morning of the date determined in the village *tudang sipulung* meeting. After praying for a good harvest and absence of pests and diseases, a bundle of stalks is ritually cleansed with holy water from the irrigation temple, and planted out by the *pemangku*. Early planters and those who perform agricultural labour on the day of the ritual are fined. They must also pay the costs of a cleansing ritual. The level of the ritual to be carried out depends on the economic position of the transgressor, but usually the simple or medium level will suffice.³² In the core subak areas - the irrigated fields initially defined as subak

example of the use an 'indigenous' term appropriated by state agencies as an instrument of top-down state control, veiled in participatory rhetoric (see Acciaoli, 1997).

²⁹ In Kertoraharjo, this meeting is attended mainly by the *pekaseh* and his staff, the subak leaders and their staff, and the WUA chairmen (see introduction).

³⁰ During my visit to the village in 1999, some farmers told me that these constraints were less urgent than two years before. While the economic crisis did not prevent Balinese farmers from buying tractors, it stimulated many young people to form transplanting groups to gain additional income. A constraint caused by the crisis was the sharp price increases of original tractor spare parts, which made farmers turn to lower quality substitutes. Farmers complained that, because of this, tractors broke down more often than before.

³¹ Note that, contrary to the period in which the *pekaseh* held the function of WUA coordinator, nowadays the *pekaseh* puts sanctions on early, but not on late planting. Further, there is no absolute agreement among Balinese on this point. Those who want to plant early seem to be a majority. Many Balinese farmers, who own land both within and outside the original subak areas, respect the transplanting date of the *pekaseh* for their land located in the former areas, but feel free to plant before that date on other land (see below). Some farmers follow the (former) *pekaseh* in his preference for a relatively late planting date. During the *tudang sipulung desa* held in preparation of the 1996 dry season, the *pekaseh* personally preferred 3 August to 16 July, the date ultimately decided on. As he could not get a majority behind his proposal, as a *pekaseh* he was forced to accept the earlier date. But, convinced of the correctness of his own view based on the Balinese calendar and the stars, personally he refused to abide by this date, and transplanted on 3 August.

³² Rituals can be staged and offerings made at three levels of elaboration: *nista* (low), *madia* (middle), *utama* (high). Each is divided into three sublevels (also called *nista*, *madia*, and *utama*), resulting in nine levels at which rituals can be performed. Still, the costs of the *macaru* cleansing ritual for an irrigated field to redress the transgression of planting rules by its owner may be considerable (Rp. 50,000-100,000 before the crisis).

areas - transgressions of the rules for the beginning of transplanting seldom occur. During my own field observations in the areas under subak control I did not detect any transgressions of the planting date. I know of only one case, before my stay in Kertoraharjo, in which a member of subak Nadi Sari (who later became its chairman as well as functionary of one of the WUAs) transplanted his rice before the day of the ritual. The farmer was convicted by the pekaseh to sponsoring a macaru cleansing ritual, executed on his field by the subak priest. The farmer concerned:

'I had my rice transplanted one day before the pengawitan ritual. The problem was that the definitive date chosen by the pekaseh was announced very late that season. I had assumed that it would be much earlier. When it was finally announced, I had already contracted a transplanting group that I could not cancel without getting into serious trouble with finding new labour power at short notice. My rice stalks had already been extracted and bundled, and lay in the sawah ready for transplanting. So under these circumstances I was forced to steal one day. The transplanting group arrived and transplanted my rice before pengawitan. A late announcement of the transplanting date is a problem for farmers. It makes finding a transplanting group very difficult. If it is a late date, it makes it impossible for us to follow the government schedule.'

Another subak leader stresses that there is great pressure on farmers to plant as early as possible, especially since the farmers are disciplined by an increasingly strict operation of the main system by the Irrigation Service. There are distinct advantages to early planting. First, those who manage to be among the first to plant can avoid the peak period, during which it is difficult to find labour for planting. Bottlenecks in labour availability due to wrong or late planning may be disastrous, forcing farmers to postpone transplanting for another one or more weeks. In view of this, it is surprising that there are so few transgressions of the planting date.³³ Second, when planting early, the incidence of pests seems to be lower. Third, during the harvest labour peak those who are among the first to harvest have the advantage of easily finding harvesting labour. Fourth, early harvesting in the dry season means a greater chance of dry weather during harvest. An advantage of a sawah that can be drained and dried are the reduced harvest costs (harvesters demand a higher share when harvesting a wet and muddy sawah; the same goes for sawahs on which the quality of the crop is lower due to water damage). Fourth, rainy weather in the harvest period (the possibility of which increases in the months of November and December) negatively affects the value of the crop. Harvest time can, of course, be partly controlled by the choice of a very fast-growing rice variety.

Balinese often stress that subak regulations, closely related to Balinese Hinduism, only apply to the Balinese farmers. However, the following field impression shows that reality may be different:

It is the morning of the day on which the pengawitan ritual will be held on the customary village land. Early in the morning the members of some Javanese planting groups are ready to start planting in the fields around the customary land. However, no transplanting is allowed before the ritual has been held. The priest and offering specialist are late. Members of the planting groups pass the time talking and smoking. Then one of them starts preparing the sawah for transplanting by marking the planting distances in the mud with a wooden *caplak*.³⁴ However, he is immediately told by the farmers to leave the sawah and wait for the ritual to have been performed. After a while the pekaseh, subak chairmen and offering specialist arrive, the latter carrying a large basket containing the offerings. She prepares everything for the ritual. Finally, the old priest arrives on his bicycle. He immediately starts praying and performing the prescribed ritual acts, first on the customary land and later under a *penyor* erected at the entrance of the land. In a lengthy prayer, the priest begs for protection against all diseases that may threaten the rice crop. After that, he starts ritually transplanting the first rice stalks on the irrigated part of the customary land. Then, under the eyes of the priest, who is still engaged in ritually planting the corners of the sawah and placing small offerings near the

³³ The more so if we take into account the fact that many farmers have more than one sawah.

³⁴ A *caplak* is an implement used to mark in the mud the places where rice stalks have to be planted.

transplanted rice stalks, a young member of the planting group hired to plant the customary land enters the sawah to ‘caplak’, but is immediately told by the former to stop. Probably labour stress plays a role here. Often, planting groups make appointments with two farmers on one day. Hence they cannot afford postponing work in the morning for too long. After the ritual I stray through the sawahs and meet the (Balinese) water master of the TU in which the customary land is located. We sit down in his field hut and chat. In the meantime, a Javanese farmer turns up in his sawah near the water master’s field hut, and starts working his land. Immediately, the water master forbids the farmer to continue, as this is a transgression of Hindu-Balinese subak rules. Disappointed, the Javanese puts his hoe on his shoulder and returns home. Back in his hut, the water master tells me that he had been ordered by the chairman of the WUA (also a Balinese) to guard the sawahs against transgressions of the subak regulations forbidding agricultural labour on this day.

This shows, first, that application of subak regulations is not always restricted to Balinese. Some Balinese seem to hold the opinion that, where Balinese farmers are a majority, non-Balinese should observe subak restrictions on agricultural labour on the day of pengawitan. However, it is difficult to find any Balinese who would openly recognize this. Second, the example shows that the formal separation of functions and spheres of influence between the WUA and the subak is not always clear in actual agricultural practices. Such formal distinctions need not correspond to actors’ understandings of these distinctions or the fields of human organization and activity on which they have been imposed. In this case, a WUA leader was enforcing subak rules upon a non-Balinese farmer!³⁵

5. The contested subak: multiple spatial definitions of subak authority

Blurring subak boundaries

Initially, subak membership had been determined by the pattern of land allocation to the settler groups. Though widely differing from the major determinants of subak boundaries and membership in Bali, the definition of the subak organizations emerging from the specific conditions in Kertoraharjo was clear enough at the outset.³⁶ Each settler group established its own subak, and subak land was defined as the land allocated to the Balinese transmigrants belonging to one of the four Balinese settler groups. The leadership of each group was vested with a clearly demarcated authority, supported by legal regulations specifying the rights and responsibilities of its members and the sanctioning power necessary to enforce its rules and decisions within its spatial and social boundaries.

What used to be a clear basis for the subaks more than twenty-five years ago and continued to be so during the eighties, no longer suffices now for defining and demarcating subak authority. This has much to do with the fact that, contrary to the subak in Bali, the location of land owned by the Balinese rather than common exploitation and management of a water source was the basic defining criterion of the Kertoraharjo subaks. This definition on the basis of landownership has made the subaks vulnerable to processes of socio-economic change. As I have shown in chapter 8, Balinese have been strong buyers of (irrigated) land in the immediate or more distant surroundings of their

³⁵ The TU concerned has a large majority of Balinese farmers. Upon further inquiry into what had happened, it turned out that the Javanese farmer worked land of the mosque in a sharecropping arrangement.

³⁶ This does not mean that in Bali such boundaries are always clear and uncontested. They are often ambiguous or subject to redefinitions and reinterpretations in contexts of ‘upgrading’ and ‘rehabilitation’, where such definitions may determine access to financial resources. Thus, boundary definitions may become crucial weapons in struggles about such resources (Spiertz, 1989, 1992, 2000).

village. The active Balinese role on the land market and Balinese control of land spread across an increasingly wide area around Kertoraharjo have had their impact on the subaks as well. The combination of these factors has made the initial definition of the Kertoraharjo subaks and their membership problematic and obsolete.³⁷

There are many issues at stake here that may interact in complex ways, relating the subak sphere to other arenas of interaction. Inside the subaks, members with leadership ambitions or bearing a grudge against the sitting leadership can mobilize such issues. This may explain that the problem of the definition of boundaries of subak land and authority surfaced most clearly in subak 100 at a time when this subak was hit by other conflicts as well. Whatever complications may occur in the various subaks, a key issue in all of them is the following: what is the status of land bought by Balinese outside the areas initially defined as subak areas? Are the owners of such land subject to the taxes and other contributions, rights and responsibilities, do's and don'ts of subak and pekaseh? Those questions have become divisive issues in all subaks. The status of such land is not clear and not covered by pekaseh or subak regulation. The problem of boundaries of authority - not this time between subaks and WUAs but between land under subak authority and land outside subak control - continues to haunt the Kertoraharjo subaks. The many conflicting interpretations of subak, its physical boundaries and boundaries of authority have become a major threat to the functioning of the subaks and pekaseh in Kertoraharjo.

Who pays for what land? Who transplants when?

Two responsibilities of subak members make the boundary issue particularly important and, at times, fiercely contested: the payment of the sarin tahun subak tax (collected in proportion to the area of irrigated land owned) and restrictions put on transplanting before the pengawitan ritual.³⁸ As I have shown in chapter 8, Balinese have been strong buyers of land in surrounding villages. If the land is irrigated, and the owners are (Hindu) Balinese, according to strict interpretations of subak law these owners are automatically subject to subak regulation. This includes paying subak tax and respecting the ceremonial-ritual cycle of the agricultural season. According to strict interpretations, subak ritual has to be performed for all Hindu Balinese and for their total area of irrigated fields owned, irrespective of the location of the land. It cannot be restricted to Balinese who happen to own irrigated fields in certain places only. Therefore, all Balinese farmers who own irrigated rice fields are obliged to register their total area of irrigated land with one of the subaks, to pay subak tax on a per-hectare basis, and to respect other subak regulations, especially about transplanting.

However, such strict interpretations of subak authority and regulations are not shared by all Balinese rice farmers. In the irrigated areas initially under subak control the picture is more or less clear. Generally speaking, all Balinese transmigrants started off with an equal amount of (mostly irrigated) land: 1.75 hectare.³⁹ In the meantime, some have sold (part of) their land while others

³⁷ Another factor, already discussed above, that consolidates this rootedness of the definition of subak in terms of land resources, is the way the subaks have developed in the context of a Public Works system.

³⁸ Other factors play a role as well. First, the subak regulation stating that a Kertoraharjo (irrigated rice) farmer is obliged to become a member of one subak only, irrespective of irrigated land owned in one or more of the other subak areas. This makes subak supervision over land owned by its members more difficult. Second, there is the problem of transfers or partial transfers of land from the initial subak member (usually a transmigrant family head) to a (future) inheritor. Such transfers may give rise to unclarities about responsibilities, membership contributions etc. Here I focus on subak tax and transplanting behaviour.

³⁹ Aside from differences caused by topography (land not turned into sawah because of elevation or depression), location (free expansion of sawahs bordering on land not claimed by anybody), or construction (land

have bought additional land from Balinese in the subak areas. Such changes are taken into account in determining the seasonal contributions of subak members: it is paid in proportion to the area of irrigated land owned in one of the initial subak areas.⁴⁰ In other cases the situation is more difficult. Farmers owning land both within and outside the initial subak areas tend to pay for the former only. Moreover, most Balinese owners do not respect the pekaseh schedule for transplanting rice on their land outside the initial subak areas. There are also farmers who own irrigated fields outside the initial subak areas only. The majority of these farmers are not members of the subak, do not pay subak tax, and do not respect the date of the transplanting ritual. The situation is most complex for land bought by Balinese from Javanese farmers in neighbouring Margomulyo (see chapter 7). Some farmers pay for this land, while others refuse to do so. Here follow some cases of farmers who take widely diverging positions in this issue. The first example concerns a farmer who actually recognizes full subak authority over all irrigated land, but openly protested the free-riding behaviour of others by temporarily not paying the tax some years ago:

Wayan Gatra once openly refused to pay the subak tax on his land located outside the initial subak areas. He had paid for all irrigated land before but, having become irritated by the general unwillingness of his fellow villagers to pay tax for land outside the subak areas, he decided no longer to pay his subak tax.: ‘Subak ceremonies are held for everybody, for all of us Balinese who work irrigated fields. I was of the opinion that either everybody should take his responsibility and pay the full tax, or that the tax should be collected on the basis of irrigated area in the transmigration areas only. But nothing in between, like me paying my tax and the others backing away from their responsibilities. That is why I refused to pay. In the end, I remained a subak member and pay my tax again, though I have sold my land in the subak areas a long time ago and bought irrigated land in Patengko. I am still of the opinion that subak ceremonies are organized for all Balinese rice farmers, including those outside the subak areas. So we all have to be members of a subak. Indeed, there are still many who skirt their responsibilities, but that is their own decision. I pay my subak tax and I plant in accordance with the subak schedule. Even though I am the only Balinese among fifteen Toraja farmers, I wait for the transplanting ritual in accordance with subak regulations. It is no problem. The Toraja farmers often even ask me about a suitable date for planting. They come to my house and ask “when will you sow, when will you plant?” The best solution would be to decide that all irrigated land owned by Balinese from the customary village of Kertoraharjo is liable to payment of subak tax.’

The farmer in the following example goes to the limits of contesting subak authority by refusing to pay tax for land bought from another Balinese and located in one of the initial subak areas:

Many years ago Pan Budarsana, an old man, bought a sawah from a Balinese transmigrant who had decided to return to his island of origin. The land is located in the administrative village of Margomulyo. Since he owns the land, Budarsana refuses to pay tax for it. He also refuses to observe subak decisions on transplanting. For his other irrigated fields, acquired by transmigration, he pays the amount due. Budarsana himself avoids the subject and does not want to comment upon it. According to other farmers, the situation is quite clear in his case: Budarsana bought his land from a transmigrant who had received the land by government allocation. Therefore, it is evident that the land he had bought is subak land. There is quite general agreement among farmers that Budarsana should pay. Budarsana, on the other hand, maintains that he acquired the land not by state allocation but by purchase from a transmigrant. According to him, even though the land is located in one of the subak areas, it is not subject to its regulations. The case remains a major topic of debate concerning subak affairs, as it has been for many years. It is considered to be one of the most difficult cases, and most threatening to subak unity. Even if Budarsana is fined by the subak, he simply

expropriated for the purpose of construction of farm roads, irrigation canals, division works, drains).

⁴⁰ Though the subak status of such land bought by Balinese is widely acknowledged, there is no general agreement. For some farmers at least it does not automatically follow that taxation should also cover land acquired through purchase.

does not pay his fine. Budarsana continues to turn up for subak meetings, where he is tolerated. The subak has no further sanctions to enforce its regulations.

The following farmer owns land outside the core subak areas only. Contrary to what he has to say about the many advantages of subak membership, judging from his behaviour he seems to be glad that he is not a subak member. At least he gets away with it perfectly well. Note how this farmer uses his status as a spontaneous migrant as an argument for not joining subak:

Made Suarna owns two sawahs, both of them located outside the original subak areas on the land of the villages of Purwosari and Mulyasri respectively. He is not a member of any of the Kertoraharjo subaks, does not pay the sarin tahun tax and only partly follows the subak transplanting schedule. On the sawah located in Purwosari he does not follow the subak schedule; under the influence of his neighbours, as he says. The Javanese-owned sawahs in this village are usually planted before the Balinese transplanting ritual. On his other irrigated land, he *does* follow the subak schedule, because there are other Balinese landowners nearby who do so as well. Suarna: 'In Bali it is a great advantage to be a member of the subak; it regulates everything: water, offerings, holy water. Here, if your sawah is located outside the subak areas, you get information from hearsay only. I should actually be a member, but I am not because the farmers around me are all Muslims. Let us not unnecessarily show off our religion. I do my own small offerings and that is it.' But what keeps him from becoming a subak member, and what is the difference between his situation and that of others like Wayan Gatra in the above case? Suarna: 'Wayan Gatra is a transmigrant. He sold his transmigration land and bought new land in Patengko. Though the sawah he currently owns is located outside the initial subak areas, he has been a subak member from the beginning, and he should remain so. I came with my family as a spontaneous transmigrant and did not get transmigration land from the government. Therefore, I am not a member of the subak. Subak is for the sawah owners in the subak areas or for those who once became members but transferred their land to another location. I happen not to own any sawah there, and I never did. Once the subak leaders tried to force people like me to become subak members, but their proposal was voted down. If we join subak, the consequence is that we also have to execute the mapag toya, bring offerings and respect the subak transplanting date. Non-Balinese who own sawahs there will probably not accept that.'

Sometimes, conflicts occur about the temporary use of the land of a subak member by another farmer, especially if this is a non-Balinese farmer. Here follows the account of Ngurah:

'Sarin tahun means something like "the proceeds of a year's labour". Remembering what sarin tahun means, payment for land outside the subak area would not be a problem to me. Whenever there are proceeds from the sawah, we have to pay sarin tahun, to me it is as simple as that. But then we have to be consistent with regard to its meaning. The following happened to me some time ago. I own three irrigated fields in Margomulyo, with a total area of 2.25 hectare. Some time ago I pawned one of these fields to a Javanese farmer, so I had left 1.5 hectare for cultivation myself. As I did not harvest from the pawned field, I did not pay tax for it. As a consequence, I ended up having a conflict with the subak last year. The klian subak demanded payment for a sawah that I do not work myself. He demanded payment for 2.25 hectare while I only owed him 1.50 hectare. I told him that he should realize the meaning of sarin tahun. If another farmer with another religion uses the sawah, what can we do about it? Then he complained to me that it is so difficult for the subak administration if the tax varies each season. He said: "the subak contributions are never constant, always changing, each and every season. That is what makes us subak administrators dizzy". I said "yes, of course. That is exactly what administration is about. If things would never change, there would not be anything to administer." If the user of the land is a Balinese, sarin tahun will be paid in accordance with an agreement between the owner and the temporary user of the land. But if the one who works the land is a Javanese, that is not possible: I do not want to pay because I have no proceeds from my land, and he does not want to pay either because he is not a Balinese and does not recognize the subak.'

There are many sides to this problem of subak boundaries. On the one hand, as some farmers and subak leaders stress, nothing less than the unity of the Balinese Hindu community is at stake. According to them, subak is an expression of the basic unity of the Hindu community. Religion should be the one and only criterion, and not a coincidental factor like location of land.⁴¹ That would severely jeopardize subak unity and authority. On the other hand there are more material considerations related to the problem of economic differentiation in particular. Should differences in ownership of irrigated land be expressed in a proportional differentiation of member duties? Should the subak tax, additional contributions in kind, or labour contributions (e.g. for maintenance of the temple and its access road) *all* be collected and demanded on the basis of irrigated area owned? Should farmers who have bought land in addition to their transmigration land, contribute in proportion to their total landownership or should they be assessed on the basis of the area of transmigration land still owned? This issue of how to cope organizationally with emerging forms of economic differentiation and stratification is not exclusively a problem of the subaks. It also pervades the WUAs and the small farmers' groups within them (see chapter 10).⁴²

A second problem concerns the specific position of land owned by Balinese on locations outside the initial subak areas. For some farmers the argument comes in handy in legitimizing their position in the issue of subak membership, tax payment and transplanting behaviour. However, it cannot be denied that there is a dilemma here: between joining and following subak regulations, or adapting to the area in which the land is located and the people owning and cultivating land there. Should a minority of Balinese farmers among non-Balinese be forced to follow the subak or be left free to adapt to the agricultural practices of farmers around them? Many people stress that Balinese religion should not be too prominently present outside the 'Balinese' area. Farmers can and must do their personal offerings on their irrigated land, but should refrain from 'showing off' by expanding subak ritual to these areas. If, for instance, Balinese land in these areas is defined as belonging to the subak, the consequence is that ceremonies like mapag toya will have to be held every season at the water inlet of the TU concerned. This might generate tensions with the surrounding villages. Even now the Balinese are not allowed by their Toraja neighbours to hold the mapag toya ceremony on land that belongs to Patengko village, where the water inlet of TU PS3 (with a mixed Balinese and Toraja farmer population) happens to be located.

Most Balinese farmers outside the initial subak areas follow the planting rhythm of surrounding non-Balinese (e.g. Javanese) farmers, and do not seem to be bothered by ignoring the Balinese date for transplanting. Some farmers with whom I discussed the issue even expressed their satisfaction with being able to transplant early. Issues of water availability and flexibility of adaptation of agricultural planning to the availability of labour for ploughing and transplanting play a role here. Farmers in the areas West of Kertoraharjo tend to start land preparation about two weeks earlier than in Kertoraharjo, because of their position in the system. For farmers who do not adapt the timing of their activities to the majority of surrounding farmers, ploughing and transplanting may be problematic. First, it will be difficult to get access to a plough (owners tend to prefer working blocks of adjoining fields rather than ploughing scattered plots). Second, being late may mean that adjoining sawahs have already been planted, making access difficult or even impossible. Thus, the

⁴¹ One of the more visible expressions of that unity is, of course, the date for transplanting the rice (see above). If transplanting before the transplanting ritual is regarded as a transgression of religious-ritual rules, why should that not be the case for all irrigated fields?

⁴² It should be stressed here that differential interests in land in the contested areas do not directly reflect differences in total landownership. Irrigated land outside the initial subak areas can be owned by a rich farmer who has bought additional land, but also by the child of a transmigrant or by a spontaneous settler owning little land. Moreover, these differential interests in irrigated agriculture also reflect farmers' choices; for instance, to invest in cocoa gardens rather than in sawahs, or even to sell sawahs to buy gardens.

farmer presented in the first case above has less difficulty in adapting to local circumstances than the farmer in the third case. The former belongs to a group of Balinese working land belonging to a Toraja village. They are surrounded by Toraja farmers who tend to start the agricultural season very late: from several weeks up to two months after the Balinese. The farmer in the last case has a minority position among Javanese farmers who tend to plant earlier than the Balinese.⁴³

Opinions about the behaviour of farmers who refuse to become a subak member or to comply with all its regulations differ. Some recognize the need for Balinese farmers to adapt to their non-Balinese neighbours and stress that the subaks should have no say in farmer behaviour in those areas. Others conclude with a sigh that the farmers concerned have no discipline but cannot (yet) be fined because their land is located outside the area under (recognized) subak control. It is clear that subak authority with regard to tax payment and transplanting is uncontested only in the irrigated areas initially under control of one of the subaks of Kertoraharjo, but often ignored outside these areas. Often, Balinese farmers who do not own land in the original subak areas but have bought irrigated land outside them have a completely different kind of relationship to subak than farmers who do own land in these areas. This group consists mainly of spontaneous settlers who had no initial access to transmigration land, and of the offspring of transmigrants who are dependent on inheritance and land purchases. Their different position in relation to the subak makes such owners of irrigated fields vulnerable to accusations of 'free riding'. In the end, subak members finance the necessary rice ritual, and fulfill labour requirements and other duties. The same goes for farmers who have sold land in the initial subak areas and bought new land in areas outside subak control.⁴⁴

Subak in crisis

The lack of clarity about the status of land outside the initial subak areas has led to conflict in all subaks, and is widely acknowledged to be one of the main problems in these organizations. In subak Luga Sari (subak 100) the situation exploded to such an extent that it led to its virtual dissolution: massive absence from subak meetings, refusal to turn up for collective labour, and non-payment of the seasonal and additional contributions. A number of destabilizing factors came together in this subak: emerging differences in landownership, problems of accountability and style of leadership, generational differences and differences in area of origin seem to have had their impact on its functioning. As to the latter, sometimes allusions were made to the Nusa Penida origin of farmers who stirred up trouble in the subak. On this island off the Southeast coast of Bali there is hardly any irrigated agriculture, and hence no elaborate ritual associated with the rice cultivation cycle and no subak. Or, as a subak administrator expressed it: 'Nusa people do not have a system of agriculture'. Members of the group of transmigrants with a Nusa Penida background are sometimes labelled as recalcitrant. However, not all farmers who contest subak authority over land outside its initial area originate from Nusa Penida.⁴⁵ Hence, there is no evidence that area of origin is a major factor in the subak conflicts. As to the generational factor: among those known as troublemakers there are quite some younger people, born in Kertoraharjo or transmigrated when they were very young, and hence not familiar with Bali. There are only a few original transmigrants who totally refuse to recognize subak authority, though there are many who do so for part of their land (see above).

⁴³ Among Javanese farmers South of Kertoraharjo the problem does not occur. Transplanting by Javanese in this area runs parallel to, or even lags behind, the Balinese schedule.

⁴⁴ Sometimes the accusation was uttered that farmers, who sold their transmigration land, did this with the hidden objective of withdrawing from subak authority. But it seems that other considerations are more important here: quality of the land, access to water, or the distance between sawah and home yard.

⁴⁵ There is a long Balinese tradition of labelling people from Nusa Penida as thieves, crooks and poisoners.

Some years ago, shortly before the transfer of subak leadership to a new klian, something happened that eroded faith of the members in the subak leader. The financial administration got lost in an indoor fire in the house of the retiring klian. This made accountability impossible. According to many members, all financial resources of the subak had not been accounted for during the transfer. Inevitably, stories started circulating about the loss of the financial administration, the leadership transfer, and the lack of financial transparency. This made the task of the new leader very difficult indeed. The leadership style of the new klian further complicated matters rather than restoring faith in the organization. Many members protested decisions taken - one-sidedly, according to them - about the increase of the subak tax from eight to ten kilograms of gabah, and the collection of additional contributions in kind. They did not like the leadership style of the new klian. It was too authoritarian, and lacking deliberation and room for joint decision-making.

In the course of the nineties, one subak was experiencing a major crisis. In other subaks the situation was not that critical. A special committee consisting of seventeen people had been appointed to advise the subak during the slow process of recovery. The committee also appointed a new board. To complete the break with the subak's disastrous past, its name was changed from Luga Sari into Merta Sari. It also has new (written) regulations, the most complete ones of all subaks. However, a new and unambiguous definition of subak boundaries was lacking. According to insiders, the issue was still far too sensitive; any attempt to force a decision upon the subak members would only aggravate the situation.⁴⁶

Can new subak boundaries be defined at all? Balinese hold many different and contrasting views on how subak membership ought to be defined in the future and how far its authority should stretch. Minimal definitions of the subaks restrict their authority to the land initially allocated to the Balinese transmigrants. Those in favour of maximizing subak control would prefer its expansion across all irrigated land owned by Balinese, whatever its location. There are various options in between these extremes. One such definition of subak land could include the land initially allocated to the Javanese transmigrants and later sold to Balinese farmers.⁴⁷ The latter definition would take the customary village boundaries as its point of departure. Or, to stress the hybrid character such definitions can take on, some village elders suggested that the ultimate criterion in determining the status of purchased irrigated land should be whether the land concerned is located in a TU which contains land that belongs to the initial subak areas (as determined by land allocation of the transmigration programme). Even if a TU contains only a small area of original subak land, all Balinese farmers owning land in that TU should become subak members. This would mean a further extension of subak authority over land in TU PS3, partly located in the area of the Toraja administrative village of Patengko. Members of the subak and pekaseh leadership stressed that they would try to steer a middle course which stands a chance of being accepted rather than trying to over-expand formal subak control at the risk of a total breakdown.⁴⁸

⁴⁶ At least some attempts to establish a clearer definition had been made. The board of subak Ukir Sari, for instance, tried to solve the problem by deciding on the issue during a subak meeting. However, the way the decision has been taken up in the subak regulations still allows for contradictory interpretations: 'The Hindu members of subak Ukir Sari who own sawah or ladang located in the village areas of Kertoraharjo or Margomulyo, are taxed for sarin tahun, even though the land was acquired through buying'.

⁴⁷ While there seems to be consensus that land initially belonging to a subak area cannot be withdrawn from its control, here another problem presents itself: should this more inclusive definition be restricted to those Balinese farmers who, as transmigrants, have an initial basis in a subak, or be made applicable to all Balinese who own land within this area (including those who have only bought land, like spontaneous settlers)?

⁴⁸ Therefore, the most likely outcome would be to use the boundaries of the customary village of Kertoraharjo to demarcate subak / pekaseh control. In that case subak obligations will be made to apply to all Balinese, whatever the status of their land (transmigration and initial subak land, land bought from Balinese,

The problem of delineation of subak boundaries and recognition of subak authority in the areas outside the primary land allocation area has given rise to increasingly severe tensions in the subaks and pekaseh of Kertoraharjo. In a 1999 customary village council meeting, the pekaseh and subak leaders had brought forward their complaints about the behaviour of many subak members and threatened to step down. As no agreement could be reached on the issue during the meeting, one of the village elders finally made a radical proposal: to abolish the pekaseh and bring the subaks under the control of the customary village administration (*bendesa adat*):

‘The subak has only retained its ritual function. It does no longer have a relationship to irrigation. The government determines the planting schedule, only slightly adapted to the Balinese calendar by the subak. It is also the government that determines the schedule for opening and closure of the irrigation system. WUA regulations also derive from the government. Because the TUs and WUAs are not completely Balinese, and the other groups do not recognize Balinese subak, the regulations of subak cannot be applied in the WUAs. In Bali, all farmers join subak on the basis of the source of their irrigation water. There is a close connection between all kinds of tasks like collective labour for repairing and cleaning canals, and the ritual activities accompanying each stage of the rice season. It is the subak that regulates everything: water, planting, seeds choice, collective labour and offerings. As a consequence, the work to be done is always executed in time. All members are present and do their share. Here, decision-making and tasks related to irrigation and planting have moved to the government. What remains for the subaks now is only ritual. The customary village can also execute those functions, in my opinion. If my proposal is accepted, that would mean that subak and pekaseh actually no longer exist. But an important part of subak, irrigation, has been taken away from it a long time ago anyway. If the new system is accepted, the customary village leader will collect tax on a per-hectare basis, for all irrigated land owned by Balinese farmers from Kertoraharjo, irrespective of its location and origin. If we were to continue using the old subak system, the problem of location of land could never be solved. Land outside the original subak areas could never be taxed, and payment of tax would be dependent on the willingness of its owner to pay. In this respect, there is another very important difference with Bali: if somebody refuses to pay tax or perform collective labour in Bali, he will be fined by the subak. If he does not pay the fine, his sawah is given a field mark and he will no longer receive water. Here, water can not be used as an instrument for subak sanctioning. Responsibility for and authority over water allocation is in the hands of the WUAs. Many people refuse to pay part of the tax or do not even want to become a subak member, but the subak has no effective sanctioning instruments left to force them to pay their tax and observe all subak rules. In the banjar and customary village, people fear the sanctions available. In the subak, there is no thing like that. Like in the WUA, which is not feared as an organization because it has no effective sanctions against farmers who do not abide by the rules. In the subaks, sanctions can no longer be used the way they are used in Bali, because the subak has no control over water here. The WUA has the right to close off people from water, but the subak does not.’

Clifford Geertz (1972, 1980) has made the distinction between the ‘wet village’ and the ‘dry village’, referring to the subak and the customary village respectively and stressing the relative autonomy of the former from the latter (see chapter 2). The Kertoraharjo subaks - ‘dried up’ as a consequence of their loss of irrigation management functions in the past - were now on the brink of becoming fully subordinate to the customary village. Lacking the kind of sanctioning power associated with the banjars and the customary village, the subaks in Kertoraharjo as organizations will probably only be able to survive under a strong ‘dry village’ protection.

Javanese or other owners) who own land in this area. But even this solution would not go uncontested.

Box 12: the subak in Alam Buana

In contrast to Kertoraharjo, in the Balinese village of Alam Buana (see chapter 7) only part of the village land was provided with more or less functioning irrigation infrastructure, TUs and WUAs. In this village, the subak has retained its broad range of functions that comprises construction, water management, ritual and agricultural decision-making. Irrigated agriculture in Alam Buana is seriously constrained by the position of this village in the irrigation and drainage system. The village has one subak, which is optimistically called *Sri Nadi* (something like ‘harvest will succeed’). The subak head is called pekaseh here. In the beginning of the new rice season, every day when the *kulkul* (village gong) is struck, all members gather for collective labour. A small shrine for ritual and offerings associated with rice cultivation stands at the southern foot of Karambua hill. Contrary to the people in Kertoraharjo, the Alam Buana population could not yet afford a complete ulun suwi temple. Determination of a date for transplanting takes place in the same way as in Kertoraharjo: after the tudang sipulung meeting at the subdistrict level, another meeting is held in the village, in which a date is proposed to the members. Contrary to Kertoraharjo, this meeting has a public character. However, due to their problematic position in the irrigation system, farmers owning and working land North of the village (where flooding regularly destroys the rice crop) do not often follow the government planting schedule. Whenever they see a chance for transplanting (or replanting after a flooding), they do so. Almost every wet season, harvest is either a complete failure or requires replanting once or even twice. Dry season harvests stand a greater chance of success. In view of these problems, owners of land to the North of the village are exempted from following the planting regulations of the pekaseh. They are allowed to plant or replant whenever they want to do so. In the South, farmers have to follow the transplanting schedule of the pekaseh. Those who plant the normal varieties (*padi sedang*), are given two weeks for transplanting, those who plant the very fast-growing varieties (*padi pemburu*) another two weeks. As a consequence of the shortage of cultivable land, Alam Buana has no customary village land. The transplanting ritual is held on the land of the village priest. It is the first ritual in the cycle. For most sawahs in the part of the village that is not threatened by floods, access to water is very difficult. These are rain-fed fields rather than irrigated fields; hence, the mapag toya ritual has no meaning here. The subak of Alam Buana is subdivided into three groups (*kelompok, tempekan*) headed by a *klian tempekan*, each managing part of the irrigated fields. Within the severe limitations posed by the physical conditions in this section of the Kalaena irrigation area, rules concerning the width of the water inlet relative to position along the canal, the water source, the number of users and the irrigated area are applied for water distribution in times of water scarcity. All members have collective labour obligations. Whoever owns (and actually works) more than the ‘standard’ size for labour obligations (*areal patokan*) of half a hectare of irrigated fields, has to pay a certain amount of cash per 0.25 hectare of additional land. Routine subak meetings are held once a month. Such subak meetings in Alam Buana make a far more formal impression than those in Kertoraharjo: no card-playing and other recreation, a more formal opening of the meeting, and the presence of the administrative village head. There is a stricter control on active member participation in rituals (absence is fined), and a greater subak influence on non-irrigated agriculture: farmers cultivating rain-fed crops have to join in and contribute to the subak rituals. In these meetings, all matters concerning agricultural planning, rituals and irrigation can be discussed. During a meeting I attended, farmers discussed conflicts with a neighbouring village about the construction of a weir in a drain, on the water of which the Balinese are dependent. They also discussed issues like farmer contributions to construction, subak development and ritual funds, collection of the subak tax (like in Kertoraharjo: ten kilos of unhulled rice per hectare per season), member loans and return of loans and interest, preparations for a rice ritual to be held, and discussions initiated by the administrative village head about the land titling programme by BPN and the financial consequences of titling for the farmers.

Source: fieldwork

6. The hybrid world of subak

In this chapter I have described and analyzed the emergence and development of the pekaseh and subaks in Kertoraharjo in relation to wider processes of state-led irrigation development. The specific context of settlement and land allocation in the planned command area of the Kalaena irrigation system has been an important formative factor. The existence of subaks in Kertoraharjo predated the establishment of the Public Works infrastructure (the TUs) and organizational arrangements (the WUAs). Subak formation was closely related to the process of settlement: land allocation to the four Balinese settler groups defined the subak areas and subak membership. Processes of articulation evolving between pekaseh and subaks established by the transmigrants, and WUAs for TU management that came with the irrigation system, also determined subak development. Before construction of the irrigation infrastructure, the subaks as organizations still had the potential of performing a wide variety of functions: agronomic, religious-ritual, and (irrigation) managerial. Finalization of the irrigation system was a breaking point with that Balinese past: when the system was put into use, the subaks lost part of their broad irrigation management functions to the WUAs of the new TUs. Thus, a formal organizational separation was established between the subaks for the religious-ritual aspects of irrigated agriculture, and the WUAs for irrigation management tasks, narrowly defined as operation and maintenance of the TUs. After a short period in which the pekaseh functioned as a coordinator of the WUAs with Balinese farmers and applied subak regulations to irrigation management, this separation of WUAs and subaks as organizations became definitive.

The demise of this construction is widely believed to have initiated a process of degradation of the TUs and loss of authority of the WUAs as organizations for tertiary irrigation management. With the enforced separation of irrigation managerial and religious-ritual functions, the almost natural coherence between the various dimensions of the rice cropping cycle had been lost. While under subak authority, for instance, canal repairs and cleaning would precede the rituals associated with the beginning of a new planting season, under conditions of separation of ritual and management functions this close interrelationship had disappeared. Without control over water, the subaks had also lost a crucial element of their sanctioning system. As 'water' has become a WUA affair, the subaks were left without effective sanctioning instruments for conflicts about rights and responsibilities of their members.

After this formal separation, the function of the subaks and pekaseh as organizations was restricted mainly to the religious and ritual dimensions of the rice cropping cycle. Notwithstanding curtailment of subak by government regulation, pekaseh and subaks continued to exist as a customary legal body exerting authority over hundreds of hectares of irrigated land and performing various functions related to irrigated agriculture. Three crucial functions of pekaseh and subaks are collection of the sarin tahun seasonal tax, planning and executing of rice rituals, and determination of crucial dates for agricultural activities. The transplanting ritual forms the main point of interaction between the religious-ritual and agronomic sphere of decision-making of pekaseh and subaks, and the government policy sphere. Determination of the starting day of this stage of the cultivation cycle most deeply influences the agricultural practices of Balinese farmers. As rice farmers have to take into account in their planning of the agricultural season various other crucial factors, like the availability of labour for ploughing and transplanting, tensions may occur between the planning requirements of farmers and decision-making about transplanting by the pekaseh.

The expansion of Balinese landownership and the existence of conflicting views about the status of purchased land relative to the subaks have made these organizations susceptible to multiple interpretations and contestation of the scope of their legitimate authority. Main issues of

contestation are payment of the subak tax and adherence to the date on which transplanting is allowed to start. The subaks are bent on increasing their income from subak tax and expanding their authority by adapting subak regulations to the changed conditions of Balinese landownership. However, the subak members who own irrigated fields outside the original subak areas rather massively stick to the initial definition of subak land as land allocated by the state in the framework of the transmigration programme.

The conflict is also typical of another dimension of socio-economic change: growing economic differentiation in an initially egalitarian society. Obligations that used to be shouldered more or less equally by all, are now increasingly felt to be unequally distributed. In the end, the subak boundaries determine how and by whom the financial burden of subak ritual will be borne. The subaks have become one of the social arenas in which conflicts about these differences surface. Competing normative definitions of 'subak' are the main weapon used in this struggle. In addition to tax payment, the extent to which Balinese landowners outside the initial subak areas should follow the transplanting date determined by the pekaseh is an important issue. Balinese who own irrigated fields outside these areas massively ignore this date. This is not only easier for their own agricultural planning, but also a form of adaptation of Balinese farmers to the agricultural practices and diverse ethno-religious backgrounds of farmers outside the Balinese village territory in an ethnically heterogeneous society.

The subaks in Kertoraharjo, then, provide a good example of an 'indigenous' or 'traditional' institution re-invented and redefined in a new locality. Definition of subak in terms of initial state allocation of land, redefinition of its authority under the influence of irrigation development by the state and interaction with state-initiated regulatory arrangements, and the difficult process of adaptation of subak to changing socio-economic conditions typically involve the construction of subak legitimacy by borrowing from a variety of sources, some related and others unrelated to subak. The widely diverging and conflicting definitions of legitimate subak authority have become a major threat to the functioning of the subaks and pekaseh. Conflicts have even disrupted subak functioning to such an extent, that their very existence in Kertoraharjo is at stake. Will the subaks remain independent organizations or be brought under control of the customary village, which will then collect the subak tax, organize subak ritual and enforce obedience to subak rule?

The hybrid world of the tertiary unit

1. Observations in a Balinese tertiary unit

In the company of the *ulu-ulu* (water master) of a TU in which Kertoraharjo farmers have their irrigated land, I stray through the sawahs of this unit. Just a few days after the Balinese transplanting ritual, many farmers are busy extracting and bundling their seedlings, transplanting, or still doing the last ploughing or levelling. The water master has offered to show me his working area. It is one of the last chances to join him for some months to come, as he plans to leave for Central Sulawesi to plant with cocoa trees the land he has bought there. As there is nobody to replace him, the TU will be without water master for a long time. On our way along the tertiary canal of his unit, he explains to me what the main problems are and shows me the hot spots. In the meantime, he carefully observes the condition of the canals, the water availability and the ways farmers take water. The tertiary canal along the farm road is short of water. Closer inspection shows that a clod of plant remains is stuck in a culvert under the farm road. While making an opening in the farm road and sticking his arm through to remove the obstruction, the water master complains about the lack of responsibility of farmers: ‘you know what the problem is? They have no sense of responsibility for the canals. Like that clogged canal: everybody sees it but nobody acts upon it. They just wait for me to solve their problems’.

Standing at the tertiary gate, the water master explains that water shortage is not a major problem in his area. The TU receives water from various sources. Where shortages occur, drain water is re-used for irrigation by leading it back into the tertiary canal. Problems of access to irrigation water sometimes arise for elevated fields, and in the tail end part of the TU. But this is a distributional problem caused by a lack of water control and the selfish behaviour of farmers in the head end of the unit rather than by an intrinsic water scarcity. He explains that, as many farmers are transplanting, water allocation can now be reduced. He takes a rope and a stick from a plastic bag to change the setting of the tertiary gate. The gauge and the iron handle for operating the gate have since long disappeared. The water master:

‘Some years ago the lock was sawn-off, and the handle stolen. I am afraid to report it to the Irrigation Service. They might think I am the one to be blamed. But I can manage with this stick, and they will never find out, because they never show up here. If farmers complain to me that there is too little or too much water, I just change the gate setting myself. Since many years the farmers, and not the officials of the Irrigation Service, operate the gates in this area. I have not seen an official for a long time. Therefore, it is better if we do it ourselves. How long do you think it would take if we do it the formal way? Who is going to report to the Irrigation Service, the office of which is more than fifteen kilometers away from here? When will they come to change the settings? Will they come anyway?’

Then he concentrates on his work again. He applies the stick to the gate, fixes it with the rope, and changes the gate setting by turning the stick. At least formally, this is not a WUA task, to be sure.

However, in the relationships between main system and tertiary systems that have developed in large parts of the Kalaena system it has become a task of the latter. We continue in the direction of the secondary gate, the lock and handle of which have disappeared as well. The water master adjusts it by using the same method. His estimations are based on experience. He does not know anything about the measuring and regulating devices and gauges, nor about the quantities of water measured by them. Rather, acting on factors like rainfall, farmer demands and complaints, he gives more or less water. Sudden heavy rain and the resulting flooding are a threat. Between January and April, the wettest period of the year, there is a continuous threat of flooding. Especially for farmers in the tail end of the unit, which borders on an insufficiently maintained and badly functioning drain. If flooding occurs in the first days after transplanting and the water does not recede within a few days, farmers may suffer considerable damage to their crops. In the period of transplanting he has to be on his guard.

During our walk through the TU it becomes clear that the infrastructure is not what it used to be. Water division boxes have fallen into disuse and decay, or were intentionally destroyed. The canal system has been changed and functions redefined. New connections have been created between irrigation canals and drains, and new additional water sources found and made accessible through PVC pipes. In some places, to improve water control farmers have invested in new stone and cement division structures to divert water from the tertiary canal, replacing the original water division boxes of the Public Works system. These new artifacts for proportional continuous irrigation are a typically Balinese rather than a Public Works solution to the problems of water control and distribution.

In the foregoing chapter I have given an account of the establishment and subsequent development of subaks in Kertoraharjo, and their transformation under the influence of the construction of the irrigation system and the establishment of WUAs as formal organizations for irrigation management. The analysis of the historical development of pekaseh and subaks as organizations has yielded two important insights: first, the ways in which these have developed are the outcome of complex articulations with the government domain of TUs and WUAs, established in the framework of irrigation development. Second, pekaseh and subaks have developed in a locally specific way, entailing changing, differing and often conflicting notions and interpretations of what subak is or should be. However, an analysis of subak as a formal organizational arrangement only does not suffice. Subak also exists in a broader sense, as a Balinese institution: as specifically Balinese values and normative notions, knowledge, technology, and organizational practices pertaining to irrigated agriculture. Therefore, I shift my focus now to the world of TUs and WUAs. Did curtailment of the subaks imply full Balinese adaptation to, and internalization of the normative, technical and organizational framework of TU and WUA? Or did the latter undergo transformations under the influence of institutional elements of subak, in the same way as the establishment of TUs and WUAs has radically transformed the subaks in Kertoraharjo? In what ways have they changed? Can we speak of a trend towards 'subak-ization' of WUAs with Balinese farmers, of hybridization? I try to answer these questions by tracing developments in two TUs with either an almost wholly Balinese farmer population or an ethnically mixed population.

This chapter consists of the following parts: in the next, second, section I give some general information on the Kalaena irrigation system and relevant main system organizational and operational aspects. The third section focuses on the Kertoraharjo TUs and their development. In the fourth section, I present two case studies of processes of change in Kertoraharjo TUs with a Balinese (majority) farmer population, to gain a deeper understanding of the role of specifically Balinese elements of local irrigation management in this Public Works setting. In the fifth section I draw some conclusions about the way local irrigation management among Balinese farmers has developed, keeping also in mind the analysis of subak presented in the foregoing chapter. In the final section I will present a conclusion to the part of this book on the role of land and water in Kertoraharjo, paying specific attention to the chapters on local irrigation management.

2. Balinese TUs and the Kalaena system

The Kalaena system is located in four subdistricts: Wotu, Burau, Mangkutana, and Tomoni. For purposes of main system operation, the command area of the Kalaena system is organizationally subdivided into four operational sections of the Irrigation Service. Each stands under the responsibility of a branch head (*kepala ranting* or *ranting*) and with its own branch staff: Kalaena Weir, Kalaena Kiri, Kalaena Kanan I and Kalaena Kanan II.¹ At a lower level, each operational section is responsible for a number of secondary canals, each under a functionary called *sub-ranting*. At a lower level again, canal maintenance personnel (PPS) and gatekeepers (PPA) are employed for the day-to-day operational and maintenance tasks on the main system, including the gates of the TUs.² However, in practice there is hardly any difference between the tasks performed by PPA and PPS (see below).

As the TUs of Kertoraharjo are part of the larger system of the right bank branch of the Kalaena irrigation system, the specific ways in which tertiary irrigation management has developed in these TUs cannot be exclusively explained in terms of factors and processes inside the TUs or 'the village'. However, the following characteristics go a long way in explaining the way the Kertoraharjo TUs have developed since their establishment in the eighties. First, water in the Kalaena area as a whole as well as in the Kalaena irrigation system is relatively abundant. The area has a high annual rainfall (around 3,000 mm. per year) and number of rainy days per month, spread across the dry and rainy seasons.³ Water discharge of River Kalaena is also high, and volumes let into the system well below river discharge throughout the year.⁴

In addition, the Kalaena system has not yet been developed up to its maximal irrigable area. As a consequence, water supply to both branches of the system is, on the whole, not problematic.⁵ Rotational arrangements at the level of the main system are not necessary. Future finalization of the infrastructure for irrigation and expansion of irrigated agriculture in the lower sections of the Kalaena system (especially of Kalaena Kanan II and Kalaena Kiri), might well change these conditions and require greater water allocation discipline at all levels. Another important characteristic, not system-specific but shared with many Indonesian irrigation systems, is the severe shortage of field staff for operation and maintenance, and of other resources needed for system operation.⁶ This latter characteristic, in combination with high water availability in the system, have engendered managerial routines based on a reduction of operational tasks and minimal staff involvement. In addition, it has boosted routine approaches to WUA development that focus on a target-oriented establishment of WUAs that fulfill formal criteria rather than on creating viable organizations (see chapter 2).

¹ Kalaena Weir covers an irrigated area of 2,700 hectares (planned; 2,165 realized). Kalaena Kiri covers a planned area of 4,043 hectares (3,557 hectares realized). Kalaena Kanan I covers a planned irrigated area of 6,615 hectares (realized 5,774 hectares). Kalaena Kanan II covers a planned irrigated area of 4,226 hectares (realized 2,260 hectares). This gives a total of 17,584 hectares irrigated planned, and 13,756 realized (source: Irrigation Service North Luwu, 1996).

² PPS: Petugas Pemeliharaan Saluran (canal maintenance worker); PPA: Petugas Pintu Air (gatekeeper).

³ In 1995, a normal year, the area had a rainfall of 2,960 mm, and 167 rainy days spread across the year (with slight differences between the rainy and dry seasons). Source: Irrigation Service North Luwu, 1996.

⁴ Thus, in the wet months during which irrigation water was used, the discharge varied between 2,250 and 2,450 liters per second, of which between 1,200 and 1,600 liters p.s. were used for irrigation. In the dry months, discharge varied between 1,700 and 2,000, while a maximum of 1,300 liters per second was used (source: Irrigation Service North Luwu; no other data available).

⁵ This does not mean, of course, that shortages do not occur locally, e.g. in the tail end parts of secondary canals or TUs. Such shortages are mainly caused by the excessive use of water in the upper part of the system.

⁶ Formal staff need, existing staff and shortage in 1999 are: Weir: 27, 15, 12; Kalaena Kiri: 40, 11, 29; Kalaena Kanan I: 66, 34, 32; Kalaena Kanan II: 42, 16, 26; Total 175, 76, 79 (Source: Irrigation Service North Luwu).

A meeting at the branch office

I attend the monthly meeting of the Irrigation Service staff of the section (ranting) responsible for operation and maintenance of part of the right bank system (Kalaena Kanan I). The staff members gather in the small, dusty meeting room of the section office. Today, the meeting is about image management rather than system management. That week, a team from the provincial capital will visit the area to monitor ongoing activities of an ADB-sponsored irrigation sector programme.⁷ To make sure that unexpected questions posed during meetings between the staff and the visiting team will yield the desired answers, a rehearsal is held with the staff members. The branch head reads out a task description for the gatekeepers (PPA), and tells them which answers they should give:

‘If the monitoring team asks you what your field tasks are, you should answer: “for operation, we have to set the tertiary gates to allocate water in accordance with the irrigated area, following the data received from the secondary branch canal head. We have to clean the tertiary canal around the gate and fifty meters behind it. We have to gather data on the tertiary units and fill them in on the right form, starting with the planned cropping area”.’ The branch head now interrupts his enumeration of field tasks to test his staff by asking a question: ‘what was the number of that form again?’ Silence follows. Nobody knows the answer. Thick clouds of clove cigarette smoke fill the room. The staff members study their agendas or focus on the ceiling. The branch head waits for a while. If the answer does not come, he provides it himself: ‘that is, of course, form 01-O’. Then he continues reciting the operational tasks that the staff should mention in case they meet with the monitoring team: ‘noting the flow in the canals, filling up the *pasten* board.’⁸ And then for maintenance: maintenance of the gates between the cropping seasons, cleaning and maintaining the gauges, cutting weeds and cleaning of canals and gates, greasing the movable parts of the gates, painting the other parts if necessary, keeping an eye on cattle and removing cattle from the canal embankments, ...’ Then the branch head criticizes the PPAs because they do not know how often they are expected to read the flows and fill it up on form number 06-O. When further questions arise about the precise tasks for ‘O’ (operation), the branch head readily admits that for all branches ‘O’ does not yet function. The general condition and maintenance needs of the main system put a strong pressure on the staff to prioritize maintenance to operation. Then follows a monologue on the task of secondary branch heads: giving guidance to the WUAs, supporting them in creating a “sense of ownership” (*rasa milik sendiri*). After that, the secondary branch leaders, who had been ordered earlier to check the condition of the secondary and tertiary division structures, report their findings in this meeting. This quick inventory yields a long list of gates without locks or gauging devices, or heavily damaged. On many gates the scales have never been placed, and the gates have not been calibrated anyway. Such shortcomings do not seem to disturb the general objective of creating the image of an efficiently managed system, operated and maintained by a motivated and responsible staff.

A sub-ranting

I visit a secondary branch canal head (sub-ranting) in his house. He started working for Public Works as a daily labourer in the early sixties, and became an official by 1968. He has to survey his area by bicycle and report to the branch office. The sub-ranting complains that the number of PPAs in his working area is far below what is needed. In the current situation, with a shortage of labour power to operate the main system as it should, PPAs are deployed wherever they are needed for maintenance tasks on the main system, such as overseeing canal cleaning activities or performing such tasks themselves. As a consequence, these functionaries are hardly involved in system operation tasks, but perform all kinds of odd jobs that would remain undone if they stuck to their task description. Control over the gates of most TUs has been devolved to the WUAs. Only two units which have proved ‘too unreliable’, according to the sub-ranting, are formally dependent on him for water allocation. In practice, farmers have quite a repertoire of techniques to appropriate water by manipulating the gates.

⁷ Asian Development Bank; the Provincial Irrigated Agriculture Development Programme.

⁸ A notice board placed next to the tertiary gate, on which the main data concerning water allocation to the tertiary unit are written down. If present at all, the boards are never used, usually in a state of decay with the paint peeling off and the wood curling or cracked.

The total required flow of the secondary canal is determined by adding up the standard data on the irrigated area in each TU. This total for the secondary canal is adapted twice monthly on the basis of a form filled out by the sub-ranting.

Maintenance of the infrastructure is a key problem, according to the sub-ranting. While maintenance of the main system would require the availability and use of heavy equipment, almost all maintenance work is done by making use of human labour, of which there is a continuous shortage. Maintenance is largely restricted to removing weeds and dirt from canals and their embankments in the periods between the cropping seasons. Requests for funds for maintenance and repairs are only partly granted, so implementation of such tasks has to be adapted accordingly. Important formal tasks of the sub-ranting are maintaining contacts with the WUAs and the village heads in his working area, and coordinating activities related to irrigation at the tertiary level. But, in practice, his contact with WUAs is restricted to the subdistrict meeting at the beginning of a new season. Sometimes he also attends collective labour activities. Contacts with his colleague officials are largely restricted to the monthly meeting at the branch office. There are no contacts with other agencies like PERTANIAN.

A gatekeeper (PPA)

One day in the field I meet a PPA in the area for which he is responsible, which is a rare occurrence indeed. Outside the office, he feels free to explain to me 'his' reality of main system operation and maintenance. His account largely confirms the remarks made by the sub-ranting. He has been PPA for ten years now, working for the right bank section on a low-paid daily wage labour basis, in spite of frequent applications for the status of official. To reach his working area, he has to bridge a distance of more than fifteen kilometers by bicycle. Questioned about his precise field tasks, the PPA starts complaining: 'We are called gatekeepers, but we do nothing but cleaning canals. As we are short of labour power, keys of the locks, if still in place, as well as the bars of most gates have been handed over to the WUAs a long time ago, so they are free to manipulate them as they like. Taking in too much water, they damage the embankments of the canals and the farm roads'.

According to the PPA, water allocation to the TUs is not, and has never been, based on the formal procedure of two-weekly reports of area planted, cropping conditions, and water demand collected by the Irrigation Service in cooperation with the WUA staff. Rather, it is based on ad-hoc manipulation of the tertiary gates by the farmers. Therefore, water appropriation rather than allocation is involved. Sometimes by functionaries of the WUAs, but often by farmers who have no formal function in the WUA. Sometimes the PPA changes gate settings at the request of farmers, or because he finds it necessary himself. This may be the case if TUs take in too much or too little water, without anybody intervening to improve the situation. Adjustment of gates is based on feeling, and not on reading of the gauges. The PPA does not know how that system works, and has never received indications for the gate settings in terms of measurable and readable quantities: 'We are just ordered to adjust the gate opening, to give more or less water until it seems to be the right setting, that's all.' The PPA never enters the areas of the TUs he formally serves. Like many others, he does not know what happens behind the tertiary gates: 'many functionaries live far from the area they control. In the routine meetings all functionaries give the impression that they often visit the villages, TUs and WUA leaders in their areas, but most of them have too little motivation to spend all day in the field.' Then, on his position as a PPA: 'we never do the work we actually should do. What is our future here, as low-paid daily labourers with slight chances of becoming officials?'

Back to the branch head

When not bothered by the threat of outside monitoring and control, the head of this branch of the system is a very open-minded person. He confirms the impression that the daily practice of water distribution is, in the first place, a matter of appropriation by farmers or their tertiary representatives

rather than a systematic process of determination of the quantity to be supplied, followed by allocation of that quantity to the TUs by the Irrigation Service. Two unrelated processes are going on: the sub-branch heads routinely provide data on water needs (based on irrigable area of the TUs and the stage of the cultivation cycle), note them on a form and report them ‘upwards’, where they are further used to determine canal flows. On the other hand, WUAs of most TUs have control over their gates, and take water from the secondary canals in an ad-hoc fashion (based on immediate demands from the farmer population). Neither quantities of water to be formally supplied and methods to determine them, nor measuring and regulating devices to implement them, play a role in processes of water allocation to TUs. The locks of most tertiary gates have disappeared, and many operating devices stolen; those that were not stolen are now taken home by representatives of the TUs or stored by farmers living near the gates.⁹ Tertiary gates belong to the domain of the farmers rather than the Irrigation Service.

WUA development is a task largely devolved to a triangle consisting of the village head, agricultural extensionist, and irrigation staff. Formally, the PPA is the point of contact and intermediary between the Irrigation Service and the farmers organized into WUAs. As the PPAs in the Kalaena system do not function as such, this field of direct interaction between representatives of the water users and the Irrigation Service does not exist; a void that has been gradually filled up by the farmers. According to the branch head, these problems of water allocation procedures and control of the tertiary gates have much to do with the serious lack of staffing mentioned above. The branch leader:

‘We actually have a serious staffing problem. Take the PPAs and their functions. Formally, the tertiary gates have to be under control of the Irrigation Service. Every PPA should have a working area of about 250 hectares, responsibility for the gates of two or three TUs. They should have regular contacts with the water masters of the WUAs they serve, who receive the water from the Irrigation Service. But the main problem here is that, with the shortage of staff we are facing, we are forced to make a choice between our operational tasks and our maintenance tasks. Under the current conditions, these tasks compete for manpower. If we were to use PPA staff for operational tasks, which is their actual function, the consequence would be that main system maintenance would suffer even more than it does now. So operational personnel usually perform main system maintenance tasks rather than operational tasks. As long as maintenance is not contracted out, as it should be, we have to make do with this provisional solution. Only in the beginning, during the first years after finalization of the system, we tried to make it function as it should.’

With the large majority of the lower staff working as daily labourers, with slight chances of promotion and low salaries, motivation is generally low and additional sources of income important. Especially the PPAs, working on a daily labour basis, lack the advantages that even low-grade officials enjoy in addition to their basic salary: health insurance, pension, and logistic support (e.g. means of transport).

3. Tertiary Units in Kertoraharjo

TUs with Kertoraharjo farmers

The irrigated land initially allocated to the farmers of Kertoraharjo is nowadays located in nine TUs with a Balinese (or mixed Balinese / Javanese / Toraja) farmer population (see map 8). In the official administration of the Irrigation Service, these WUAs are registered as WUAs ‘in the process of being developed’, which means that they are supposed to be on their way to fulfilling the

⁹ Which does not prevent the gates from being manipulated in an alternative way (see above).

formal criteria for their functioning set by the Irrigation Service.¹⁰ The vocabulary used suggests a gradual but definite progress in the direction of the universal model of the ideal WUA; a claim that may be doubted in the light of field conditions and processes of change taking place inside these WUAs. Hereafter follow some general characteristics of the TUs in which Kertoraharjo farmers have their land:

Table 9: WUAs with Kertoraharjo farmers

TU	Ha. irr.	Village land of	Members	Population	Inhabitants of	Formal TU name	Formal status	WUA staff
PS3	91	Ker / Pat	92	Bal / Tor	Ker / Pat	Utus Sari	SDB	Bal
KL1ki	100	Ker / Pat	107	Bal / Jav	Ker / Mar	Nadi Sari 1	SDB	Bal
KL1ka	131	Ker	147	Bal / Jav	Ker / Mar	Merta Sari	SDB	Bal
R2	137	Mar	134	Bal	Ker / Mar	Ukir Sari	BB	Bal
R3	108	Mar / Man	97	Bal / Jav / Tor	Ker / Mar / Man	Kembang Sari	SDB	Bal
R4	113	Mar	115	Bal / Jav / Tor	Ker / Mar	Suka Karya	SDB	Bal / Jav
R5ki	86	Ker	78	Bali / Java	Ker / Mar	Bunga Harapan	SDB	Bal
R5te	111	Ker	110	Bal / Jav	Ker / Mar	Lugra Sari	SDB	Bal
R5ka	108	Ker / Man	165	Bal / Jav / Tor	Ker / Mar / Man	Nadi Sari	SDB	Bal

Source: fieldwork (Ker = Kertoraharjo; Pat = Patengko; Mar = Margomulyo; Man = Manunggal. Bal = Balinese; Tor = Toraja; Jav = Javanese. BB = not yet developed; SDB = developing.

Transformations of TUs and WUAs

The factors mentioned above have made main system management by the Irrigation Service into something without much relevance for day-to-day irrigation management practices in the Kertoraharjo TUs. The WUAs have taken over control of the gates of their TUs, usually there is enough water, and Irrigation Service staff members seldom turn up in the field. Thus, in the course of the nineties there was minimal interaction between main system and tertiary system organization. Farmers are not used to contacts with Irrigation Service personnel. However, from time to time they are hit by waves of intervention initiated by either the construction section or the Irrigation Service of Public Works. Irrigation development is an ongoing process. Irrigation systems are never 'ready' but in a continuous process of change (e.g. through regular rehabilitation programmes). At least until the late nineties, such interventions were mainly financed by foreign donors. Thus, in the nineties the Asian Development Bank funded the Provincial Irrigated Agriculture Development Programme in Kalaena. It included land clearing and levelling, irrigated field development, land titling, and the (re-)establishment and training of WUAs. When such programmes entailed interventions in existing TUs (like the TUs and WUAs in Kertoraharjo), the WUAs were not a party in negotiations about priorities, design, planning and construction. The bureaucracy took the decisions, infrastructure was 'dropped', and the work of the contractor accepted in extremely untransparent procedures. In the framework of the programme mentioned above, the Kertoraharjo WUAs were also selected for re-establishment and strengthening. The following account is a typical illustration of the routines of such courses:

¹⁰ (SDB; sedang berkembang); in the classification of WUAs by the Irrigation Services a distinction was made between BB (belum berkembang; not yet developed), SDB (sedang berkembang; developing) and SB (sudah berkembang; developed). In the late nineties, only 108 out of a total of 205 planned WUAs existed in the Kalaena system. Forty-six WUAs were classified as 'not yet developed', sixty-one as 'in the process of developing', and only one as 'developed' (source: Irrigation Service, Kalaena).

Wayan, a Balinese farmer and chairman of his WUA, has just returned from a four days' course on tertiary water management for WUA staff, organized by Public Works with ADB funding. One of the objectives of the programme is the revitalization or, if necessary, re-establishment of WUAs in the Kalaena system. The construction section of Public Works organizes the course. The Irrigation Service only provides the lists with the names of the trainees. Since some years, Wayan has the intention to step back from his function as WUA chairman. He has been occupying this function for ten years, and is fed up with it. His TU is one of the most degraded ones in Kertoraharjo, and its WUA largely inactive. The members of his unit usually do not turn up for collective labour, do not pay their fines, and are absent from WUA meetings. Wayan: 'people prefer working in their cocoa gardens. They do not even pay the fine for not turning up. Collective labour has become *bisnis*', he says. Formally, a new board is elected or the sitting one re-elected every three years, but every time elections were planned, Wayan and his staff were forced to continue for lack of a new candidate, or because there were not sufficient members present at the meeting to elect a new head. Therefore, willy-nilly, he had to attend this course. Wayan tells about the topics dealt with during the course: 'We learned about the organizational structure of the WUA, about the government regulations pertaining to TUs, about rice cultivation, post-harvest practices, and plans to reach three harvests per year in the future. We also learned how to operate the tertiary system using the division boxes for water rotation at the level of the quaternary units.' 'But', I ask him, 'you don't use those boxes at all, or do you? Apart from that, most box gates have been broken out or sawn off, and boxes have decayed, been smashed to pieces or otherwise manipulated, haven't they? And water isn't rotated at all, is it?' 'Well', he said, 'that is what I tried to ask them about our TUs during the course. But they don't want to hear all that. What they told me is that we have to learn how to use them. "One day", they said, "the tertiary unit infrastructure including all the division boxes will be rehabilitated so you can rotate the water as you should do".'

Akan direhab (it will be rehabilitated) is a familiar phrase in the Indonesian irrigation world. It reveals much about the dynamics of irrigation development in Indonesia, determined by foreign donor funding. It is also symptomatic of the existence of two separate realities, each with its own dynamic. On the one hand the irrigation bureaucracy, converting donor funding into construction packages and training courses; on the other the farmers adapting and re-adapting the resulting infrastructure to their own priorities, wishes, and values by any means available, and developing their own local irrigation and organizing practices. Farmers are not the passive recipients of the benefits of development projects that planners and bureaucrats would like them to be. Likewise, the Balinese farmers in Kertoraharjo have been engaged in a dual role from the onset. On the one hand they had to adapt, at least to some extent, to the Public Works infrastructure and its accompanying organizational arrangements. On the other hand, they were agents of change by actively adapting the physical infrastructure and social organization to their own views, priorities, needs, and interests.

In the initial design and construction process, TUs were blueprinted drawing table products, the outcome of the application of standardized design criteria to an area in which irrigation was to be developed. In none of the TUs with Kertoraharjo farmers, the formally prescribed water tests had been held as part of the procedure of establishing WUAs and handing over the tertiary systems to these organizations. According to the farmers, some parts of the tertiary systems were functioning as they should, but most were not. The TUs delivered were not ready for use, but required - sometimes considerable and difficult - adaptations and changes by the farmers. Initial shortcomings were, for instance, the low quality of construction, especially the wrong positioning or elevation of quaternary division boxes leading to rapid decay, water losses, and a disturbed water distribution function. Apart from spontaneous decay of water division boxes, deliberate destruction by farmers has occurred in most TUs. Acceptance of 'engineering' solutions like flap-gated division boxes has in all units been very low.¹¹ Traces of tampering with the infrastructure can be seen everywhere: locks have been forced; gates fixed with wire, sawn off or completely broken out; thresholds under the gates broken

¹¹ Compare the observations by Horst (1996a) for Bali. See also chapter 2.

away; gate openings filled with earth and stones or with masonry; and whole boxes smashed to pieces. More than eighty percent of the water division boxes in the TUs with Kertoraharjo farmers can no longer perform the function for which they were designed and built, that is: rotational water division inside the TUs. Tertiary drains have sometimes disappeared as well, and the land on which these were located appropriated by farmers. Third, farmers have gained access to alternative or additional water sources (drain, marsh, secondary canal, or tertiary canal of neighbouring TU) through all kinds of adaptations of the system. In some cases these are necessary and useful solutions providing (groups of) farmers with a more secure access to water. However, in other cases the use of alternative sources may lead to over-irrigation, a general decrease in water control, damage to the infrastructure and a further reduction of organizational capacity. Fourth, lack of canal cleaning and maintenance, presence of cattle in the TUs, as well as methods used to appropriate water, are important causes of serious damage to and degradation of the infrastructure, especially the canal embankments. The current state of affairs in the TUs of Kertoraharjo is the outcome of these processes of adaptation and degradation. All tertiary systems have shifted away from the engineering ideal of rotational irrigation through quaternary division boxes to a kind of continuous flow systems through degraded infrastructure characterized by a low degree of water control.¹²

The initial formation of WUA boards took place by appointment, on the basis of information provided by village leaders. As I have shown in chapter 9, initially the tertiary organization of irrigation in Kertoraharjo seems to have developed relatively well, probably thanks to the involvement of the *pekaseh* in his function as coordinator of the WUAs. The *pekaseh* was a kind of representative of the WUAs in issues requiring contacts with the Irrigation Service, which was at that time actively involved in the process of establishment and guidance of WUAs. Contacts with the Irrigation Service were more frequent than they are nowadays. Later, the WUAs weakened and did not take up an active role in tertiary irrigation management. On the contrary, within the conditions set by the general main system characteristics discussed above, water resources were exploited with disregard for the long-term effects upon the infrastructure. The Irrigation Service, on its part, had shifted attention to other sections of the new irrigation system after the formal establishment of WUAs and organization of courses for the WUA staff. The more so, as the shortage of manpower for operation and maintenance of the expanding system became increasingly felt. From that period onwards, an increasingly wide gap has grown between the farmers or their WUA representatives, and the Irrigation Service. One of the few Irrigation Service activities that continued to require some degree of intervention at the TU level was the collection of the seasonal Irrigation Service Fee (ISF) from the water users.¹³ Some years ago the Irrigation Service in the Kalaena irrigation system decided to withdraw this task from the WUA staff and have it executed by the administrative hamlet heads (*kepala dusun*), in cooperation with the irrigation police. This move caused much resentment among WUA staff members. They lost their remuneration for collecting the fee. As a consequence of taking away this last incentive to the WUA staff, motivation further eroded after this change. The way in which fees were being collected since then were openly questioned by many farmers because of its obscure character.

¹² Farmers have never practiced the kind of rotational irrigation through division boxes envisaged for them. On the other hand, farmers have many techniques, of course, to practice staggered, phased or rotational water allocation at various levels in times of water scarcity or extremely high water demand (e.g. during land preparation).

¹³ IPEP (Iuran Pembiayaan Eksploitasi dan Pemeliharaan), amounting to Rp. 5,000 per hectare per cropping season in the mid-nineties. Later, a beginning was made with the replacement of IPEP by a new collection system, IPAIR (Iuran Pelayanan Air Irigasi). In Kalaena, the IPEP system had only been introduced in parts of the system until the late nineties.

Box 13: water control and organization in a degraded tertiary unit

TU R2, with an irrigated area of 137 hectares, has 134 Balinese members. It is one of the TUs with the most degraded infrastructure and weakest organization. The WUA board is largely inactive and fed up with the problems. Out of a total of eight farmers' groups, only two (with 21 and 12 members respectively) are active. One of these has a meeting in a small field hut. Most members are present and engaged in discussions about collective labour, fining policy, and drainage problems caused by farmers who close off drains. The chairman and the treasurer are calculating the interest to be paid on member loans from the group funds during the last season, administering payments, and preparing a financial account to be presented to the members. Upon establishment of the group, all members contributed Rp. 30,000 for group capital formation. Once capital has grown, plans will be worked out for the collective purchase of agricultural inputs. This group became active one year ago. One of its stimulators is a former secretary of the WUA. Since the WUA board fell apart he tries to unite farmers at a lower level of organization. One of the problems he has been able to solve is that of collective labour. While until a year ago only three out of twenty-one farmers joined such labour, now all members are actively engaged. The group has recently drawn up its own regulations. During the meeting, new regulations for collective labour are once more read out and explained to the members: as long as preparations for the next season are going on, every Friday afternoon the members meet for cleaning and repair of canals. Defaulting farmers are fined. Notwithstanding the activities in this group, the general picture in this TU is one of decay, over-irrigation, loss of water control, and a lack of viable arrangements for local irrigation management. Water intake at the tertiary gate is high; the gate itself has no gauging devices or locks. Large sections of the TU suffer from over-irrigation and drainage problems. Nobody seems to take responsibility for the gate, not even if heavy rains and flooding threaten the rice plants. Land cannot be dried and falls prey to all kinds of pests, the latest addition to which is the destructive gold snail (*keong mas*). All division boxes are broken down, leading to water losses and drainage problems. According to farmers, the infrastructure did not function from the beginning. Parts of the TU, including the planned location of the tertiary canal, had been heavily damaged by borrow pits dug for the embankment of the secondary canal. Hence, in those parts construction did never take place, or did not function. Farmers in the northern part of the TU solved their water problems by looking for alternative water sources. One group takes water through a pipe directly from the secondary canal, another has constructed a culvert below the secondary canal and farm road, ending in the marshy tail end part of another TU. Large quantities of additional water are taken in through this construction. One former WUA staff member: 'from the beginning, there have been difficulties in this TU with its badly functioning infrastructure. Initially, farmers were still active, but after a while they did not turn up for collective labour any more and did not bother about regulations. Then the Irrigation Service started collecting IPEP through the hamlet heads, as a result of which the WUA staff no longer received any compensation for its work. What we had received before was not much, but it was a stimulus for the work we did. Since that moment we have lost interest in our function. When I was still a water master, the gate was always adapted to the water needs of farmers. But when we did no longer receive our percentage of service fee collection, I thought "I only lose by doing this work, it gives me a headache. I'd better just concentrate on farming."' A farmer who owns land in this TU: 'There are two farmers' groups now that function reasonably well. The WUA as a whole does not function at all. This is caused by the fact that it is too big. Awareness of the farmers should grow from the bottom upwards instead of being enforced from above. Only if the small farmers' groups have become strong and functioning organizations, the WUA can follow. But the WUA staff should be no more than the coordinators of leaders of the farmers' groups. If the WUA takes over all tasks, the system does not function. It does not matter at all if only the farmers' groups have group funds, it is even much safer. In my experience, the WUA staff should not control money. Money is like poison; leaders are easily influenced by it and get easily hit by it. Even a small deficit on a total group capital of Rp. 1 million is dangerous. Small as it may be, it smells like that one million Rupiah.'

Source: fieldwork

Other factors have played a role in shaping the TUs and WUAs into what they are now. First, the TUs, often crosscutting ethnic and village boundaries, are organizationally rather complex. Second, the WUA staff tends to have a low motivation, partly caused by the limited authority it has in the eyes of the farmers. Third, many farmers feel powerless against the lack of attention on the part of Public Works for urgent repair and maintenance needs of crucial parts of the main system (e.g. the drains). Fourth, there is the impact of rapid socio-economic development. As a consequence, household labour power has to be divided over an increasing number of plots, both irrigated (and relatively near) and rain-fed (and far away). Rather than being full-time rice farmers who spend every day from sunrise to sunset on their irrigated fields, farmers are increasingly on the move between irrigated fields and cocoa gardens. Related to this are the processes of socio-economic differentiation. These result in conflicts between the farmers about the distribution of collective labour responsibilities in the WUAs. Finally, there is the impact of tenancy arrangements, especially pawning and sharecropping. This entails temporary use of the land by farmers who do not always have a long-term interest in the maintenance and improvement of infrastructure (see chapter 8).

4. Entering through the back door: subak inside the tertiary units

Superficially, all TUs give the same impression of degradation of the tertiary infrastructure and organizational incapacity, in which it seems useless to look for any differentiation or meaning at all. However, a closer look at some of the Balinese TUs and WUAs through field observations and discussions with Balinese farmers yields quite a different picture. Under the surface of the overall uniformity of tertiary infrastructure and organization, gradually the intricate micro-history of the development of subak, TUs and WUAs becomes visible in specific forms of application of knowledge, organization, legal regulation, and irrigation practices that have developed inside the TUs. Tertiary systems and WUAs have not only degraded, and farmers are not only competing for water and creatively looking for ways to neglect their duties. Even in a degraded TU like R2 (see box 13), farmers have also actively contributed to the improvement of tertiary infrastructure, to the establishment of more effective forms of organization, and to the creation of new forms of legal regulation inside their TUs. To illustrate these processes in the TUs with Kertoraharjo farmers, in this section I present two short case studies of the TUs of PS3 and KL1ki respectively. The insights that derive from these case studies will make it possible to answer the important question about the processes of interaction between WUA-derived dimensions of local irrigation management and those associated with the institution of subak.

Tertiary unit PS3

General characteristics:

TU PS3 covers a total area of about ninety hectares of irrigated land. The land area of this TU cuts across village and ethnic boundaries. The upstream (head) part of PS3 belongs to Patengko village with a migrant population from Tana Toraja, while the middle and tail end parts belong to Kertoraharjo (see maps 8 and 9). Boundaries of the TU are the home yards of Patengko in the North, Karambua hill in the East, the drain separating this TU from KL1ki in the South, and Kertoraharjo and its access road in the West. In the eastern Patengko part of the TU, water shortages regularly occur. The field-to-field irrigation practiced by Toraja farmers makes those who own land at greater distance from the canal system highly dependent on water drained off from the fields of their

neighbours. Most land in the Balinese part of the TU can be easily reached by irrigation water, except for some small pockets of elevated land. Conversion of parts of this elevated land into irrigated land using levelling techniques is still going on. Other parts are used for rain-fed crops. Five landowners in the tail end section have great difficulty in acquiring water from the irrigation canal. In the dry season, this land often dries up. Drainage problems occur mainly in marshy sections of the head part and along the drain at the foot of Karambua Hill. The capacity of this drain is too small anyway, but has further decreased as farmers owning land along it have expanded their land at the cost of drain capacity. Land directly bordering on the drain is very sensitive to excessive rainfall and flooding.

As a consequence of the history of land allocation, land tenure in the Balinese part of the TU is relatively egalitarian. Landownership still reflects the egalitarian and neatly ordered allocation pattern of the one-hectare sawah plots of transmigration. On the Patengko side, however, most land used to be owned by a small number of founding families of this Toraja settlement.¹⁴ Gradually, they sold most of their land to both Toraja and Balinese farmers, or had it worked in sharecropping arrangements. One trend in land tenure is clearly visible: recent changes in ownership show a 'Balinization' of the Patengko part of this TU. About eighteen Balinese farmers own land bought from Toraja farmers, and this trend of Balinese take-over of land is continuing. There are no cases of Toraja farmers (or farmers belonging to other ethnic groups, for that matter) buying land from Balinese in the Kertoraharjo part of the TU. According to data from the village land administrations and the TU itself, the TU has fifty-eight Balinese and thirty-four Toraja landowners. Sharecropping and pawning are common among Balinese, among Toraja and, especially in the case of pawning, between Balinese and Toraja. Leasehold seldom occurs. In such arrangements the Balinese are also the main party working land contracted out by the Toraja in a diversity of arrangements, usually pawning. There is a marked difference in cropping schedule between the Balinese and the Toraja: most Toraja start the cropping season one to two months later than their Balinese neighbours, and harvest accordingly.¹⁵ The Balinese, who have no control over the head end of the TU, tend to regard this as an advantage: spreading the high water demand during land preparation over a longer period may prevent conflict between the two groups about the appropriation of water.

Tertiary infrastructure and technology

Many parts of the infrastructure in PS3 did not function well when the system began to be used: low quality of construction, wrong position of boxes, and non-functioning quaternary canals were the main problems. The tertiary gate of PS3 can still be operated, but was never calibrated and lacks a gauging device. The lock has disappeared, and the bar for operating the gate is now guarded by a Balinese farmer of the WUA staff. The original tertiary canal is still in use, but all five water division boxes in the TU have lost their function of rotational water distribution. Quaternary openings have been closed using cement, stones and earth; gates have been sawn off or broken out. Many quaternary canals from the boxes have disappeared. On several locations in the Patengko part of the unit, water is taken directly from the tertiary canal by opening the tertiary embankment or boring (usually invisible) holes in the canal bottom, a practice of water appropriation common among Toraja farmers. In most cases, the water thus appropriated flows directly into an irrigated field and is further distributed on a field-to-field basis. Apart from the water requirements for irrigated fields and a fishpond, in this part of the TU there is much water loss through leakage from tertiary canal and degraded boxes. All quaternary canals have disappeared, as have many drains.

¹⁴ Two Toraja landowners, for instance, owned about eleven hectares of land each. One of them sold part of his land in one deal with a group of Balinese farmers from Kertoraharjo.

¹⁵ There are no great differences between the two villages in the degree of commercialization of agricultural labour. However, there are many more tractors in Kertoraharjo.

Box 14: conditions of tertiary infrastructure for irrigation in tertiary unit PS3*Tertiary gate:*

The gate is not calibrated, no gauging scale. The lock is broken, and the handle taken by farmers. Water flow is often maximized. Sometimes conflicts occur about operation of the gate. Maximization of water flow damages the tertiary canal embankment.

Box 3.1:

The locks have disappeared; one opening was filled up with earth. The quaternary canal has also disappeared; the box has no rotational function. Farmers between box 3.1 and 3.2 take water from the tertiary canal by digging the embankment.

Box 3.2:

Locks disappeared; one opening was filled up with stones and earth. Quaternary canal has also disappeared; no rotation. Farmers between box 3.2 and 3.3 take water from the tertiary canal by digging the embankment. Water losses through the earth filling of the box gate.

Culvert:

Crossing with tertiary drain has sagged away. Water losses, damage and drainage problems around the structure.

Box 3.3:

Locks and quaternary canals have disappeared; no rotational function. Farmers between box 3.3 and 3.4 take water by digging through the tertiary canal embankment and leading water under the farm road.

Temuku 1:

Between box 3.3 and 3.4, at the boundary of Patengko and Kertoraharjo, Balinese have constructed a stone-cement temuku. Water taken from the tertiary canal at the temuku is divided into two shares in proportion to the number of users: the larger share flows downstream through the tertiary canal, a smaller share is led back to the Patengko part of the TU, to the Balinese farmers owning land here.

Box 3.4:

Locks have disappeared; the gate to the quaternary was filled with earth and stones. Quaternary canals have also disappeared; no rotation. Farmers between box 3.4 and 3.5 take water directly from the tertiary canal, but use transparent methods.

Temuku 2:

Between boxes 3.4. and 3.5 Balinese farmers have constructed another (stone-cement) temuku. Water in the tertiary canal is divided into three shares proportional to number of users: one for downstream farmers, and two for the groups of farmers using water from the temuku.

Box 3.5:

Locks have disappeared; two gates closed off, one gate can still be used. Two of the three quaternary canals have disappeared. According to farmer accounts, the position of the box was too low; hence the quaternary canals did not function. Therefore, temuku 2 was constructed upstream to replace this box.

Source: fieldwork

Exactly at the place where the tertiary canal enters Balinese village territory, Balinese farmers have constructed a proportional division structure (temuku; see figure 1) using bricks and cement. This guarantees water allocation to the Balinese farmers who have bought land in Patengko, and an equitable water allocation to the middle- and tail ends of the TU. Downstream of this temuku, another stone-cement temuku has been constructed to replace one of the Public Works water division boxes which, according to the farmers, has never functioned because of its low position. The temuku divides the tertiary water supply proportionally into three parts, the larger portion of which enters the tertiary canal, while two smaller shares enter feeder canals from which a group of eleven farmers each takes its water. Farmers taking water from these feeder canals have been very active in improving access to water, making culverts, and maintaining the farm road on which their irrigated fields border.

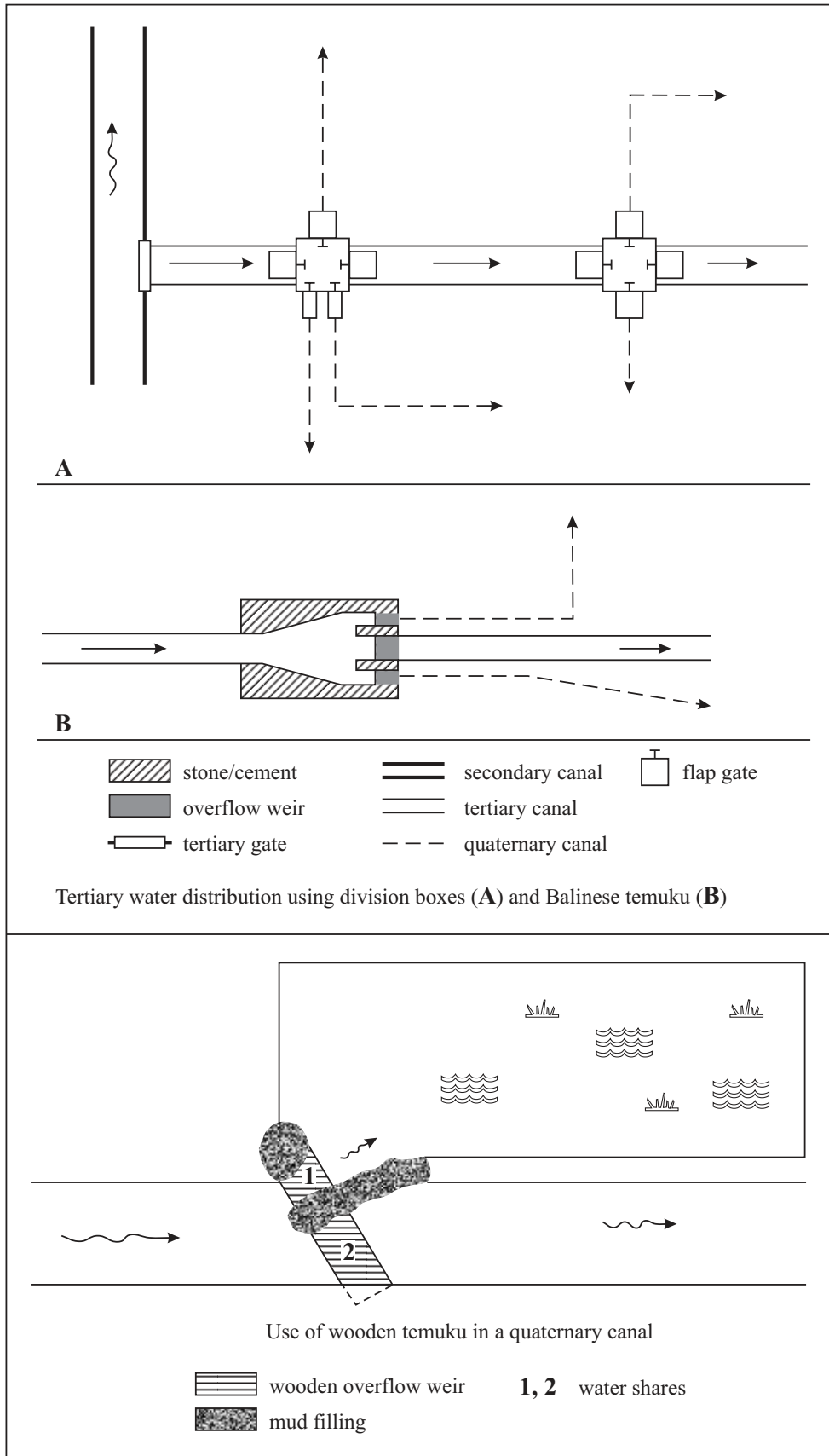


Figure 1: quaternary water division box, temuku, and use of a wooden temuku

The Public Works irrigation boxes are designed to allocate a share of water to quaternary units, usually covering between ten and fifteen hectares each. Water distribution between the box outlets and the individual fields is left to the farmers. Among the Balinese farmers in the TU, the use of a small wooden *temuku* (see figure 1) for water distribution at this level is quite common. This is a piece of wood of sufficiently large size to be placed diagonally at the point where a water inlet or small canal leading to an individual field branches off from the quaternary canal, so as to serve as a small weir. Using earth, farmers can close off the canal and the opening to the individual sawah in proportion to the water shares involved at this level of distribution. Thus, a more transparent way of water distribution, open to public control, is realized from the (stone-cement) *temuku* in the tertiary canal, through the quaternary canal for a block of irrigated fields, down to the inlets of the individual fields where water is divided by using the wooden *temuku*.¹⁶

In some places, farmers have sought additional or alternative water sources. In the upper part, for instance, (Balinese and Toraja) farmers depend partly on water from a drain entering the TU from the West. Water can be taken easily and in sufficient quantity by damming the drain. Most of the time, this drain provides a rich source of additional water. Severe water shortages may occur only in the extreme tail end section of the TU. Here, five farmers who did not get water from the tertiary canal, have made a deal with the farmers in neighbouring TU KL1ki. Now they have access to water from this TU. On two locations, they have made an aqueduct of PVC pipes to transport the water from TU KL1ki across the drain separating the two units, to their land. In this way, throughout the TU all kinds of irrigation-technical adaptations to the blueprinted TU infrastructure have come into being. Let us now look at the organizational arrangements existing in this unit.

Tertiary organization (WUA)

The WUA has an all-Balinese board consisting of a chairman, vice-chairman, secretary, treasurer, and water master. The chairman has occupied this function for more than eight years now, almost three three-years' periods. He often complains about the problems in the WUA and the difficulty of his function: the rift between Balinese and Toraja farmers, the low status of the WUA, and the absence of Public Works officials, who never react to complaints from the WUA anyway. Therefore, he intends to lay down his function. At a lower level of organization, four farmers function as group leaders (*kepala kelompok*) of the four subgroups of which the WUA consists. Though there is a clear parallel between the existing organization of the WUA into subgroups based on the common use of a water source and the formal quaternary unit structure foreseen in the initial technical and organizational lay out of the tertiary system (with the TU consisting of seven quaternary units each fed by a quaternary canal from one of the division boxes), this formal structure has never existed in practice. The WUA now exists for more than ten years, but has no formal statutes (*anggaran dasar*) to support its day-to-day functioning. As in all TUs, WUA staff and group leaders are elected for a three years' period. Both the WUA staff and three of the four group leaders have been in function for a longer period (between six and ten years), and would actually prefer to be replaced by other farmers. However, the generally low attendance at WUA meetings makes it impossible for them to step back and have a new WUA staff elected. As the hamlet head collects the Irrigation Service Fee (IPEP), WUA staff members do not receive any compensation for their function. This is not very conducive to their motivation.

The incorporation of two ethnically different farmer groups into one TU / WUA complex can be a source of tension and conflict. Such tensions are not caused by ethnic or religious differences per se

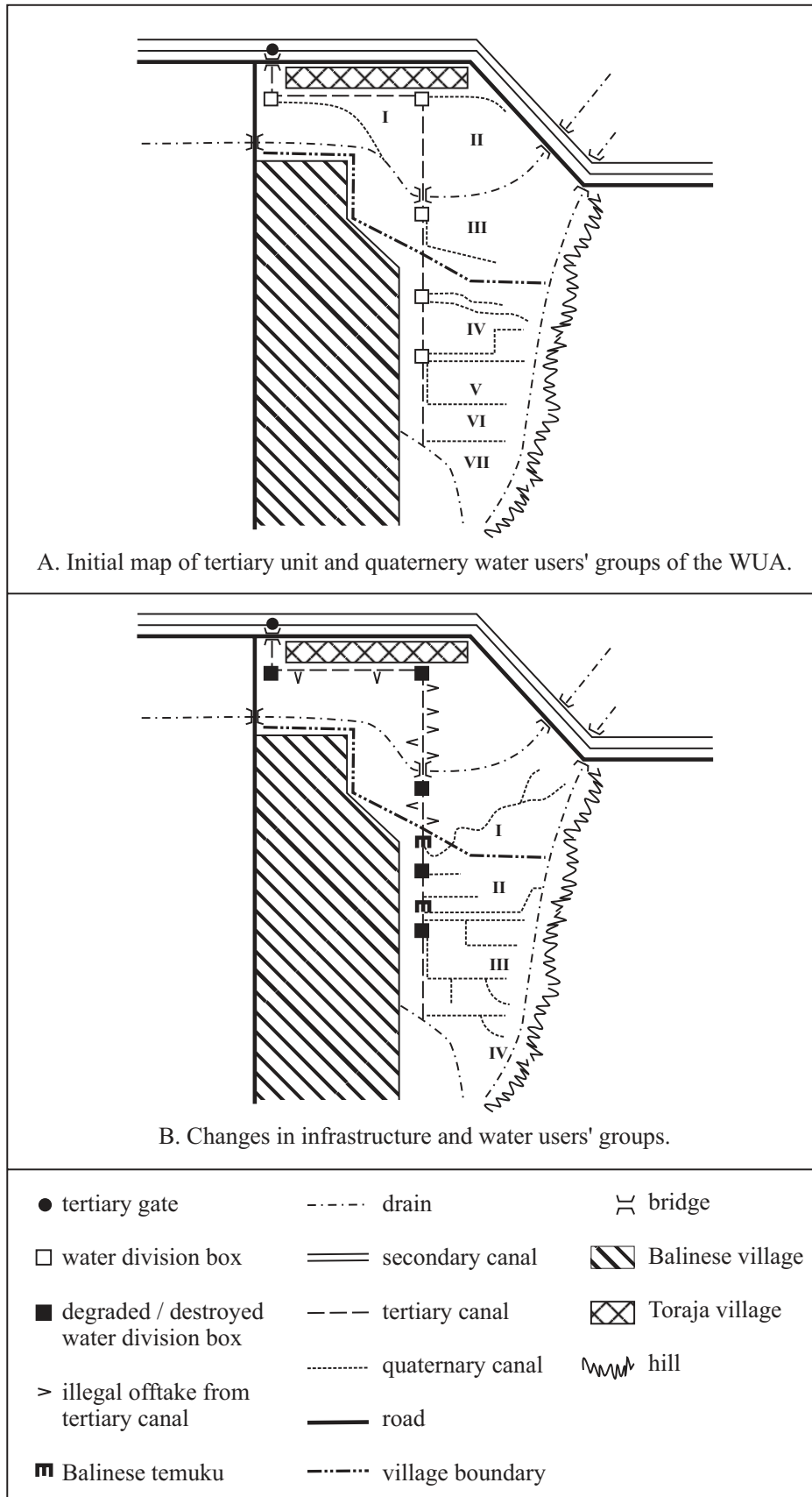
¹⁶ Devices like stone or wooden *temuku* can, of course, also be (and sometimes actually are) tampered with, e.g. (for the former) by closing off one of the proportional openings, or (for the latter) by letting water pass under the piece of wood. What is important here is the fact that, without such tampering, water distribution takes on a more transparent and orderly form than would have been the case with the division boxes.

(cordial relationships may exist between Balinese and Toraja farmers), but rather by the widely differing agricultural and irrigation management practices. First, there are differences in the field irrigation techniques used by Balinese and Toraja farmers. The Balinese tend to divide irrigation water over a complex of irrigated fields by means of a relatively dense network of ever smaller canals. They keep up a drainage system, and often re-use drain water for irrigation by allocating it to downstream fields or leading it back into an irrigation canal. Toraja farmers, on the other hand, tend to practice field-to-field irrigation without using a network of small canals. Second, there seem to be considerable differences in the values and norms that guide irrigation practices of the two groups. Where water distribution is really an issue, Balinese farmers tend to establish a transparent, visibly equitable water distribution. Translated into irrigation technology and practices, this means the use of proportional division structures like the stone-cement or wooden *temuku*. In their irrigation practices, Balinese make a clear distinction between normal use and ‘borrowing’ on one hand, and ‘stealing’ on the other. Toraja farmers, on the contrary, do not hold the value of transparency of irrigating behaviour in high esteem. For a Toraja farmer in need of water it is quite common to pierce the canal bottom or dig a hole in the embankment and let as much water flow out as he needs. Third, while the Balinese have organized themselves into small farmers’ groups, such organizations are non-existent among the Toraja farmers. Usually, only the Balinese turn up for collective labour for maintenance and repairs. Conflicts between Balinese and Toraja farmers in PS3, then, are mainly caused by different degrees of organization of farmers for collective labour for canal maintenance and repairs, and by the way Toraja farmers take water - or, as the Balinese say, ‘steal water’ (*mencuri air*) - from the tertiary canal. On these issues, the relationships between the two groups can indeed be said to be problematic. According to one WUA functionary:

‘Since the establishment of this WUA there have been many conflicts about labour contributions by the Toraja farmers and about the way they take their water. Usually they do not turn up for canal cleaning and maintenance, and let us do all the work. While we are cleaning the canals, they sit on their balconies and smoke a cigarette. They also destroy the canal embankment by the way they take water. As a consequence we do not get enough water. If only it would be possible, we would rather propose that the Toraja farmers form a separate TU and organize themselves in their own WUA. We have even proposed this to the Irrigation Service. However, the Irrigation Service did not allow us to become a separate TU and WUA because we share the same gate and canal. It would not even be possible.’

As a consequence of these tensions, Toraja farmers have in fact been excluded from the WUA. Though the TU has physically remained one unit, organizationally the Balinese have separated themselves off and formed their own WUA, from which Toraja farmers are fully excluded. The fifty-eight farmers owning land in PS3 and registered in the WUA administration are all Balinese. They belong to four smaller farmers’ groups, three of which are located on Kertoraharjo land while the fourth consists of Balinese farmers who have bought land in the Patengko part of PS3 (see map 9). The thirty-four Toraja farmers are not organized in such groups, and not represented in the WUA. The Balinese chairman of the WUA states that the organization now exclusively represents the Balinese farmers who own land in the WUA. Even in the Patengko part of the unit, Balinese are taking control. They have built the *temuku* to serve the Balinese buyers of land who have organized themselves into a fully Balinese farmers’ group, and also created Balinese regulations for the Balinese in this part of the TU (see map 9; see below).¹⁷

¹⁷ The Balinese also allow two Toraja farmers known to be active in cleaning and maintenance, to take water from the canal. Such tendencies can also be observed in relationships between Balinese and Toraja farmers more to the Southeast of the TU. Though many of them have already sold their land to Balinese, remaining Toraja farmers are increasingly dependent on the goodwill of the Balinese for their irrigation water.



Map 9: changes in infrastructure and farmers' organization in TU PS3.

This separation of the Balinese from the Toraja part of the unit does not mean that the WUA as a fully Balinese organization is unproblematic. On the contrary, issues like transgression of the norms for water distribution and of farmer contributions to collective labour often occur and are hotly debated themes among Balinese as well. Both free-riding behaviour and 'night irrigation' occur, while effective sanctioning by the WUA is problematic. One farmer:

'Especially in periods of water shortage during the dry season, if the Toraja farmers upstream take too much water from the tertiary canal by boring holes in the canal bottom, the temuku may become a place of conflict. Usually the struggle takes place silently, from the evening until midnight. Farmers from one of the downstream groups close off with mud the opening of the temuku leading water into the canal of our group. We always are on our guard, and regularly check the water diversion point. We never take a flashlight because one thing should be absolutely avoided: catching one another in the act of tampering with the temuku or even meeting in the sawahs. You never know what will happen in such a situation. Even though the water may be cold, the people who use it are hotheaded.'

According to the village head, formally responsible for the TUs and WUAs on his village land:

'The WUAs do not function at all. They are too large, and there is no faith in their leadership. Usually there are no clear regulations and sanctions. Even if there are rules, nobody bothers about them. Transgressions are usually not fined. If they are fined at all, the fines are not paid and the farmers still get away with it. The organization should become more meaningful to farmers, activate them and make them stick to the rules. In my opinion we should try to find a combination between the WUA and the kind of organization the authority of which is recognized by the farmers.¹⁸ As long as farmers do not feel at ease, are not members of an organization like the subak, conditions inside the tertiary units will never improve.'

Organizational initiatives inside the WUA

Other, more constructive trends can be discerned as well. As I have remarked above, at a sub-WUA level inside the TUs other forms of organization exist: the small groups of farmers who receive water from the same feeder canal (in engineering terms the 'quaternary units' or 'quaternary canals'). The Balinese part of TU PS3 has four such groups. Rather than the formal organizational structure of a WUA board, these groups have only a leader (*kepala*), chosen for three years. Before the start of the season, informal group meetings are held. Usually these meetings take place in a field hut rather than in the village. Contrary to WUA meetings, on such occasions time is not only spent on formalities: the meetings tend to be combined with collective labour activities like canal cleaning or repairs. In a weak WUA, which lacks the means to impose sanctions, effective organization of collective labour is generally considered problematic. It can more easily be planned, organized and controlled at this lower group level. In these groups, labour for maintenance and repairs on the small feeder canal (between the division structures - boxes, stone-cement temuku - and the water diversion point to the individual sawah), structures, and farm roads is planned, organized and implemented. Some of these groups have very simple written legal rules that regulate collective labour, fines for absence, and transgression of norms for water appropriation.

To solve the problems of felt inequity in collective labour contributions between farmers with differential interests in land, most groups have successfully introduced a Balinese solution to this problem: *beli ayah* or *beli ayah*an ('buying work'). This term, common in the Balinese customary institutions of banjar and subak, is used for various regulations concerning financial compensation to be paid by farmers who, for one reason or another, cannot perform their fair share of collective labour.

¹⁸ This state of affairs differs widely with the situation generally found in *adat* (customary) organizations like subak and *banjar* (customary hamlet), where presence at meetings is, generally speaking, high and fines and other contributions are collected with great precision.

The arrangement is most commonly used for those who have other labour obligations in or near the village (e.g. teachers) or those who temporarily live too far away from the village to be able to perform their labour share but have retained all ties with the village and its institutions. In another meaning, it refers to arrangements ensuring the proportionality to area owned of labour or money contributions by the various members. Thus, in the various groups in which collective labour on the irrigation infrastructure is organized, a standard or modal area of land (*areal patokan*) is determined for which all members are expected to perform labour. For landownership exceeding that area, owners have to pay a certain amount of money per 0.25 hectare. Sometimes, farmers who own less than the modal value receive compensation proportional to their deviation from standard landownership. Especially in combination with a small savings and credit function for the group (see TU KL1ki; below), acceptance of such payments seems to be high. The small capital derived from these sources is used for buying snacks, drinks and cigarettes for group meetings. The groups in PS3 have no funds used for loans to the members (*simpan pinjam*).

In the case of only one group, transgression of general distributional rules and determination of a fine for water theft are explicitly stated in the written group regulations. As, generally speaking, water availability is not very problematic, there is no felt need for a very strict regulation of water distribution within the small farmers' groups. Even in the absence of such rules, most farmers are familiar with a set of widely accepted norms concerning water allocation and distribution. First, farmers should not be too greedy, and should not take in more than a hand's width of water. Second, water appropriation should be visible and transparent (no hole digging in the canal embankment). Farmers are advised to use a wooden temuku to take their share from a canal with more shareholders downstream of their own intake point. Third, under conditions of water shortage farmers at the head end of the feeder canal may be ordered by the head of the group to take in less, while those at the tail end are allowed to take more.¹⁹ Fourth, in case of a farmer's acute need of water (e.g. for land preparation) a larger share or all water may be taken for a period determined by the group leader or the other shareholders. Inside these small groups, farmer demands for additional water can be weighed and decided upon, taking into account factors like the elevation of his land, position along the feeder canal (head, middle or tail), and availability of drain water in addition or as an alternative to water from the irrigation canal. The farmer borrowing water is expected to ask permission in advance to the leader of the farmers' group or the farmers affected, and responsible for restoring the normal water distribution afterwards. Some groups demand that the farmer who temporarily changes the normal water division places a stick at the point where he changes it, as a sign that no 'stealing' is involved.

At this level the behaviour of farmers is continually subjected to social control: observed, negotiated, protested, and labelled, the two main categories being *pinjam* (to borrow) and *curi* (to steal). While in the large WUA organization farmers can easily get away with greedy behaviour, in such small groups there is a considerable risk that farmers caught in the act of breaking the rules will be fined. However, sufficient elasticity remains in practice for norms to be negotiated and transgressed. Such situations may easily get out of hand. Especially if farmers are caught in the act of tampering with the water division by their neighbours, the situation is felt to be delicate. But it should not be forgotten that the distinction between 'borrowing' and 'stealing' is not always clear or at least open to interpretation. The leader of one of the small farmers' groups, sometimes engaged in night irrigation activities himself: 'if you want to call it "borrowing", then it is borrowing; if you want to call it "stealing", then it is stealing. Perhaps you might say it is stealing for a moment only (*mencuri sebentar saja*)'.

¹⁹ One group leader has been chosen on the basis of the location of his land in a tail end position of a feeder canal, because there was a general feeling that the interests of tail end farmers should be represented.

Box 15: new WUA regulations of tertiary unit PS3**I. Collective labour (gotong royong)**

1. those who are absent without permission will be fined Rp. 2.500;
2. those who arrive too late will have to pay half of that amount;
3. those who are absent on three consecutive occasions will be fined twice the amount under 1.

II. Absence leave

1. for ritual obligations;
2. for circumstances related to death;
3. those who left the village before the call for gotong royong was given;
4. those who are absent for reasons unclear will have to pay up.

III. Labour recompensation (pembeli ayah)

1. officials: Rp. 10.000 per cropping season;
2. those suffering from chronic disease: Rp. 10.000;
3. those who own more than one hectare have to pay labour compensation Rp. 10.000;
4. those who own less than 1 hectare will receive labour compensation.

IV. Cattle

1. a fine for cows of members or non-members tended or bound (gembala/ikat) in the sawahs, causing damage to farm roads / canals: Rp. 25.000 per cow;
2. cows entering the sawahs causing damage to sawah bunds: Rp. 25.000;
3. cows eating the rice plants: Rp. 250 for each 'rumpun'

V. Pigs, ducks, geese

1. damage to the farm roads etc.: Rp. 5.000 per animal;
2. damage to the sawah: Rp. 5.000 per animal.

VI. Sexual intercourse in the sawahs

1. those, either members or non-members, who commit sexual intercourse in the sawahs will be fined. They will have to organize and hold a cleansing ritual (mecaru), and also pay a Rp. 50,000 fine;
2. those who are witness to people having intercourse in the sawahs and immediately report to the head of the WUA are entitled to receive Rp. 15,000.

Source: fieldwork

Shortly before the 1996-1997 wet cropping season, a WUA meeting of this TU was held with the purpose of strengthening the cohesion of the WUA as a whole by proposing new regulations and having them sanctioned by the members. The meeting, attended by the majority of Balinese farmers only, was part of an initiative of the Balinese administrative village head to blow new life into the badly functioning WUAs of Kertoraharjo. In order to re-establish contacts with the Irrigation Service, the branch head of the main system was also invited to be present at another meeting attended by WUA staff of all TUs, to discuss general problems related to irrigation. As part of this process of revitalization, the WUA of PS3 was the first to formulate new rules to strengthen its performance. The new regulations, drafted by the WUA chairman, were presented to the members who attended the meeting, and accepted unanimously. The new regulations, later to be extended with rules concerning water allocation and distribution, cover the following subjects: collective labour (accepted reasons for absence with leave, fines for absence without leave); labour compensation (beli ayahan, for those unable to work, as well as in proportion to the area of land owned)²⁰; cattle and fowl (fines on diverse kinds of damage to infrastructure, sawah bunds and

²⁰ In the latter, a 'standard' (modal) area of land is determined (in this case 1 hectare), for which the owners are expected to perform communal labour. For landownership above this modal value, owners should pay per hectare per season, while farmers owning less than the modal value receive a compensation proportional to deviation from the modal value (see above).

crops); and sexual intercourse in the sawahs (fines; the need for a cleansing ritual; reward for witnesses who report the incident to the WUA staff).²¹ This reference to the maintenance of religious-ritual purity in the new WUA regulations for PS3 is particularly remarkable. It shows that, in the eyes of the Balinese, the WUA is nowadays felt to be a fully Balinese organization to which Balinese regulations should be applied and in which the Toraja members have no place. This means that the physical space of the TU and the organizational model attached to it have indeed become fully separated from the real-life organizational arrangements for the WUA.

Tertiary unit KL1ki

General characteristics

Tertiary unit KL1ki covers an irrigated area of more than 100 hectares and has 107 members. It is made up partly of land formerly allocated as 0.75 hectare 'ladang' plots, and partly of land allocated as 1.00 hectare 'sawah' plots, separated by the road bisecting the unit. While the former part (forming the 'head' half of the unit) belongs to the village of Margomulyo with a mixed Javanese-Balinese population, the latter part (the 'tail' half) belongs to Kertoraharjo (see chapter 7). The TU borders on Kertoraharjo and TU PS3 in the North, on the tail end of TU PS3 and Karambua hill in the East; on TU R2 and KL1ka in the South, and on TU R1 in the West. KL1ki is an almost completely Balinese TU (Balinese: 101; Javanese: 5; Toraja: 1). Water shortages occur primarily in the tail end section of the TU, where formerly fallow land bordering on Karambua hill has in the past years been turned into irrigated fields, as well as in the slightly elevated parts throughout the TU that are used for irrigated agriculture. Farmers working the latter locations often have to dam canals in order to get enough water to their fields. These are the places where 'night irrigation' is common. Over-abundance of water occurs around those canal sections where water control has diminished due to the degradation of infrastructure, where drain water from the marshy tail end of TU R1 enters KL1ki and stagnates along the farm road of KL1ki, and (in long periods of heavy rainfall) in the tail end sections bordering on the drain at the foot of Karambua hill. Severe flooding after heavy rainfall can cause crop damage to irrigated fields as far as two hundred meters away from the drain. In KL1ki, as in other TUs, small patches of land too marshy for rice cultivation can be used for *kangkung* (marsh vegetable), which is used as pig fodder.

Landownership in both sections of this TU goes back to the transmigration programme. It is, therefore, relatively egalitarian. However, processes of socio-economic change have brought about some degree of differentiation. Sharecropping and pawning, mostly among Balinese, are common; land rent seldom occurs. In this TU, small pockets of elevated land that have not been turned into sawahs still exist. Such land is either planted with perennial crops like coconut trees and cocoa, or used for the cultivation of seasonal crops like maize and tubers. Some farmers have turned such elevated parts into home yards. Recently, the rapidly rising prices of red peppers made this crop very popular for cultivation on the elevated parts in this TU. In the western part of the TU, transplanting closely follows upon the date of the planting ritual. Between one and two weeks after the ritual, most irrigated fields have been planted. Especially in the tail end of the eastern part, there may be a time lag of (maximally) some weeks due to water shortages.

²¹ This regulation is not so much meant for those who might decide to make love under cover of the rice plants, but rather for those who spend the night in their sawah hut or those who decide to build a house in the rice fields (e.g. young couples who have no village home yard). In the latter case, the place where the house is built has to be ritually separated from the sawahs before the couple is allowed to live and sleep there.

Tertiary infrastructure and technology

The five water division boxes of the Public Works tertiary system have all lost their rotational water division function. The first box still has gates, but the thresholds beneath them have been broken out. The second one has sagged away and is heavily damaged. The third, which has never functioned due to its elevated position, was smashed to pieces by farmers and replaced some years ago by a large stone-cement temuku about one hundred meters upstream. All farmers in this WUA financed its construction after the WUA members had decided that a temuku should be built to solve the water distribution problems. All sawahs that could not be irrigated from the initial box can now be reached by water. The two boxes on the other side of the road transecting the unit have lost part of their gates. Generally, no rotation is practiced. In periods of water shortage, especially the dry season, water can be rotationally allocated in a provisional way by closing off part of the temuku outlets, remaining box gates, or the gateless holes in the boxes. Other measures in dry periods, taken at a lower level, are the use of a wooden temuku (see figure 1) in the smaller canals on which groups of farmers are dependent and the allocation of water in proportion to farmers' differential positions along the feeder canal (head, middle or tail).

Though the farmers in this TU have constructed only one stone-cement temuku, farmers seem to prefer water control and distribution through temukus to the use of the Public Works division boxes. As in TU PS3, in a situation of limited and decreasing water control as a result of the partially unusable and rapidly degrading infrastructure, the farmers had recourse to their own Balinese irrigation technology again. According to one farmer, who is very experienced in tertiary irrigation matters:

'The boxes have rapidly degraded after the system began to be used. Some had been badly constructed and cracked or sagged away. Sometimes the farmers have broken out gates or destroyed the whole box. Where the closed box gates in the tertiary canal prevented the water from passing through the box, we had serious damage to the farm road. That is why in these boxes the gates and the thresholds were broken out. Other boxes had not been constructed at the right elevation, and hence did not divide the water flow as they should have done. If a box is not constructed in the right way, the water runs straight through the box, one canal getting much more water than its share and the others just a little bit or nothing at all. As a result, farmers' groups start quarrelling about their rights to water and manipulating the division boxes. That is why we prefer to use temukus for water distribution. If temukus are used, the water distribution is more equitable. It just divides the available water in an equitable manner. If there is much water in the canal, we all enjoy its benefits in the same proportion; if there is a shortage, we all suffer equally.'

Farmers prefer the use of temukus to water division boxes for three reasons. First, the greater transparency of temuku structures. Second, the often considerably distorted water division function of the boxes, if these have not been constructed exactly at the right place and elevation. Third, the fact that the division boxes are part of a TU design for rotational irrigation. In situations of sufficient water supply, Balinese farmers are generally not in favour of the use of rotational forms of water allocation.

To solve the problem of tail end shortages, drain water from the marshy downstream part of another TU provides additional water supply to the tertiary canal. However, since a long time conflicts exist between the head enders and the tail-enders about the right to appropriate and make use of this water. Farmers in the northern part of the upstream end of the TU, having difficult access to water from the tertiary canal because their area was 'forgotten' by engineers and constructors when the system was built, compete for drain water with the tail-enders. They have made a diversion of drain water to their sawahs and, after they have used it, onwards into another drain from which re-use in the tail end is impossible. This diversion was, of course, immediately contested by the tail end farmers on the other side of the road, many of whom need additional water. Such issues about water control and division are a major divisive element in the WUA.

Box 16: conditions of tertiary infrastructure for irrigation in tertiary unit KL1ki*Tertiary gate:*

Not calibrated, no gauging scale; lock broken, handle taken by farmers. Seldom operated (if operated: by water master or farmers). Water master also operates secondary gate upstream.

Box 1ki.1:

Box severely damaged; gates still in place (without locks), but not functioning; thresholds beneath the gates have all been broken away to let the water pass even if gates are closed. According to farmers, closure of gates is causing flooding of the tertiary canal and damage to its embankment and the farm road along the canal.

Box 1ki2:

This box is completely destroyed. According to farmers, it did not function from the beginning because it had been constructed at a wrong elevation.

Temuku:

Between box 1ki.2 and 1ki.3 Balinese farmers have constructed a stone-cement temuku for continuous proportional water distribution. Water in the tertiary canal is divided into three shares proportional to the number of users behind the temuku. The largest share flows to the eastern part of the TU, across the road. Two smaller shares for 15 and 10 farmers respectively bend into the sawahs of the western part. The opening in the temuku for the 15 farmers' share is narrower than that for 10 farmers, because the former group receives suppletion from the drain.

Box 1ki3:

This box is completely destroyed. According to farmers, the box did not function from the beginning, because constructed at a wrong elevation.

Box 1ki4:

Gates still in place; locks disappeared. Can still be used for rotational irrigation. New canals made to replace the earlier quaternary canals. Sometimes (especially in the dry season) rotation is practiced here by closing off part of the gates.

Box 1ki5:

Most gates broken out; no locks left; no rotation. Canal system has changed.

Source: fieldwork

WUA organization

The WUA has an all-Balinese staff. Two staff members are often on their cocoa gardens at great distance, while a third one refuses to perform his function because he was not present at the meeting in which he was elected. The chairman and the water master intend to step down after having served for almost ten years. WUA meetings are seldom held. The WUA has no statutes (*anggaran dasar*) recognized by the regional authorities. As a formal organization, the WUA remains largely inactive in irrigation management affairs. Financial matters seem to play an important role here as well. As the irrigation service fee (IPEP) is collected by the hamlet head, collection is no longer a source of income for the WUA staff. Internally, problems arose concerning the lack of transparency in the collection and use of another fee, construction funds (*dana bangunan*). In the end, farmers refused any form of payment to the WUA, whether for construction, fines, or labour compensation. Thus, with water control still problematic, and the WUA divided on issues like the re-use of drain water, equitable solutions to the problem of collective labour, financial management and accountability, the WUA is a very weak organization lacking authority in the eyes of the farmers. However, at a lower level seven small farmers' groups exist that more or less fulfill the same function as in PS3.

Parallel to the conflicts about access to drain water, conflicts have also arisen about collective labour by the WUA members. Problems began when farmers who own land only in the 'ladang' part (0.75 hectare plots) of this unit did not want to work any longer in the downstream 'sawah'

part, where most farmers own one-hectare plots. Initially the 'sawah' block farmers continued joining labour activities in the 'ladang' block. However, in the end they did no longer turn up for cleaning and maintenance. The downstream farmers have even tried to separate themselves off from those upstream. An appeal made to Public Works for the physical separation of the eastern and western parts of KL1ki was turned down, because the two parts are dependent on the same tertiary gate. The two groups have now separated in an organizational sense: the WUA as a whole does not play a role in issues like collective labour and the payment of compensation for differences in labour responsibilities. Collective labour, according to one farmer, now has become 'bisnis'. But, as another farmer stresses, it is essentially a problem between head end and tail end farmers:

'After the canals in the upstream part had been cleaned and repaired by both head end and tail end farmers, the former simply refused to do their part of the work in the tail end as well. They said: "what is the use of us going there?" It was not in their direct interest to do so. They are head enders and have control over the water. But they made use of the labour power of the tail end farmers, who continued turning up for labour.'

In the separate parts, the same issue of collective labour was also raised by farmers who owned less than the originally allocated area of land, against those who own more land but had the same labour obligations. Collective labour, and especially its regulation in such a way as to guarantee a contribution by all farmers and no free-riding behaviour, had to be arranged at an even lower level of organization. In this TU, to an even greater extent than in PS3, the small farmers' groups have taken on an important organizational role in irrigation management and related issues during the last few years. As I will show below, these groups can be important in other respects as well.

TU KL1ki now consists of 7 small farmers' groups that, though they existed for a longer time, have all been re-activated at the initiative of the farmers in the last few years. As in TU PS3, the groups are based on the common use of a canal from a temuku or division box. These groups resemble the quaternary units of the formal WUA organization. However, as a consequence of changes to the system, the groups differ in the area of land they cover and their farmer composition. All groups have composed their own written regulations that primarily deal with the issue of labour contributions of the members. Most groups have regulations determining issues like absence, late-coming and sanctions to be put on such transgressions. To solve the problems of felt inequity in collective labour, most groups have successfully introduced the system of 'beli ayah' for land-ownership above the standard area (areal patokan) determined by the group (see the PS3 case). In combination with a credit function for the group, acceptance of such payments seems to be high.

One group has regulations concerning transplanting of the rice seedlings, stating that all group members should transplant within one week after the transplanting ritual (see above). However, in view of the fact that Balinese are rapid planters anyway and nowadays can also use fast-growing rice varieties, such regulations seem to have become rather superfluous. Not superfluous, but not often written down either, are rules concerning water distribution. Few groups have written regulations for this. Farmers are familiar with the general norms concerning water distribution; norms that manifest themselves in more or less institutionalized practices of local irrigation management. Moreover, in a situation in which shortages do occur but are not too severe a problem, most group leaders state that distributional issues can in principle be left to the farmers. However, the leaders of most groups keep a sharp eye on field practices, especially of those farmers known as *rakus* (greedy). And so do farmers themselves. Generally, farmers are stimulated by the group leader to adopt an attitude of restraint, not to monopolize water by damming canals without permission and foreknowledge of fellow water users, and to use wooden temukus at the intake point of the individual fields. In some groups where slight differences in elevation of the irrigated fields play a role and hence damming regularly occurs, simple written regulations and fines on damming and monopolizing water exist.

Box 17: a farmers' group in KL1ki

The twenty-two members of this farmers' group own land in the eastern (tail end) part of the TU. Group regulations and financial administration are in the hands of the chairman (*kepala kelompok*; there are no other formal functions), all carefully stored in plastic bags as protection against moisture and vermin. The group members choose the chairman for an unspecified period, as long as he is accepted by the farmers. The chairman regards the organization and management of collective labour, and the productive use of the group funds as the main functions of his group. Apart from that, he keeps an eye on farmers' irrigating behaviour. In case of complaints by farmers, he immediately acts upon such complaints. The group owns a considerable capital of more than Rp. 3 million, built up from interest on loans (now 1,5%), fines, 'beli ayah' (Rp. 5,000 per hectare; with a standard area of 0.5 hectare), and a member contribution of Rp. 5,000 per rice season. Every meeting the group capital is lent out to the members. Big loans are possible, but depend on the borrowing needs of the other members. The members intend to let the capital grow to Rp. 5 million. When Rp. 3 million was reached, interest was reduced from two to 1,5 per cent. Once the Rp. 5 million target is reached, another reduction to 0.5 per cent will take place. According to the chairman the financial function of the group is so highly appreciated by the members because the farmers use it as a reserve from which they can pay part of their inputs: fertilizer, pesticides, but also a planting group or the ploughing of their land. The chairman: 'if we order our inputs through the KUD, they arrive late. So many farmers just buy them cash on the market. In the near future, if our funds have grown further, we intend to order inputs for the whole group simultaneously.'

The group has drawn up simple regulations (*awig-awig*):

1. Those who are absent from collective labour activities without a good reason, have to pay a Rp. 1,000 fine.
2. Labour activities will start at 14.00 in the afternoon. Once one hundred meters of canals have already been done, those who arrive late have to pay a Rp. 500 fine.
3. For those tasks that have been divided among the members, members are given one week to perform their share. If the task has not been executed after one week, a Rp. 11,000 fine has to be paid. If the owner of the land is not in the village, and there is no man or woman in his family who can replace him, it is up to the chairman of the group to decide whether the group will do his share.
4. Those who damage or bring about changes in the canals for private interests without earlier consultation are fined Rp. 5,000; for stealing water (that is: taking it without earlier consultation) a Rp. 5,000 fine has to be paid as well.
5. Those who do not follow the decisions reached by consultation will be given the following sanction: as long as the person involved does not improve his behaviour, he will be forbidden to take irrigation water or drain his sawah in the drains.
6. Accepted reasons for absence (*batas-batas izin*): illness, having left the village before the order for collective labour was received, taking care of / caring for a sick person, medical treatment, and an important day (day of a ritual / ceremony).

Source: fieldwork

Collective labour tasks have been divided as much as possible among the different farmers' groups. Each group is not only responsible for its own feeder canal from a division point (*box, temuku*), but also for a predetermined stretch of tertiary canal. Since collective labour obligations have been translated between the farmers' groups into such physical shares, the situation has clearly improved. What remains a problem is the strengthening of those groups in which much land has been given out to tenants under sharecropping or pawning contracts. Usually, tenants do not want to join in the financial activities of a farmers group of which they will often be part for only a short

period. This may seriously weaken group coherence, and even become a major hindrance to its functioning.

Recently, some farmers' groups have, more or less successfully, taken over other WUA functions: collection of the contribution for construction, and of fines to be paid for absence during collective labour on the tertiary canal. Before the groups took over, any collection of fees and fines proved to be impossible at the level of the WUA. Only a few WUA members turned up for labour; fines for absence were not paid. Now, with matters concerning labour, sanctions and fines collection decentralized to the farmers' groups, farmers tend to take them seriously and act accordingly. They massively attend at meetings in which group issues are discussed over drinks, snacks or a meal. An important additional function that, according to Balinese farmers, effectively binds people to their organization is the financial function of such groups. Group capital derives from various sources: fines on absence and late-coming (recently taken over from the WUA); 'beli ayah'; a voluntary contribution by the group members; and - through the savings and credit function - interest on loans. Some farmers' groups have built up a considerable amount of capital, while others are still building up. Some groups do not want the administrative load of money lending. One group with twenty-two members had built up a loan capital of more than Rp. 3 million, rented out to the members against a five-percent per month interest. Its members plan to continue building up sufficient capital for financing agricultural inputs (primarily fertilizer and pesticides, but also labour, tractor rent etc.). In some (all-Balinese) groups, the members use the group funds to buy a pig together before one of the Balinese Hindu festive days and slaughter it, distributing the meat among the group members.

In the wake of the political changes of the late nineties, new opportunities emerged for such small farmer groups, the members of which intend to use their capital in a productive way. Thanks to a Presidential Instruction of the Habibie administration, from the end of 1999 they were able to deal at the village level with so-called 'primary cooperatives' (Presidential Instruction No. 18, 1998.). These cooperative organizations can work independently of the KUD, which used to have the absolute monopoly of provision of agricultural inputs. In mid-1999, the members of some farmers' groups had already massively registered as members of the alternative village cooperative which was then in the process of being established, with the objective of ordering inputs through the new cooperative and paying back from group funds. If this new institutional space for farmer cooperative initiatives proves successful in the future, it might create new linkages between all kinds of spontaneously established local farmers' groups and credit-providing institutions. This may strengthen local groups and the managerial and (socio-economic) security functions they fulfill.

5. The hybrid world of the tertiary unit

This chapter concludes the part of this book on the role of land and water in Kertoraharjo. I have focused on irrigation management in the TUs in which Kertoraharjo farmers have their irrigated fields. I did so with two main intentions: first, to get a clearer picture of the TUs and the WUAs in 'real life'. Second, to see to what extent and in what way 'subak', broadly conceptualized as a complex of normative, organizational and technical dimensions of irrigation, plays a role in local irrigation management practices. After the irrigation system had reached Kertoraharjo, the farmers found themselves in a state-provided physical and organizational setting which, even aside from its physical shortcomings, was inherently strange and meaningless to them. In their attempts to cope with the physical, technical and organizational problems inside the TUs, Balinese farmers have actively changed the TUs in which their land is located and the WUAs of which they are members. The TUs went through a long and ongoing process of sociotechnical change, of stabilization and

balancing of their normative-legal, technical and organizational properties. In some TUs, this struggle for improvement of local irrigation management has been more successful than in others. On the whole, the Balinese TUs look physically degraded, and the WUAs are weak organizations with little legitimacy in the eyes of farmers.

For the Balinese, *subak* is a primary way of giving meaning to irrigated agriculture and organizing irrigation management. As I have shown in chapter 9, the role of *subak* and *pekaseh* as formal organizations in irrigation management was short-lived. Under pressure of the local administration a functional separation was established between the *subaks* and WUAs. The former were narrowly interpreted as belonging to the domain of 'religion', the latter established for tertiary irrigation management in the process of irrigation development. However, 'subak' can also be more broadly conceptualized as an institution, a complex of normative-legal, organizational and technical dimensions of irrigation that may guide and structure the behaviour of Balinese farmers as irrigators to a greater or lesser extent, irrespective of the issue of its recognition as a formal organization. In this chapter I have explored to what extent these elements of *subak* as an institution continue to form a point of orientation for Balinese farmers in an irrigation setting dominated by the TU / WUA structure. I analyzed local irrigation management in two TUs with a (partly) Balinese farmer population, against the background of a number of main system characteristics. The 'contextual' factors of relative water abundance, chronic shortage of operational staff, and routine approaches to TU / WUA development seem to be important: for lack of staff, the tertiary gates are controlled by farmers rather than the Irrigation Service. Further, the relative abundance of water allows for a high water availability to satisfy demands associated with the practices of continuous flow irrigation. Routine approaches to TU and WUA development focus on externally devised engineering ideals of irrigation technology, rules and organizational structures for local management rather than on rules and forms of organization that are, at least to some extent, related to local Balinese realities and practices. Apart from constraining local initiatives, such approaches have very little to contribute to the development of locally embedded practices of tertiary irrigation management.

In the case studies of TU PS3 and TU KL1ki, I have specifically focused on the closely interrelated and partly overlapping technical, normative-legal and organizational dimensions of irrigation. As to the first, the cases show that degradation of the physical infrastructure is a major characteristic of these TUs. Investments made by the farmer population in infrastructure are rare. However, where farmers felt new water division structures were badly needed in order to reach an acceptable level of water distribution and control, farmer initiatives are visible. Wherever Balinese farmers were actively engaged in creating infrastructure for water division, they made use of elements of *subak* knowledge and technology. In both PS3 and KL1ki, farmers have replaced the non-functioning or degraded water division boxes with *temukus*, Balinese fixed proportional division structures for continuous flow irrigation. Though the core canal structure (tertiary canals) of the Public Works system was accepted, the water division boxes in the TUs were massively rejected. The major reason for this seems to be that the boxes do not meet the requirements posed by Balinese values, norms and principles concerning water distribution.

Thus, new division structures were built (and the initial ones destroyed) in accordance with the Balinese preference for a transparent proportional water distribution based on continuous flow. Similar methods exist for water distribution at the lowest level: to the individual fields. The stone-cement *temukus* divide the water to units that more or less correspond to the quaternary units of the initial irrigation system (but with boundaries adapted to the realities of a working irrigation system). At a lower level of water distribution, farmers use wooden *temukus* to divert water from the 'quaternary' canal into their individual fields. In some groups, the use of wooden *temukus* is quite common, and actively stimulated by the group leaders. It counterbalances the lack of distributive technology and arrangements below the division boxes of the TU infrastructure. Like its larger

stone-cement variant, the wooden temuku makes water distribution more transparent and reduces the possibility of conflict with fellow water users. Thus, application of subak-derived knowledge of water distribution at various levels can create a more transparent and orderly water distribution between tertiary canal and individual fields.

The TUs also make a degraded impression in an organizational sense. WUAs are inherently weak organizations that have little effective control over local irrigation management. However, as the cases show, in the face of these organizational problems at the level of the WUAs, Balinese farmers are struggling for a more legitimate and effective form of local organization of irrigation management. Most initiatives for farmer organization emerge at a sub-WUA level. In the last few years, many small farmers' groups have been established at the initiative of farmers who realized that organizational arrangements with a higher degree of farmer acceptance than the WUAs were badly needed. Such small farmers' groups, usually consisting of ten to twenty people, have come to play a stabilizing role in day-to-day irrigation management. These groups consist of farmers sharing water from the same canal branching off from a box or temuku (quaternary unit and canal in engineering terms). These groups are very practically oriented. Meetings are held in the field, and always combined with crucial management activities like canal cleaning. Yes, farmers do hate transaction costs, but primarily associate them with the routines and procedures of the WUA, the organizational arrangement that should have given them a 'sense of ownership'.

In these small groups, collective labour for cleaning and maintenance on the small feeder canal between the division structure (box or temuku) and the diversion point to the individual sawahs, on drains and on farm roads is planned, organized and implemented. In some cases, collective labour responsibilities for the tertiary canal have been divided into physical shares among such farmers' groups. Inside the groups, farmers have developed a way to define individual labour responsibilities in proportion to the area of (irrigated) land owned: 'beli ayah(an)'. Many groups have created their own written legal regulations that primarily deal with the issue of labour contributions by the group members. Most common are regulations on issues like absence and late-coming, and rules for sanctioning such transgressions. Few groups have written regulations on water distribution. However, group leaders stimulate members to show restraint, not to monopolize water, and to use a wooden temuku for taking water. Some groups have taken over WUA functions like fee collection and fining. Groups with sufficient capital may function as credit providers to the members. Group capital derives from various sources: fines, 'beli ayaan', voluntary contributions by the members, and interest on loans. This banking function of the groups is very popular among the members, and widely regarded as a major cohesive element in such groups. Thus, the cases show that the small farmers' groups that have filled the organizational void of the WUAs play an important role in local irrigation management. Specifically Balinese ways of organizing farmers at this sub-WUA level rather than the blueprinted WUAs form the main structuring force in the tertiary units.

The normative-legal dimensions of irrigation management are closely related to its technical and organizational dimensions. First, the preference of farmers for Balinese water division technology (temuku) reflects widely shared norms pertaining to water rights and the equitable and transparent allocation of water shares through a system of continuous flow. Such normative conceptions of water rights have literally 'materialized' in the Balinese water division technology introduced in the TUs discussed. In the same way, the use of wooden temukus reflects such shared norms about rights to a share of water and ways to appropriate that share. The use of subak technology at these levels is supportive of such norms, and introduces and reproduces them in an irrigation setting that was the product of externally generated engineering norms, principles and rules.

Second, the cases clearly show that many farmers' groups are actively creating their own basic legal rules. The focus of such regulation is largely determined by the local context of irrigation management: no serious water scarcity, the need for a more controlled distribution and a more

effectively enforced farmer contribution to cleaning and repair of the infrastructure, and widespread conflicts about felt inequity of farmer contributions to collective labour. Such regulations tend to focus on labour issues, but may also incorporate rules on water division and appropriation, on the presence of animals in the rice fields (which damages crops and canals), and on religious-ritual matters pertaining to the rice cycle. Such new forms of legal regulation have not only developed in the small farmers' groups, but have also penetrated the WUA level of legal regulation. This is most clearly the case with subak-derived norms and rules pertaining to the religious-ritual dimension of irrigated agriculture. The case of PS3 clearly shows that these religious-ritual dimensions of subak, focusing on the maintenance and protection of religious purity, have become an integral part of WUA regulation. Thus, the WUA is no longer a 'neutral' organization: after the Balinese had turned their WUA into a fully Balinese organization, subak-derived norms and principles became more prominently present in its regulations. From a 'community' based on engineering norms and principles of participatory ideology on which the concept of the TU and WUA is based, the Balinese turned their WUA into a fully Balinese organization based on specifically Balinese sets of norms, principles and rules.

Thus, even the religious-ritual dimensions of subak seem to be penetrating more openly into the regulatory sphere of TU and WUA. The rules for maintenance of religious-ritual purity incorporated in the WUA regulations of PS3 (but, at the level of practices, also the case of the WUA functionary enforcing observation of the rules pertaining to agricultural labour) show that religious norms and principles still play a crucial role in the world of TU and WUA. Classification of religious-ritual dimensions of irrigated agriculture on the one hand, and irrigation-technical, agronomic and managerial dimensions on the other as separate categories governed by different and segmented organizational arrangements is meaningless in Balinese conceptions of irrigated agriculture and irrigation management. Wherever irrigated agriculture is at stake, its religious-ritual dimensions permeate all arrangements and activities related to rice cultivation. As formal organizations, subaks and pekaseh are responsible for agricultural planning and rice rituals in the public sphere. Balinese households have their private cycle of offerings related to the rice cultivation cycle, and responsibility for the observance of subak regulations. The WUA in this case study devises rules pertaining to ritual purity and observance of subak norms.

It can be concluded, then, that subak-derived elements play an important role in tertiary irrigation management. The regulatory void of the WUA provided a fertile breeding ground for the introduction of normative-legal, technical and organizational elements that belong to the world of subak rather than of TU and WUA. In the difficult process of adaptation to, and transformation of the TUs and WUAs, the Balinese farmers make use of the culturally endowed knowledge, organizational and normative-legal resources they have at their disposal. Much of what is going on in the world of tertiary irrigation management derives from a Balinese repertoire of ideals, norms and values, of organizational arrangement, and of knowledge and know-how pertaining to water distribution technology. It should be stressed that these are long-term and open-ended processes of change that depend on a wide variety of factors. The outcome is neither predictable nor equally pronounced in all TUs and WUAs with Balinese farmers. Again, comparison of the TUs analyzed in this chapter is instructive: the ethnically heterogeneous character of PS3 and the correspondence of the Toraja-Balinese divide with the divide between head end and middle / tail end have made the factor of identity (or, more processual: identification) in irrigation management issues more important. It might well be that the ethnic boundary which cuts through the TU reinforces the specifically Balinese elements of irrigation management, leading to incorporation of subak elements into a 'Balinese only' WUA regulation. In KL1ki, on the other hand, subak elements also play a role, but their cohesive influence is restricted to the level of the small farmers' groups and

interactions between them. At the WUA level, fission along the lines of head end (ladang) versus tail end (sawah), with Balinese pitted against each other, predominates.

The case studies make clear that subak, banned as a formal organization from the world of irrigation management and restricted to the world of ritual and religion, has re-entered local irrigation management through the back door of the TU / WUA complex. This has led to various degrees of 'subak-ization' at different levels. Thus, the TU and WUA have changed under the influence of interaction with subak, as subak and pekaseh in Kertoraharjo have been shaped by interaction with state approaches to irrigation development and tertiary irrigation management. These articulations between engineering approaches and subak have produced locally embedded relationships between resources (land and water), technology, human organization and legal regulation, incorporating elements of both. Subaks and tertiary units have become hybrid worlds.

6. Land and water resources in a Balinese transmigrant settlement in Luwu

Kertoraharjo: finding a new Balinese identity in an expanding rural economy

The third case study in this book focused on the role of land and water in Kertoraharjo. In Chapter 7 I have described the history of settlement and re-creation of a Balinese society in Luwu. Irrigation development has been a powerful motor of socio-economic change. Introduction of irrigation has greatly benefited the majority of Balinese settlers. Other factors conducive to development were the absence of inter-ethnic conflict and the farming background of the Balinese transmigrants. In the sixties and seventies, various settler groups competed for land in and around Kertoraharjo. In some cases, government control of land resources on which transmigration in the area had been planned turned out to be limited, as was coordination of land use planning between various government agencies. But this has not negatively affected the population of Kertoraharjo. In a few decades, the pioneer settlement has become a relatively prosperous village. Few Balinese, if any, regret their move to the Kalaena area. There is not a major development problem here.

After the transmigration project Kertoraharjo I had been transferred to the regional authorities and become part of the district administrative structure as a village, it was split up into two new administrative villages: Kertoraharjo with a Balinese population, and Margomulyo with a mixed Javanese and Balinese population. Behind these processes of creating administrative order, quite different and, for the Balinese, far more important, processes were going on: of creating a Balinese customary village society, covering all Balinese settlers in both administrative villages. The Balinese live in two partly overlapping administrative realities, guided by two regulatory orders that cannot be fully reconciled or unified: the customary and the administrative village (see Warren, 1993). While the latter is associated with government issues like registration, tax, and development programmes, the former represents the Balinese as a moral and religious-ritual community. There is no doubt that, in daily life, Balinese identification with the customary village is much stronger than with the administrative village. The customary village is the primary point of orientation in most village matters.

The creation of a customary village order was not an easy process inside a unified 'community'. Distrust and power struggles between groups of Balinese settlers from different areas of origin were common. Differences in local customary practices, real enough in themselves, also became weapons in a struggle for influence and power over the customary village sphere. Gradually, a new sense of identity grew out of a slow process of unification: the identity of Balinese living in Sulawesi, who have adapted to the new realities of life in a transmigrant village with settlers from

various (Balinese) origins, in accordance with the philosophy of 'desa, kala, patra'. This unification has been most radical in the sphere of the customary village and, more in particular, the banjars with their responsibility for a sensitive issue like death and the rituals, obligations and taboos associated with it. The prani, organizations for mutual assistance in ritual-ceremonial matters, often still based on area of origin, have become organizational spaces that leave some leeway for the expression of local Balinese customary identities. In the 'wet' sphere of irrigated agriculture, the Balinese have also created their own institutions, regulatory spaces and boundaries of pekaseh and subak. These will be further dealt with below.

Economically, the introduction of irrigated agriculture rang in a process of rapid transition from production for subsistence to production for the external rice market. With the more recent shift towards cocoa gardening, the Kertoraharjo population has become even more outward-oriented in its agricultural activities: the analysis presented in chapter 8 shows a clear shift from mainly village-based irrigated rice agriculture towards geographically spread cocoa gardening. This booming of cocoa farming by Balinese and other population groups in the Kalaena area holds an important lesson about land tenure, tenure security and incentives for exploitation. The growth of Balinese cocoa gardening took place in a context of land tenure characterized by the absence of state-guaranteed security of tenure. A dynamic market has developed for land with an, often, unclear status. Land in the third and fourth zones discerned in chapter 8 is often claimed by the state as state land, and by local groups as customary land. Much land on which customary rights are said to have rested, was sold to buyers of the many migrant groups in the Kalaena area. Thus, the trend towards privatization and commercialization of tenure takes place entirely outside the context of state definitions of land rights, legal landownership and secure title. The combined factors of availability of land resources under favourable property rights conditions, a booming crop, a market beneficial for smallholder agriculture and migrant labour rather than state-provided security of tenure and legal title are the crucial factors in the development of the cocoa boom. For the Balinese, access to a state-recognized title was not a factor in their decision to invest in garden land. They even buy fertile land in the flood plains that cannot be titled but yields very good cocoa harvests. The cocoa cycle model (see Ruf, 1995; Ruf and Siswoputranto, 1995) seems to provide a much stronger explanation for productive land use than assumptions of a direct causal relationship between tenure under a state-issued title, willingness to invest in land, and productivity.

Settlement, then, was not a one-dimensional process of creating homogeneous state administrative structures. That was, indeed, one side of the story. However, Balinese settlement in a non-Balinese environment crucially entailed the reconstruction and, in part, re-invention of Balinese values, meanings, identities, spatial orientations, and regulative and administrative boundaries. Balinese society in Kertoraharjo is a product of 'development', of state-planned societal change through irrigation development and farmer settlement. At the same time, the way it developed has little to do with the blueprints made for such a project of change: in that sense, Kertoraharjo is as much a product of Balinese cultural identity, values and norms as of state planning. As a product of the rationalizing and standardizing drives of 'state simplifications' (Scott, 1995), it is as locally specific and embedded in a context of Balinese migrant culture as can be. The case study on local irrigation management in Kertoraharjo forms another corroboration of that conclusion.

The hybrid worlds of subak and water users' association

Chapters 9 and 10 were an elaboration of the general theme of land and water in a Balinese transmigrant society through a case study of local irrigation management. I will focus now on the latter. The analysis should not be understood as an evaluation of the regulatory ambitions of the

state in terms of 'success' or 'failure'. As I have stressed above, the transformative capacities of state development programmes in the irrigation sector have proven to be considerable, with positive effects for the Kalaena area, and for the Kertoraharjo population in particular. It is meant to put into perspective a-priori assumptions about the role, direction and outcome of state-initiated irrigation development, and to bring within view the contingent and locally embedded nature of such processes of planned change and forms of regulation that tend to be depicted as unproblematic, controlled, and linear in mainstream approaches to development.

The image created since long about tertiary irrigation management in Indonesia (and, for that matter, in many other countries) is built on sweeping statements about 'sense of ownership', about water users' groups as 'communities', and the participatory character of local management. This developmental, participatory and community rhetoric of tertiary irrigation management tends to close off these areas of intervention from critical analysis. Rather than starting from such assumptions and development rhetoric, I have made tertiary irrigation management, with a focus on its normative-legal dimensions, the object of empirical field research and critical analysis. Developmental approaches to tertiary irrigation management tend to be biased by a-priori assumptions and normative views about the relationships between individual and collectivity, resource, and technology. In the world of irrigation development, the normative-legal 'ought' and the empirical 'is' are too often mixed up (see Spiertz, 2000). To avoid the pitfalls of such approaches, I have analyzed the relations between regulation and farmer behaviour in complexes of technical, normative-legal, and organizational dimensions of irrigation management developing within broader Balinese cultural frameworks.

The elusive character of the normative and legal dimensions of irrigation management will make clear why I have chosen for an analysis of such 'sociotechnical' complexes (see chapter 1). Explicitly or implicitly, law plays a role in various ways. In the first place, formation of WUAs is based on a 1984 Presidential Decree that made WUA formation compulsory for most irrigation systems in Indonesia (see chapter 2). Its expression in daily life is not so much legal in the strict sense of the term. It has established a form of 'mass processing of clients' of a government agency by organizing them locally in a way determined by the state (see Lipsky, 1980). No WUAs in the Kalaena area have made it to the point of formulation of more specific by-laws or transfer agreements.

Second, even before the establishment of TUs and WUAs, the Balinese organizations of *pekaseh* and *subak* exerted local legal authority in agriculture. In Bali, *pekaseh* and *subak* tend to cover a broad field of functions related to (irrigated) agriculture: irrigation technology (design, construction, maintenance and repairs), agronomy and agricultural planning, and the religious-ritual dimensions of agriculture. In Kertoraharjo, the function of these organizations was formally restricted to the religious-ritual one. After a short period in which a kind of hybrid construction existed in which the *pekaseh* of the *subaks* functioned as the WUA coordinator for Kertoraharjo, the *pekaseh* and *subaks* withdrew from the field of 'irrigation management' formally covered by the WUAs. Since then, *pekaseh* and *subaks* as formal organizations have their main functions in the fields of religious-ritual obligations, agricultural planning and *subak* tax collection. The scope of *subak* legal authority pertaining to *subak* tax collection and determination of the date on which transplanting is allowed to start, is contested in Balinese society. Many different views exist about the redefinition of legal authority of the *subaks*, varying from narrow conceptualizations of *subak* based on initial land allocation by the state to the Balinese settlers to a broad definition that extends *subak* authority to all irrigated land owned by Balinese from Kertoraharjo, whatever its location and provenance. According to many Balinese, with the functional separation between *subaks* and WUAs the former have lost their main instrument of sanctioning power - water - to the latter. However, the WUAs, based on a, compared to Balinese '*persubakan*', very narrow definition of farmer involvement in

irrigated agriculture as ‘manajemen’ (operation and maintenance of tertiary infrastructure) holds an even more limited authority and sanctioning power.

Third, at the sub-WUA level small and very pragmatic farmers’ groups exist. These create their own legal rules for local irrigation management. Rules and sanctions mainly cover the field of collective labour. In some cases, group rules also deal with issues like water division and appropriation, and religious-ritual matters. These groups seem to be much more effective than the largely inactive WUAs in organizing and performing management tasks and imposing sanctions on members who transgress the rules or neglect their duties. Group meetings tend to be informal, and combined with field activities like canal cleaning and repairs. In some cases, such groups have even taken over important local management tasks from the WUAs.

If a key characteristic of institutions is that they structure and regularize human behaviour (see Leach et al., 1999; Meinzen-Dick and Pradhan, 2001), the small case studies of two WUAs presented in chapter 10 have identified ‘subak’ as an important institutional element in local irrigation management. Many elements of irrigation management as it has developed inside the TUs with Balinese farmers derive from subak rather than from the WUAs: the type of water division structures (temuku) constructed by farmers, the ways of coping organizationally with differences in landownership and of expressing them in differentiated collective labour duties (beli ayah), the legal rules (awig-awig) formulated for these farmers’ organizations, and the general cultural orientation of which these are an expression. Institutional elements of subak have even penetrated the WUA regulations of one of the TUs discussed. Thus, Balinese irrigators have created a variety of forms of ‘local law’ in the field of irrigation management at various levels of regulation.

The normative-legal dimensions of irrigation also play a role in a less explicit and self-evident, but no less important, form: general norms about water rights and an equitable water division are encoded in water division infrastructure. Artifacts for water division are a reflection of social property relationships existing in a specific society (Mollinga, 1998; see Vermillion, 1985). Water allocation in the engineering system is based on crop water requirements. The division boxes for rotational water allocation to quaternary units in the TUs are a very coarse ‘first approximation’ (Vermillion, 1985) to what farmers perceive to be an equitable water distribution. For Balinese farmers, the system of continuous proportional irrigation using stone-cement temukus stands for a more equitable, precise and transparent way of allocating water rights to groups of right holders. At the level of allocation of a share to individual farmers, the same goes for the use of wooden temukus for water appropriation that has become an institutionalized practice in some farmers’ groups. The use of Balinese technology reaffirms and reproduces such norms for water division and allocation of water rights. Though generalization is impossible on the basis of the small number of cases observed, relationships between these technical, organizational and normative dimensions in the field were striking. Where farmers had constructed new division works to replace old division boxes or shifted a division point to another location, existing farmers’ groups had been revitalized or new ones created. The groups have devised rules for collective labour and water distribution that contribute to the stabilization of local irrigation management and reproduction of its norms, rules and principles, knowledge and technology, and organizational arrangements.

Two things will have become clear from the above discussion. First, these TUs are very complex, and not just blueprinted irrigation units in which farmers orient their behaviour towards formal rules, technology and organizational set-up derived from the world of civil engineering. They are, first of all, complex in terms of the interrelationships between normative-legal, technical, and organizational dimensions of irrigation management. It is hard to isolate ‘the legal’ from the technical and organizational elements. Therefore, I have analyzed the normative-legal dimensions of irrigation management as part of a sociotechnical complex in which the legal, the technical and the organizational are intertwined (see Mollinga, 1998; Vincent, 1997, 2001). TUs and WUAs go

through a process of sociotechnical stabilization. As Boelens (1998) stresses for farmer-managed irrigation systems, a precondition for some degree of stability to be reached is the acceptance by farmers of the complex of normative-legal, technical and organizational elements of irrigation management. In the case analyzed here, the seeming uniformity of the system and its organizational arrangements may hide from view the enormous cultural diversity and differences in norms, knowledge and organizing practices between various user groups, as well as between user groups and external engineering approaches to irrigation management. In the case of Balinese irrigation management, the initial infrastructure, organizational arrangements and normative-legal elements 'dropped' in the process of irrigation development were largely external to the lifeworlds of the Balinese farmers.

Second, and related to the above point, the TUs are complex in another sense: in terms of a plurality of sources or systems of legal regulation at various levels, of organizational elements, and of irrigation-technical knowledge and know-how. Balinese tertiary irrigation management is legally, organizationally and technically complex. One of the characteristics of mainstream approaches to natural resource management is their treatment of its normative-legal and institutional dimensions as unproblematic. 'Rules-in-use' are treated as basically unambiguous and uncontested (e.g. Schlager and Ostrom, 1992). In such approaches 'resource management' is narrowly defined as a discrete field of human activity, the analysis of which - usually from a neo-institutionalist perspective - opens the way to new interventionist ambitions like the 'crafting' of institutions with the right incentive structure for optimal management built in (Ostrom, 1992). However, as this relatively unproblematic case clearly shows, it is not so clear at all what the 'rules-in-use' are. Nor are the technology and organizational arrangements that are so closely interwoven with the rules and principles of water allocation and division, uncontested. On the one hand, such complexity is a source of legal and other uncertainties (Meinzen-Dick and Pradhan, 2001). On the other hand, the existence of various legal, technical and organizational options may be an asset that can be used in shaping the processes of sociotechnical stabilization at work. Farmers have a broad repertoire of subak-derived rules, norms and principles, technical and organizational knowledge that can be actively used to transform TUs and WUAs from externally imposed arrangements into something more akin to Balinese subak, even if this is a subak 're-invented' in Sulawesi. If any degree of sociotechnical order in the Balinese TUs could be discerned, it derived from subak rather than from the TU / WUA complex.

In tertiary irrigation management, hybrid forms of regulation have come into existence: TUs in which Balinese proportional division works have replaced some of the boxes, organizational arrangements that have a distinctively Balinese identity, and legal rules at the level of small farmers' groups - and in one case even at the level of a multi-ethnic WUA - that heavily borrow from the normative-legal and cognitive repertoires of subak. As organizations, pekaseh and subak are the products of processes of hybridization as well. They were defined in terms of the pattern of state allocation of land in the first place, and are radically influenced in their functioning by the organizational and legal arrangements associated with the Public Works system. The 'hybrid worlds' of subak and WUA are locally specific products of the history and dynamics of settlement and irrigation development, generating localized ways of coping with the challenges of irrigation management. This locally embedded and specific character is accentuated if we compare the case of irrigation management in the Kertoraharjo TUs with the role of subak in the neighbouring Balinese village of Alam Buana (see chapter 9, box 12). As to its specifically legal dimension, we may speak of 'local law' here (see F von Benda-Beckmann et al., 1996, 1997; Meinzen-Dick and Pradhan, 2001).

The introduction of subak-derived knowledge, forms of regulation and practices into tertiary irrigation management in the Balinese TUs also entails radical changes in the 'bundles of rights' as

formally defined for WUAs. A canal system like Kalaena exhibits a complex mix of state -, common -, and private, individual and collective property rights. Rights transferred by the state agency to WUAs are a kind of common property rights narrowly circumscribed by state regulation. WUAs have a very limited bundle of mainly operational rights (operation and maintenance of the tertiary system below the gate). Farmers are definitely *not* allowed to actively change the tertiary infrastructure of their TU. Nor are they allowed to decide on the rights of others, or exclude other farmers in the TU from participation in the WUA. Nor is a Balinese WUA functionary formally authorized to regulate the agricultural activities of non-Balinese farmers by making them bend to the subak-determined calendar of rice cultivation. Yet, as the case studies have shown, all these rights were in fact exercised in TUs with Balinese farmers. In some TUs, Balinese have improved the degraded and badly functioning water division infrastructure by building *temukus*. In one TU, they have turned the WUA into a 'Balinese only' organization and given its legal regulations a specifically Balinese identity. In TUs with a Balinese majority, there may be pressure on non-Balinese farmers to conform to the subak rules for rice transplanting and agricultural labour.

Thus, a very ambiguous picture emerges: on the one hand, an active, meaningful and substantial role of farmers in local irrigation management requires a much greater farmer control over tertiary infrastructure than is allowed by the formal framework of the TU / WUA system. Stabilization of the relations between the normative-legal, organizational and technical dimensions entails changes in all three of them. On the other hand, as such processes are intricately related to cultural identity as well, this factor inevitably becomes an issue in WUAs with a multi-ethnic population. As I have shown for one of the TU cases, fission and a strengthening of Balinese identity through the formulation of new subak regulations was the outcome of such processes. Again, this shows how resource use and management may be related to issues of identity and boundaries. The cases of the multi-ethnic WUA that became a 'Balinese only' WUA, and of the processes of fission between head enders and tail enders in the other WUA are also a warning against a-priori assumptions about WUAs as 'communities', the basic homogeneity and cohesion of which can be taken for granted (see also Agrawal and Gibson, 1999, 2001).

This brings me to the point of isolation of 'resource management' as a discrete area of human activity, independent of other dimensions of human life (see also Mosse, 1997). Superficially, the history of tertiary irrigation management in Kertoraharjo is a history of degradation and deviation from the rules established in the process of development of the irrigation system. However, my analysis of its history shows that it is also a history of struggle for improvement and about meaning. For Balinese, irrigation management is not exclusively a field of human activity guided by the instrumental logic of production, and amenable to institutional economic analysis and 'crafting' rules through WUA regulation. In the case study, I have identified the differences in conceptualization and scope of irrigation management as 'persubakan' among Balinese, and as 'manajemen' among officials and engineers, as a major disjunctive force. A conceptual and organizational separation of the religious-ritual dimensions of irrigated agriculture from its physical and operational dimensions is meaningless to Balinese. Both in village matters and in the 'wet' sphere of irrigated agriculture, the gods are 'real social partners' (see Warren, 1993: 20). The consequences of forced separation in terms of management in the more restricted sense of the term may have been considerable. It has torn apart the rhythms of the ritual cycle related to rice cultivation from the physical cycle of management routines. Further, this forced separation of 'water' from 'religion' has weakened the sanctioning powers of both subaks and WUAs. A normative approach to irrigation management in terms of conformity to, and deviance from the rules would never have identified these factors as potentially relevant in explaining locally existing resource management conditions and practices. Nor would social scientific approaches centered on the normative aspects of law as social control have elucidated these aspects of Balinese irrigated

agriculture. For a better understanding of local irrigation management as a localized practice, attention to the cognitive dimensions of resource use are indispensable.

In my view, there is no ground for idealizing subak as a 'traditional' or 'indigenous' institution marginalized by a hegemonic state agency and its structures. Rather, the way in which tertiary irrigation management has developed in the field of tension between TU / WUA and subak is the contingent and unintended outcome of processes of social engineering applied to the irrigation sector on the basis of fixed and normative assumptions about the relationship between regulation and human behaviour. However, critical analysis of the relationships between assumptions of control, regulation and human behaviour should not be restricted to the external 'development' part of the story. As the history of subak in Kertoraharjo shows, it is wrong to assume a total convergence between regulatory ambitions, forms of regulation, social relationships and practices in the customary regulatory sphere, or to start from a dichotomy between the rules of the system and the practices associated with subak. Hence, analysis of the role of subak requires the same 'layered' analytical focus on possible discontinuities between the various levels, at least between the 'ought' of legal regulation and the 'is' of human behaviour, between the normative repertoire and social reality (F. and K. von Benda-Beckmann, 1999; F. von Benda-Beckmann et al., 1996; Spiertz, 2000). My analysis of the development of subaks as formal organizations shows that the mode of translation of widely shared values in Balinese society into discrete definitions of the scope of subak authority and forms of regulation is problematic and subject to serious contestation. At the level of values and principles, there is quite general agreement in Balinese society about the need for subaks. However, if it comes to translation of these values into legal regulation pertaining to transplanting behaviour and subak tax payment, competing definitions of subak and of what ought to be the scope of its authority, such agreement on broad principles are short-lived. Competing definitions of subak become a weapon in a struggle about resources and agricultural decision-making. The majority of Balinese rice farmers seem to have no scruples about using the pattern of land allocation by the state as a definitional criterion for the scope of pekaseh and subak authority.

The role of diversity in irrigation systems based on engineering technology has remained rather under-explored in irrigation studies. I have focused on this hidden diversity in such a system and on the disjuncture between Balinese irrigation traditions and engineering approaches. Rather than a routine of technical construction and establishment of WUAs, the history of irrigation management among the Balinese irrigators of Kertoraharjo is a long and difficult process of sociotechnical stabilization with a context-dependent and unpredictable outcome. I have identified subak as a major source of regulatory order in the TUs and WUAs with Balinese farmers, and hence of technical, organizational and normative-legal complexity. Rather than passively adapting to the blueprints of TU and WUA, farmers are active agents. They borrow from the repertoire of subak in their attempts to establish a greater degree of, for Balinese meaningful, managerial order, and from the repertoire of state-defined rights (to land) to limit subak authority. Farmer behaviour is structured by norms, rules and principles of irrigation management belonging to the domain of subak rather than WUA. Rather than a crafted 'community', the WUA is an environment in which subak-derived forms of more permanent social organization take shape at different levels. The development of Balinese landownership and Balinese identity are important formative elements in this process.

Luwu: complex regulation in a changing world

1. Three cases of complex regulation of natural resource use

In this book I have analyzed three quite different case studies of the complex use and regulation of land and water resources in Luwu. All case studies involved processes of social transformation related to 'land and water' in different settings at various scales and levels, and with different linkages between micro-, meso- and macro-level dimensions. The first case study (chapter 3) was an exploration of the relationship between the emergence of Toraja identity and massive migration to lowland Luwu in a societal context of rapid socio-political change. With a primarily regional socio-political focus, it inquired into the wider determinants and conditions of possibility for the emergence of a migratory movement of people from Tana Toraja in search of access to land in Luwu. I have analyzed this migration as a phenomenon made possible by the specific societal context in which Toraja identity emerged from the early twentieth century and became a regional political factor. Migration and access to land, emerging Toraja identity, and the drawing or redrawing of political-administrative boundaries turned out to be important interrelated elements in a socio-historical explanation of migration to lowland Luwu.

In the second case study, covering chapters 4 to 6, the focus shifted to the analysis of an attempt at intervention in land tenure in the framework of PIADP, a Dutch-funded rural development project in North Luwu. I have described and analyzed the history of project intervention in land tenure through a land reform and settlement programme, the long-term effects of PIADP on security of tenure of farmers affected by the programme, and the ways in which various actors cope with the PIADP heritage of land conflicts and insecurity of tenure. As I have shown, the project created a huge gap between claims and formal rights. It increased insecurity of tenure, tensions and conflicts rather than reducing them. After project termination, representatives of state agencies and (sub-) district administration withdrew from the land issues caused by PIADP, and left conflict solution to those most directly affected: local administrators, farmers affected and other local actors. Generally speaking, rights defined by the project and formally recognized by the state proved of very little value in the day-to-day struggles about land that people affected by PIADP were confronted with.

The third case study, presented in chapters 7 to 10, zoomed in on a Balinese transmigrant village located in the command area of the Kalaena irrigation system in North Luwu. The general focus of this study was the history of settlement, adaptation and re-creation of a Balinese village society in Luwu, with special attention to the role of land and water resources. More specifically, in the last two chapters of this part I have analyzed the complex articulations between WUAs and Balinese subaks in the TUs with a partly or wholly Balinese farmer population. I have shown that the field of tertiary irrigation management is legally, organizationally and technically very complex. Local irrigation management realities have little to do with the blueprinted engineering ideal of TU and

WUA. The complex history of articulation between subak and WUA stood out as a key factor in the historical development of local Balinese irrigation management since the introduction of irrigated agriculture. Notwithstanding the formal exclusion of the subaks as organizations from irrigation management, elements of subak as an institution continue to play an important role in Balinese organizing practices related to irrigated agriculture.

I have already drawn the in-depth and case-specific conclusions at the end of each case study section. I will not repeat those conclusions here. Rather, building on the insights derived from the separate case studies I will try to pull these insights together into a more general reflection on developmental ambitions, forms of regulation resulting from them, and the reality (or rather realities) of life in Luwu to which such regulation is assumed to apply. The three case studies presented in this book can be seen as the building blocks of a more encompassing 'multi-sited' research involving 'the mapping of complex spaces into which fieldwork literally moves' (Marcus, 1998: 19). Such an approach opens up the boundaries of the object of study and typically connects the variously 'sited' studies by juxtaposing and connecting them. The challenge of ethnography is 'tracing and describing the connections and relationships among sites previously thought incommensurate' (Marcus, 1998: 14). For all their differences in theme, focus and scale, taken together the case studies presented in this book *do* convey a broader message about Luwu as an, in many respects, increasingly complex society. This has important consequences for Luwu as a 'project of development' in general and for the agendas of regulation of land and water resources in particular. This complexity is also visible in the tensions that characterize the socio-political order in Luwu by the late nineties and later.

The second section of this final chapter will focus on the field of tension between the image of Luwu as a project of (linear) development with unproblematic relationships between ambitions for change, regulation and reality on the one hand, and the kind of contextualized understanding of development as a socially, historically and otherwise situated process emerging from the three case studies on the other. In the third section I will make a few final remarks on the limitations of state regulation in the field of natural resource use and on the role of identity. The last section is an epilogue on Luwu as a socially and politically complex society.

2. Ambition, regulation and reality: the complexities of development

From development routines to locally specific histories of resource use

The discussion on the role of law and legal complexity in development and resource management presented in chapter 1 formed the point of departure for an exploration and analysis of the normative-legal dimensions of resource use in the three case studies of this book. However, the case studies go beyond an analysis of 'the legal' in isolation. The first case study focused on the issue of migration within a wider context of changing socio-political conditions and emerging normative notions of development, identity and administrative order. In the second case study, the role of normative notions of development, legal regulation through project law, legal complexity and (legal) insecurity is much more explicit. It forms a central feature of the analysis of PIADP. In the third case study, the normative-legal dimensions of irrigation management emerge as part of a much broader technical, normative-legal and organizational complex in which these various dimensions of regulation are closely interrelated.

In chapter 1 I have pointed to the hidden character of the role of law in development policy and practice. Morally and normatively inspired ambitions of planned change tend to be expressed in

legal types of regulation. More often than not, this legal dimension of development remains hidden behind key policy models and conceptualizations of development like ‘participation’, ‘bottom-up development’ and ‘empowerment’. Such phrases stress coherence, agreement, and shared goals and interests and hide disjuncture, tension and conflict. If legal regulation plays a more explicit role in development, it is in the form of instrumental approaches to and uses of law that assume a direct and one-to-one relationship between legal regulation and human behaviour. In such approaches, there is no place for the existence of normative and other complexities and its consequences in terms of behaviour. As I have pointed out, a focus on legal complexity and human agency in development settings fills a gap here. It draws attention away from the narrow confines of formal regulation and explanatory models in terms of rule conformity versus deviance towards the social significance of law in real-life contexts. In such an approach, the impact of the existence of multiple options for, and constraints to human behaviour can be taken into account (see Spiertz, 2000).

Instrumental policy approaches to law and to development mutually reinforce one another in the way they construct the relationships between regulatory ambitions, forms of regulation and social reality as unproblematic and basically open to socio-legal engineering. I have pointed to the instrumental approach to planned societal change and the elusive relationship between the normative and the empirical, the ‘ought’ and the ‘is’, that characterizes both (see Cotterrell, 1992; Spiertz, 2000). The norms and ideals of development planners emerge as predictable future conditions that can be ‘crafted’ onto social reality. Development as a field of human activity has become increasingly self-referential, bearing no relationship to social context, history, or human motivation and behaviour. Basic assumptions of manageability and efficient regulation of planned change are upheld at the cost of an awareness of its more messy, contradictory and uncontrollable properties. Moral and normative notions of development are ‘fixed’ in a legal form and, in the process, reduced to the technical and mechanistic routines of ‘implementation’. Thus, different views, histories and realities are elided from the policy models and implementation schemes, usually to be reduced to the umbrella category of ‘hindrances’ to development. These aspects of development have come under increasingly severe criticism, with a focus on development rather than on law (see chapter 1).

A similar line of criticism has also emerged in the field of natural resource management, which has been deeply influenced by both neo-institutionalist economic and ‘community’ approaches (see Mosse, 1997). Most criticism points to the need for coping with the complexity of use and regulation of natural resources. Especially in ‘common property’ approaches with a policy appeal, locally embedded and historically situated practices of resource use and regulation are treated as a-historical objects of instrumental policy-making. Analysis is based on monodimensional frameworks with a stress on homogeneity, ‘community’ and universality rather than on local specificity and embeddedness. Institutions are treated as relatively unproblematic and uncontested. The role of law tends to be reduced to formal (state) regulation (see Agrawal and Gibson, 1999, 2001; F. and K. von Benda-Beckmann, 1999; Cleaver, 2000; Li, 1996; Mehta et al., 1999; Meinzen-Dick and Pradhan, 2001; Mosse, 1997). Specific resource use situations and problems are de-contextualized and isolated from their specific histories.

I have emphatically analyzed the three case studies presented in this book as historically, socio-culturally and otherwise situated, as ‘localized’ manifestations of various agendas and ambitions of planned societal change (see Appadurai, 1996; Long, 1996; Mosse, 1997). None of the three cases can, in my view, be meaningfully analyzed in a kind of social and historical void that abstracts from the wider arena of intervention, power relations, socio-political changes, identities and identifications. Therefore I have placed the issues of use and regulation of land and water raised in the case studies in such a historical context. By doing so I hope to have shown that a deeper understanding of the cases is only possible by situating them historically. The story of migration to

lowland Luwu is more than just a matter of economic and demographic push and pull factors. It can only be understood within a broader regional historical context of emerging identity and collective identification with a political ideal in a period of rapid social and political change. The specific relationship between law and behaviour that caused the demise of the land reform and settlement programme of PIADP can only be understood if it is situated in a local history of settlement, land registration and titling, project intervention, local practices pertaining to land tenure, and policy transformations in an area in which distinctions between 'state' and 'society' fade away in existing networks of interests, identifications and social relationships. The specific form of Balinese settlement and local irrigation management that has taken shape in the Kertoraharjo TUs also requires a historical and contextualized understanding of Balinese cultural meanings, as well as of the reinvention of such meanings and identities in a non-Balinese environment. I have focused on such processes in local irrigation management and the development of TUs, WUAs, pekaseh and subak in a non-Balinese agro-ecological setting. From such a historically grounded analysis, I was able to draw conclusions pertaining to other dimensions of the localized world of the case studies: on the role of law and legal complexity; on processes of institutionalization; on the relationships between legal regulation, organization and technology; between regulation and human behaviour; on community and identity. In short: on the local social and historical reality in which all ambitions for pre-planned change and attempts at regulation of human behaviour will have to find their place.

Luwu and its history of development: uniformity and control versus diversity and discontinuity

'Development' in the sense of planned societal change has become an important dimension of the broader historical processes of which current Luwu is the product. The emergence of state-initiated agendas for planned change in Luwu belongs to a specific period in history: the late colonial period, characterized by the expansion of Dutch colonial power to the periphery of the colony and by a more 'developmental' approach to colonial rule based on the Ethical Policy (see chapter 2). The Dutch approaches to planning for desired societal change had clearly been internalized by elites in the region, but led to a distinct and politicized view of planned change in Luwu under the influence of regionally specific social and political issues (see chapter 3). New Order plans for state-directed change, basically a continuation of the Dutch policy of colonization and irrigation development but on a much more massive scale, was made possible by the large sums of donor funding available for agendas of modernization, macro-economic development, and production-oriented rural change.

Thus, the recent history of Luwu was crucially determined by ambitions of linear development and social engineering associated with such modernization thinking. Part of the recent history of Luwu, one could say, *is* development, and the case studies in this book are all related to this important dimension of its recent history. A straight line can be drawn between the early observations made by van Braam Morris more than a century ago (see chapter 2), through colonial development policy, to the New Order focus on transmigration and irrigation development. These processes were, of course, crucially related to broader political changes: incorporation of the Luwu kingdom into the colonial empire as a 'self-governing territory' (which at least left some remaining customary identity intact), and later into the post-colonial national administrative structure. The project of modernization through colonization, transmigration and irrigation development entailed a growing state control of essential resources and a focus on more efficient use of land and water for agricultural production by changing locally existing agricultural practices. It was, in other words, a project for the creation of uniformity defined from a modernization perspective on societal change.

This project of modernization reached its culmination point under the New Order regime. Strictly controlled from the centre, 'development' became the key to the future of Luwu. After fierce

regional resistance against a Javanese-dominated political order in the fifties, the New Order ideology of development left little room for diversity beyond the narrow limits tolerated by the Suharto regime. The New Order period most radically aimed at the state-led change of cultural identities and identifications. Local or particularistic identities had to be redefined as national identities. Loyalties should shift from the region to the centre, from a wide variety of particularistic identifications to GOLKAR, the New Order state and its promise of national development. Any collective identities other than those tolerated, which could divide society and cause political unrest, was strictly forbidden. Even talking about divisive factors like ethnicity, religion and political affiliation, known in the New Order period as 'SARA', had been declared taboo. The regime demanded absolute loyalty to the unitary state, its ruling elite and agendas for development. In many respects, the New Order state proved to be an unreliable guardian of the interests of its population. In practice, 'development' often meant economic exploitation of natural resources under conditions set by, and in the interest of, the ruling elites in the centre and interest groups associated with them. In the case of Luwu, the economic interests involved in large-scale forest exploitation, mining and plantation agriculture were given priority to those of population groups exerting local rights to these or related resources (see e.g. Robinson, 1986).

Paradoxically, this very project of modernization, unification, and uniformization has turned Luwu into a 'Miniature Garden', a complex society incorporating various population groups with different ethno-religious backgrounds and identities. The old ambition of creating a homogeneous society through state governance has yielded a social reality that is quite the contrary. Luwu has not become a 'Taman Mini' in the sense desired by New Order politics: stressing unity and loyalty in a political sense, and keeping diversity for the politically less dangerous material cultural forms of expression like dances, ceremonies and architecture. Luwu has become an increasingly complex society; not only in a legal, but also in a socio-cultural and administrative-political sense. The ethnic, religious and broader socio-cultural identities associated with the various migrant or transmigrant groups are the product of a long history of colonial and post-colonial social engineering and classification of parts of these identities as 'adat', 'religion' or 'politics', as beneficial for or a threat to the national state (see Smith-Kipp, 1987). Whatever their transformed or 'reinvented' character, they represent diversity and complexity rather than a state-imposed uniformity. The three case studies point to the existence of complex mixes of state and customary regulation and forms of self-regulation, and to the, sometimes, very limited capacity of state agencies to steer its development programmes and human behaviour in such a complex societal constellation by other means than downright physical enforcement.

3. Regulation of land and water resources

Limitations of state regulation in land and water resources development

The case studies of this book have shown how crucially important the role of (legal) complexity can be in issues concerning land and water resources. Luwu has become an increasingly complex society as a consequence of recent historical developments and changes in the composition of its population brought about by development. As I have shown, the roots of 'development' in the region, in the sense of seeing massive migration and resettlement as a field of systematic planning and social engineering, can be traced to the colonial period. Its first post-colonial regional manifestations appear in the early fifties, when such massive migration becomes the object of emergent regional planning. Politicization of highland-lowland relationships made migration part of

a political strategy, and therefore an increasingly sensitive issue. Uncontrollable, but stimulated in the fifties and sixties by various political actors like PARKINDO and the Toraja Church, regional migration was an important counterpoint to the state-led agendas of land use planning for the national transmigration programme.

The history of migration from Tana Toraja to Luwu puts into perspective the general image of a strong New Order state exerting total control over land resources to impose its development agenda of transmigration. What we see is a variety of state and non-state actors involved in their own projects of planned settlement and competing with the plans for the national programme. As shown by various examples in the book, such competing claims to land were not by definition weaker than the state plans for settlement schemes but could lead to considerable tenure insecurity for both regional migrants and transmigrants (see the Patengko and Rantetiku cases in chapter 7). As the Pompengan case makes clear, large-scale land settlement in this area as a consequence of regional migration did not only make it unsuitable as a target area for the transmigration programme but also defied state attempts at land registration, redistribution and titling. Competing plans for land use did not only exist between state and non-state institutional actors, but between state agencies as well. Thus, land allocation in the framework of the general transmigration programme competed with allocation of land to the victims of a natural disaster by the Ministry of Social Affairs (see the case of Purwosari in chapter 7).

The PIADP case, moreover, shows the serious limits to state capacities of expanding control over land resources through registration and titling. Where titling succeeds, it serves specific groups in society with definite interests in securing a land title and demanding for such a title. Where it does not do so, state-initiated land registration and titling are clearly not regarded as important contributions to tenure security (see also F. and K. von Benda-Beckmann, 1999; Slaats, 1999, 2001). As the case shows, a redistribution and titling programme can only be enforced to a very limited extent and under conditions of long and intensive inputs of financial and other resources, attention by the local administration and responsible state agency, and enforcement of 'law and order' down to the individual field. In the case of PIADP, state intervention in land tenure created a legally complex land tenure situation and a huge gap between formally defined and recognized rights and actual control of land. Thus, the case clearly shows the futility of enforced mass titling programmes implemented in a routine fashion and driven by quantitative targets. In view of earlier experiences with state approaches to land titling and recently re-emerging discussions on state and customary definitions of land rights, the shift from a 'replacement paradigm' to an 'adaptation paradigm' (Bruce and Migot-Adholla, 1994) seems to be absolutely necessary (see Slaats, 1999; 2001).

Where state intervention in land tenure is weak or absent, there is no direct evidence of any negative impact on land productivity, contrary to the legitimating stories often used in favour of intervention in land tenure. Thus, project intervention in land tenure in PIADP rather than absence of a legal title to land created a high degree of tenure uncertainty and made people hesitant to invest in their land. State institutions preferred total withdrawal from this tension field to even a limited degree of involvement. The case of expansion of Balinese farmers and other ethnic groups into the booming sector of cocoa cultivation shows that it is the absence rather than a strong role of the state in markets for land (and marketing of produce) that join with other factors (like migration and forest rent) in creating a cocoa boom (see Ruf and Siswoputranto, 1995). As the effects of the cocoa boom on forest resources show, this is not by definition a positive development. However, it shows that claims of higher efficiency and effectiveness under certain property rights conditions should be treated with great caution.

Other recent developments in the field of land rights that were not discussed in this book show another important dimension of their complex character, and of its regulation by the state in the

interest of national and international capital. The political changes in Indonesia have created new opportunities for population groups in Luwu whose local customary land rights were violated under the New Order regime since many years. Thus, local protests with national and international NGO support against the INCO mining company (see also Robinson, 1984) in (current) East Luwu have been on the increase during the last few years. Such protests tend to focus on the combination of disrespect for customary rights to land, forest and other resources and negative impact of mining operations on the environment. Aside from forming a counterweight against continuation of New Order agendas for large-scale resource exploitation, movements like these contribute to making the complex character of land rights visible. The invention of new conceptualizations of customary rights or the reconstruction of old ones will no doubt have a bearing on the capacity of the state to intervene in land tenure.

Finally, comparison of the interventions in land tenure in PIADP under Dutch development policy and those in Kalaena under the widely criticized transmigration programme clearly shows that the outcome of interventions in land tenure is emergent and unpredictable. Notwithstanding all its developmental ambitions, the former has caused much more social conflict, disruption and insecurity of tenure than the latter. While few Balinese in Kalaena would regret their participation in the transmigration programme, many 'beneficiaries' of PIADP still regret the day the project started influencing their lives, whatever beautiful words may have been spent on this 'integrated' and 'participatory' development project.

It is difficult to generalize on the basis of a locally very specific case study like the analysis of local irrigation management among Balinese farmers. However, the case yields important insights about irrigation development and the organization of irrigation management in Luwu. As I have shown, the capacity of state agencies to do more than just the most basic form of main system operation was extremely limited in the late nineties. The Indonesian crisis and its economic consequences, the decentralization policy and reforms of the irrigation sector, especially turnover policies, will no doubt lead to a further government withdrawal from irrigation management and devolution of rights and responsibilities to water users organized in WUAs or even federated WUAs (see Bruns, 2003; Oad, 2001).¹ In Luwu, with its many irrigation systems based on engineering technology, this will certainly be the case. Agency withdrawal and a shift of farmer responsibilities and rights up to a higher level of the system through the formation of federations of WUAs are now regarded as a new road towards more efficient organization and, this time, 'real' empowerment. The current WUAs are generally regarded as too small for efficient irrigation management (Oad, 2001).

The outcome of combinations of the complexly related processes of administrative decentralization and irrigation management transfer is, of course, totally unpredictable. However, one remark should be made here. The chapters on local irrigation management among Balinese farmers have clearly shown the enormous impact of legal, organizational and technical complexity in the WUAs and TUs. Actually, the WUAs were too large to cope with such complex dimensions of irrigation management. As a consequence, there was a clear tendency for farmers to organize at an even lower level and pragmatically solve their management problems there. If the role of farmer management is 'scaled up' by forming even larger 'federated' units, incorporating more water users and perhaps representing an even greater socio-cultural diversity, one might ask with good reason whether such approaches stand a real chance of becoming more than paper realities. These contradictory trends should at least be a warning against overly optimistic policy agendas for turnover of irrigation management to local groups of water users.

¹ Law No. 22, 1999 on regional autonomy; Government Regulation No. 77, 2001 on irrigation.

The role of identity in resource use and regulation

Let me make some final remarks about identity now. In the case study on Toraja identity, migration and access to land in lowland Luwu I have pointed to the clear relationship between problems pertaining to natural resources, an emergent sense of collective identity and changing conceptions of political and administrative boundaries. This issue of identity and changing identifications in relation to resource use is, indeed, most prominently present in chapter 3. However, overseeing the other case studies, it will have become clear that identity and processes of identification in relation to resource use and conceptualizations of boundaries are an important dimension of all cases. In various settings and at different levels, identity and processes of identification play a crucial role, and thus seem to have an important bearing on issues of governance and resource management in Luwu as a whole.

The role of identity in the case study of PIADP remains rather implicit. However, there is a clear relationship with the first case study (chapter 3), in which I have discussed the issue of identity in relation to access to land in Luwu. In the PIADP case, part of this story comes back in the history of refugee settlement in the later PIADP area. From the sixties, the rapidly increasing migration into the area can also be related to the issue of emerging Toraja identity and its relation to strategies of migration. During implementation of PIADP, networks between local power holders and officials based on identity became an important causal factor in the Sinangkala land conflicts. Identity issues related to the sensitive history of Luwu-Toraja relations had been an important factor behind the disappearance of Toraja officials from the administrative agencies in Luwu. As a consequence of this fact, biases of inclusion and exclusion were patterned, at least in part, along lines of identity. The main beneficiaries were lowland Luwu officials and local power holders, the main victims were highland Luwu and Toraja claimants of land. In addition, identity played a clear role in the reactions to implementation of the PIADP land policy, especially in the formation of coalitions against the programme and in the access to and mobilization of external support at higher levels of administration.

In the case study on Balinese settlement, identity and new and ongoing processes of identification with certain norms, institutions, forms of organization or technologies emerged as an important factor as well. The very act of reconstruction of a Balinese society in Luwu is based on identity and the creation of new identifications with, for instance, the customary village, the banjar or the complex of subak and pekaseh. I have shown the important role of identity in local irrigation management, especially in TUs that transcend ethnic boundaries. Creating stabilized complexes of normative, technical and organizational elements, a precondition for the emergence of sustainable forms of local irrigation management, entails a difficult process of matching resources, identities and physical-organizational boundaries. The disjuncture between subak and WUA and the case of developments in the multi-ethnic TU (PS3) are clear illustrations of this dynamic role of identity.

In resource use settings that are characterized by such a limited degree of effective state control and such high degrees of complexity of norms, organizational arrangements, socio-cultural affiliations and identities it would be naïve to assume a direct relationship between intentions and outcomes, between legal forms of regulation and behaviour in resource use and management issues. Instrumental approaches that do not take into account the specific ways in which resource use in all its dimensions is locally embedded will not be able to come to terms with such complex relationships.

4. Epilogue: Luwu: from New Order to which order?

Violent conflict

In the foregoing sections I have pointed to the high degree of socio-political, legal, political-administrative, and ethnic-religious complexity in Luwu. I will now make some concluding remarks about what this means for current Luwu in another period of rapid and radical societal change. As I have shown in chapter 3, current developments in the region in times of crisis, political tension and administrative responses to the threats of disorder and total breakdown of the Indonesian state are reminiscent of an earlier historical period in which the national state was challenged and diversity ruled. As current discussions about the formation of a province incorporating Luwu (or rather the three new Luwu's that are the product of the recent administrative and political changes) and Tana Toraja clearly illustrate, the field of tension formed by resources, identities and boundaries, and the ambiguous relations between Luwu and Tana Toraja taking shape in it, continue to influence regional politics to this day.

Violent conflicts in Luwu, especially in the course of the nineties of last century, show that the relationships between migrated highland populations and the lowland Luwu population continues to be a major source of tension and conflict in the region. When I visited Luwu in 1999, the horrifying traces of mass conflict were still clearly visible. Mass violence in Luwu is definitely not a product of the recent crisis. However, the void of power and the political uncertainty created by the crisis were a further boost to such violence, which took on a really nasty character in the course of 1998. The remains of hundreds of plundered and burnt down houses and cocoa gardens, the accounts of the great number of casualties and wounded victims and of the ferocity of the fighting that had been going on for quite some time testify to the unstable character of Luwu in times of crisis. During the recent years of instability it also became clear that the legitimacy of the state administrative apparatus had become totally eroded in the New Order period.

There is a clear pre-crisis history of the mass conflicts in Luwu, with regular outbreaks of communal violence at least since the eighties and with possible roots in the pre-New Order period analyzed in chapter 3. Mass conflicts in which lowland Luwu and Toraja identities seem to have played a role occurred at least in 1988-1989, 1993-1994 in the New Order period, and in 1998-1999 and after in the post-New Order period. While outbursts of conflict in the late eighties could still be contained before they caused many casualties, violence in 1994 is said to have caused at least thirty casualties, many wounded, and heavy material damage. The 1998-1999 outburst in the town of Sabbang and a large number of villages in the Luwu plain, already in times of *Reformasi*, more or less followed the same pattern over a longer period. According to reports in the Indonesian press these conflicts have caused at least twenty-six casualties, 119 injured and a material damage of at least 395 houses that have been set on fire.² While during the New Order such 'SARA' conflicts in Luwu were hushed up, in recent years the existence of a high potential for violent mass conflict in lowland Luwu was more openly recognized. Thus, the politically sensitive history of migration and Toraja expansion to Luwu, and its close relationship to the emergence of Toraja identity still play an important political role in Luwu. It makes for a socially explosive mixture that can be easily manipulated politically.

Though conflicts often occur along ethno-religious lines of identification, these seems to be the trigger rather than the ultimate cause. A combination of socio-economic factors with a general sense

² For accounts of Luwu violence see, among others, Banjarmasin Post 17-1-1999; Kompas 15-9-1998; 14-1-1999; 15-1-1999; Suara Merdeka 16-1-1999; 11-2-1999. My account is also based on interviews in Luwu.

of having lost from the migrants plays an important role. Peluso (2001) has explored the field of tension between resources, spaces and identities for the case of mass violence in Kalimantan, pitting the local Dayak population against Madurese migrants. She identifies local resentments about general and resource politics of the New Order state, as well as a widespread sense of being excluded from the development process as the major causes of local dissatisfaction.³ Such local dissatisfaction and the way it is canalized along lines of ethnic and religious identity and group affiliation seems to play an important role here as well. When the cocoa prices were soaring as a consequence of the crisis, people in the conflict areas in North Luwu were engaged in burning one another's cocoa gardens. Jealousy (*keceburuan sosial*) is often given as an explanation for the Luwu conflicts, and not without ground. On the one hand many people, locals and migrants, have improved their situation during the last decades. On the other hand, large sections of the lowland Luwu population were part of a sago and fish-based economy rather than of one based on intensive irrigated rice cultivation and cash crop production for the market. Contrary to many members of migrant groups, the lowland Luwu population has, in general, not become accustomed to the rapid commoditization of land and the market orientation of agricultural production. While migrants have been able to benefit considerably from the land resources acquired in Luwu by turning them into sawahs and gardens, the local population has reacted less dynamically to these new opportunities. Local people are often said to air their dissatisfaction by contesting land claimed and worked by the Toraja migrant population.

From the late nineties, clashes involving massive communal violence have occurred in many places in the North Luwu Plain. Violent conflicts have also occurred in and around the area of the former PIADP project discussed in this book. Though it is unclear what has exactly happened, at least some of these clashes seem to have followed the dividing lines of area of origin and religion. The relative absence of mass conflicts between the local population and transmigrants in Luwu remains remarkable. However, it can be concluded that the presence of large numbers of population groups with different ethno-religious backgrounds forms a possible basis of social conflict in the area. The outcome depends on future lines of identification with changing boundary markers and influenced by changing mixes of xenophobia and tolerance, but also on the future capacity of the state to create social and economic conditions conducive to equitable development of all population groups in Luwu.

Luwu in a crisis of identity

Under the influence of the rapid changes in Luwu during the last decades, its population is struggling with an identity problem (see chapter 2). The Darul Islam period, the demise of the kingdom and a long period of New Order politics had left few traces of the political position, customs and traditions of the former regional power. In the nineties, the growing need for political legitimacy on the part of the Luwu district administration became manifest in its attempts to appropriate certain customary elements and use it to increase its prestige and power. District head appointments in the New Order period have always been a sensitive affair, not only in Luwu. In Luwu, the following factors seem to have played a role. First, there was the general New Order predilection for district heads with a military background, often originating from outside the district itself. Second, the recent history of Luwu and the wider region must have played a role here: Luwu

³ In Peluso's text, there is another interesting parallel with the Toraja case discussed here. She mentions Dutch colonial plans for a Great Dayak Province as crucial in shaping post-colonial Dayak collective identity.

as a core area of the Darul Islam movement.⁴ Third, there was the special position of Luwu in South Sulawesi. Before it was administratively split up, Luwu was a huge district rich in natural resources (see also chapter 2). Large-scale resource exploitation started in the New Order period. Luwu became known as a *daerah basah*.⁵ Command over these resources and over the financial resources flowing into the area for development programmes made the function of district head quite different from what it had been in the fifties. District head appointments always generated tensions and rumours of manipulation from the provincial level, and sometimes even led to open protest. When a new bupati was appointed in the beginning of the nineties, this was also the case. Probably aware of the lack of legitimacy of the district head in the eyes of large sections of the population, the administration took recourse to a strategy of increasing its appeal and legitimate authority by using symbols that vaguely referred to the distant and more recent history of Luwu. One example of such symbolism is the introduction of *Hari Jadi Luwu* (the birthday of Luwu) in the course of the nineties. A special commission was formed to prepare for the introduction of this yearly memorial day, and some South Sulawesi historians were found willing to lend their name to its historical legitimation. Through a mysterious juggling with numbers and historical data, vaguely referring to the struggle for independence against the Dutch, the coming of Islam to Luwu, and the I La Galigo tradition, 21 January 1997 became the 728th birthday of Luwu (see Roth, 2002).

In 1996 another event had occurred in which the customary tradition of the Luwu kingdom was mobilized for an event that can at least partly be interpreted as having a political meaning in strengthening the legitimacy of the district administration by vaguely referring to adat symbols. The marriage of a daughter of the (then) district head with a son of the governor of South Sulawesi was a major event in Luwu. Neither of the two families actually comes from Luwu. However, according to the wish of both families the marriage was performed by making use of all adat symbols associated with the Luwu kingdom. While it seems to have been the intention of the families to make a selective and half-hearted use of some of the symbols involved in a marriage according to Luwu adat, adat functionaries only allowed the event to take place under the flag of adat if it was fully executed in accordance with adat rules and under the guidance of the datu of Luwu. Thus, while at first sight nothing more was at stake than a dream marriage legitimized by the Luwu adat council, beneath the surface a struggle had been going on about the degree to which adat could be legitimately used for political purposes, about the relationship between adat and the government administrative spheres and the relative strength of both.

At the same time, members of the Luwu elite were also actively engaged in the reconstruction of 'traditional' Luwu. In the mid-nineties a huge wooden adat house called Langkanae (palace) had been built. The district administration had supported the project with the objective to turn it into an *obyek wisata* (tourist object). Thousands of tourists were visiting Tana Toraja but hardly any tourist came to Luwu. In order to divert a larger number of tourists from the highlands to lowland Luwu, the latter needed tourist attractions. Contrary to what is the case in Tana Toraja, 'culture' in Luwu is not clearly visible in the form of adat houses, ceremonies and ritual. The agenda of stimulation of tourism to Luwu required the reconstruction of at least some material aspects of Luwu culture associated with the former kingdom. However, the palace took on quite another function.

Palopo was no longer the safe place I had known it to be some years before. Violent conflicts and shooting had become quite common, and the people behaved as if curfew had been decreed. These, and the violent conflicts along ethno-religious lines in the North Luwu Plain, were seen by the authorities as a major threat to political stability. Early 1997 I was invited to attend a meeting in

⁴ With the war on terrorism after 11 September 2001 and its manifestations in Indonesia, the history of Darul Islam in Luwu has become of great relevance for understanding the networks associated with radical Islamic groups. See International Crisis Group, 2002.

⁵ A 'wet' area, financially profitable for bureaucrats, administrators and investors.

Langkanae. The problems in Luwu were, to my surprise, rather openly discussed here. The district authorities had, of course, given their consent to the meeting and sent their representatives of civil administration, military and police. Apart from that, what was going on had the character of an adat council meeting rather than a formal meeting in the presence of New Order district authorities. Representatives of the various customary groups in Luwu attended the meeting, sitting on the floor in a big square. The meeting was opened by the datu of Luwu and chaired by another member of the nobility. Sensitive issues concerning the problems of violence in Luwu were openly discussed. The adat house had clearly become a space in which some kind of alternative socio-political organization could come to life even under the New Order. This open recognition, in the presence of district authorities, that there was trouble in Luwu and that the authorities were not capable of bringing the conflicts to an end were important signs of change even before the crisis (see Roth, 2002).

During the crisis years, this trend became even clearer. In the New Order period and after the downfall of the Suharto regime, people had little faith in the protective role of army, police and regional authorities. People had reverted to forms of self-regulation and the formation of local defense units. After violent conflicts had broken out in the town of Sabbang, both parties rejected intervention by the authorities and demanded mediation by the datu and the Luwu adat council. After so many years of New Order politics, there was the general feeling that conflicts were not solved but only suppressed with the short-term objective of 'restoring and maintaining law and order'. Luwu elites had continued to play a sometimes important backstage role even during the New Order. However, only after the 1998 Sabbang riots, during the process of mediation and reconciliation between the warring groups, references were more openly made to the adat council and the datu. Though rather late - the conflict had already escalated, many people had died and houses burnt down - the adat council was invited by the district authorities to play a role in conflict solution. The parties were approached in adat style rather than through representatives of law and order. Both parties agreed with mediation by the datu and the adat council. Thus, for the first time since several decades the Luwu adat council was invited by the authorities to play a leading role in the resolution of a major violent conflict. The adat ceremony in October 1998 to confirm the peace treaty was held for the first time in more than seventy years (see Roth, 2002).⁶

One thing has become clear from this: the conflicts in Luwu, especially those emerging in times of crisis and weakening of the state apparatus, have given new importance to adat as a possible alternative source of social and moral order in Luwu. Various population groups (Luwu, Toraja, Pamona) have explicitly asked for mediation by the adat council of Luwu and the king. As I have made clear in the introduction to this book, the crisis in Indonesia is not only an economic, but as much a political, social and moral crisis. Thus, we can see the gradual re-emergence of datu and adat council as an alternative moral order in a society literally de-moralized during the New Order.

As I have shown in chapter 3, the political changes in Indonesia since the late nineties have radically changed the power balance between centre and periphery. Notwithstanding the Suharto heritage of hierarchic rule and control, his rule has left a basically weak and vulnerable state characterized by excessive centralization, corruption and nepotism, military enforcement and a general lack of legitimacy of the administration (Holtzappel, 2002). The introduction of laws on regional autonomy and fiscal balance between the central government and the regions provided new opportunities to regional political agendas.⁷ In Luwu, the full dynamics of these processes can be seen. On the one hand, the process of formation of new districts broke Luwu District into pieces. On the other hand the old political ambition of creating a separate province re-emerged in a movement

⁶ The symbolism of the (adat) house as the centre of power played an important role here as well. See also Errington, 1989; Robinson, 1998.

⁷ Law no. 22 and Law no. 25, 1999.

lobbying for Luwu Raya. These processes entail a complex mix of economic interests, political power struggle and issues of identity. Discussions about splitting up Luwu had been going on for years even in the Suharto period, but the issue was considered too sensitive to push through a further administrative separation. A major bone of contention was (and still is) the INCO mining company in Soroako (in recently formed East Luwu), a major cash earner in the region but now also increasingly the target of local population groups negatively affected by mining operations, supported by NGOs with a mission in sustainable development, human and customary rights, and nature conservation. In view of the trend to devolution of fiscal autonomy towards the districts, formation of East Luwu had many supporters among the elites in the area concerned, but many adversaries in the other parts of former Luwu District (see also Morrell, 2002).

The struggle about identity and identifications is clearly going on here. Morrell (2002), discussing the various movements for regional autonomy in South Sulawesi, also mentions the Luwu Raya case. While the possible advantages of provincial separation from South Sulawesi will be clear (for instance the capacity to deal directly with the national centre rather than being dependent on Makassar), there is absolutely no agreement about the form such provincial autonomy should take (see chapter 2; see also Morrell, 2002). Morrell also mentions the issue of inclusion or exclusion of Tana Toraja. She points to the ambivalent relationships between Luwu and Tana Toraja. Ethno-religious, economic and other tensions seem to have been a major factor behind the ultimate exclusion of Tana Toraja from the Luwu Raya plans (see chapter 2), though common inclusion in Luwu Raya could perhaps have been a way to cope with these tensions more effectively (see Morrell, 2002).⁸ The conclusions and insights derived from the regional historical case study on Luwu and Tana Toraja are extremely relevant in explaining these recent developments in the political struggle for Luwu Raya. Analysis of the history of relations between the two areas contributes to our understanding of these processes in general, and the issues of identity involved in particular.

Starting from complex resource use in Luwu, I have ended up with Luwu itself as a socially, politically and otherwise very complex administrative division of the national state. In view of the crucial social, political and administrative developments in Indonesia, there will probably be no end to that complexity in the foreseeable future.

⁸ One of the economic factors caused by the crisis that contribute to these tensions is the increased migration of people from Tana Toraja as a consequence of the dramatic collapse of the tourist sector in Tana Toraja (Morrell, 2002).

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Summary in Dutch / Samenvatting

Ambitie, regulering en realiteit. Complex gebruik van de natuurlijke hulpbronnen land en water in Luwu, Zuid-Sulawesi, Indonesië

Ik behandel in dit boek drie dimensies van de complexiteit van gebruik en regulering van de natuurlijke hulpbronnen land en water in Luwu, gepresenteerd als drie intensieve 'case studies' binnen de bredere thematiek van het onderzoek. Aandacht voor rechtscomplexiteit - het bestaan van verschillende bronnen en definities van normatieve en juridische regulering in dezelfde sociaal-politieke ruimte - is daarbij een belangrijk conceptueel uitgangspunt. Ieder van de drie deelstudies wordt afgesloten met conclusies die specifiek betrekking hebben op het desbetreffende deel. Het laatste hoofdstuk van het boek (hoofdstuk 11) is een vooral reflectie op de bredere betekenis van de in de deelstudies geconstateerde vormen van complexiteit voor processen van regulering van hulpbronnen en bredere sociaal-politieke processen in Luwu.

De staatsgeleide ontwikkeling van irrigatiestelsels is een belangrijke factor in de economische en maatschappelijke veranderingen in Luwu sinds de koloniale periode. De basis voor deze snelle en ingrijpende veranderingen werd in de jaren dertig van de vorige eeuw gelegd door de Nederlandse koloniale overheid. Twee speerpunten van het koloniale ontwikkelingsbeleid in het kader van de 'Ethische Politiek' waren emigratie (van het dichtbevolkte eiland Java naar de dunbevolkte 'buitengewesten' van het koloniale rijk) en irrigatie. In Noord-Luwu werden beide gecombineerd in programma's voor kolonisatie (hervestiging van Javaanse boeren op eilanden buiten Java) en ontwikkeling van irrigatiestelsels. In de loop van de jaren dertig werd daadwerkelijk begonnen met de uitvoering van deze programma's.

Deze ontwikkelingsplannen voor Luwu werden abrupt afgebroken door de turbulente sociale en politieke ontwikkelingen in de regio: de Japanse bezetting, de terugkeer van de koloniale machthebbers na de Japanse capitulatie, de dekolonisatie, en de Darul Islam opstand (DI/TII) vanaf het begin van de jaren vijftig tot 1965. In datzelfde jaar kwam het Suharto-regime aan de macht. Nadat 'rust en orde' in Indonesië op uiterst gewelddadige wijze waren hersteld, lieten grote institutionele donoren als de Wereldbank hun vertrouwen in het nieuwe regime blijken door de toekenning van grote bedragen aan ontwikkelingsgeld. 'Pembangunan' (ontwikkeling) werd een sleutelwoord in de politieke ideologie van Suharto's 'Nieuwe Orde'. Vanaf eind jaren zestig werd ook de koloniale ontwikkelingsagenda weer met grote voortvarendheid opgepakt. In Luwu leidde dit tot een gecombineerde aanpak van wat in Indonesië 'transmigratie' was gaan heten (hervestiging van boeren uit Java, Bali en Lombok) en de grootschalige ontwikkeling van irrigatiestelsels en andere infrastructuur. Deze interventies hebben Luwu in korte tijd ingrijpend veranderd, en niet alleen in negatieve zin. De geïrrigeerde rijstbouw en sterk verbeterde infrastructuur hebben de levensstandaard onder zowel de lokale bevolking van Luwu als migranten aanzienlijk verhoogd en hun voedselzekerheid vergroot.

Tegelijkertijd is Luwu door transmigratie en regionale migratie een in vele opzichten zeer complexe samenleving geworden waarin spanningen en conflicten tussen lokale bevolking en migranten langs lijnen van etnische en religieuze identificatie met grote regelmaat tot gewelddadigheden leiden. Luwu wordt vaak een 'Taman Mini' genoemd, naar analogie van het door de Suharto-familie opgerichte cultuurpark op Java, waarin de materiële cultuur van alle 'erkende' etnische groepen in de archipel staat tentoongesteld. Luwu en haar bevolking zijn daar zelf overigens niet bij. De grote mate van complexiteit van de in Luwu ontstane samenleving komt ook tot uiting in de vele problemen rond gebruik en regulering van natuurlijke hulpbronnen. De

samenleving in Luwu is niet alleen in juridisch, maar ook in sociaal-cultureel en politiek-bestuurlijk opzicht zeer complex, zoals ik in de deelstudies laat zien.

De eerste case study (zie hoofdstuk 3) is een analyse van de regionale geschiedenis van migratie van boeren uit het hoogland van Zuid-Sulawesi naar Noord-Luwu. Deze massale migratie in de tweede helft van de vorige eeuw is van grote invloed geweest op het huidige grondgebruik in Noord-Luwu. De ruime beschikbaarheid van land in Luwu oefende een grote aantrekkingskracht uit op migranten uit het hoogland op zoek naar landbouwgrond. De massaliteit en oncontroleerbaarheid van deze migratie en vestiging van migranten in Noord-Luwu maakten deze processen politiek zeer gevoelig. Verschillen in etnische en religieuze identiteit tussen migranten en lokale bevolking zijn bovendien een continue aanleiding voor spanningen en gewelddadige conflicten. Een diepere verklaring van de politieke en maatschappelijke gevoeligheid van deze migratie moet worden gezocht in de relatie ervan met bredere processen van sociaal-economische, culturele en politiek-bestuurlijke verandering in de regio. In mijn analyse van de migratie besteed ik speciale aandacht aan de opkomst en toenemende rol van een specifieke 'Toraja'-identiteit onder de bevolking van het hoogland. Ik stel daarbij de onderzoeksvraag of er een verband bestaat tussen het ontstaan van nieuwe identiteiten en identificaties in het gebied en de migratie naar het laagland van Luwu. Deze 'Toraja'-identiteit is voornamelijk een product van Nederlandse koloniale - en zendingspolitiek. Bij bestuur en zending bestond de uitdrukkelijke wens om de verschillende bevolkingsgroepen in het hoogland van Zuid- en Centraal Sulawesi bestuurlijk te verenigen in een 'Grootere Toradja'. Deze eenheid moest alle tot het Christendom bekeerde hooglandgroepen verenigen in een buffer tegen de vooral in het laagland van Sulawesi al eeuwenlang gevestigde Islam.

De onafhankelijkheid maakte geen einde aan deze in de koloniale periode ontstane politieke ambities. In de jaren vijftig speelden deze zelfs een belangrijke rol in de regionale politiek. De belangrijkste manifestaties waren pogingen om 'Grootere Toradja' (na de dekolonisatie 'Toraja Raya' geheten) als politiek-bestuurlijke eenheid op provinciaal niveau te vestigen, de strijd voor een autonome status van het zuidelijke hoogland (als het District Tana Toraja) ten opzichte van het kwijnende koninkrijk Luwu, en een vooral op het laagland van Luwu gericht expansionisme dat door oudere Toraja-politici werd aangeduid als een strijd voor 'Lebensraum'. Bij dat laatste speelde vooral het grote potentieel aan irrigeerbare grond in Noord-Luwu een rol. Massale migratie naar de kustvlakte werd niet alleen gezien als een oplossing voor de sociale problemen in het dichtbevolkte en in sociaal opzicht hiërarchische hoogland, maar ook als deel van een op Luwu gerichte politieke strategie. Het eerstgenoemde politieke ideaal stierf in de politieke realiteit van de regio in de loop van de jaren vijftig. Het tweede ideaal werd werkelijkheid in de vorming van het District Tana Toraja. Het op het laagland van Luwu gerichte expansionisme vanuit Tana Toraja manifesteerde zich in een sterk toenemende migratie naar Noord-Luwu en exploitatie van land in dit gebied.

Ik behandel vooral de sociale, politieke en identiteitsdimensies van massale migratie naar Luwu binnen het spanningsveld van de politieke ontwikkelingen in de jaren vijftig. De sterke mate van politisering van verhoudingen tussen hoogland en laagland, in combinatie met een identiteitspolitiek gericht op afscheiding van Luwu, vorming van een provincie en migratie maakten diverse spanningen en contradicties in de verhoudingen tussen Luwu en het Toraja-hoogland zichtbaar. De analyse laat zien dat er een sterke samenhang bestond tussen identiteitspolitiek, het streven naar nieuwe politiek-bestuurlijke verhoudingen en de kwestie van toegang tot natuurlijke hulpbronnen in Luwu, en dat dezelfde maatschappelijke en politieke actoren - met name gelieerd aan de politieke partij PARKINDO en de Toraja-kerk - op alle genoemde gebieden een sleutelrol vervulden. Tevens besteed ik aandacht aan enkele andere manifestaties van de spanningen rond identiteit, migratie naar Luwu en verandering van politiek-bestuurlijke grenzen in de regio: de Makula-overeenkomst ter regulering van migratie, en de zgn. 'LUTAT-affaire' betreffende plannen voor de vorming van een provincie waarvan Luwu ('LU') en Tana Toraja ('TAT') deel zouden gaan uitmaken. Ik concludeer

dat er inderdaad een duidelijke samenhang was tussen opkomst van een Toraja-identiteit en migratiestrategieën om toegang tot land in Luwu te verkrijgen. Het gaat hierbij overigens niet om een puur historische kwestie. De recente politieke ontwikkelingen in Indonesië en de wetgeving voor regionale autonomie hebben de oude politieke agenda's gericht op de vorming van een provincie die beide gebieden omvat weer volop zichtbaar en actueel gemaakt.

De tweede case study (zie de hoofdstukken 4, 5 en 6) betreft een analyse van de lange-termijn effecten van interventie in landrechten in het kader van het Pompengan Integrated Area Development Project (PIADP). PIADP, een bilateraal Indonesisch-Nederlands project voor rurale ontwikkeling, werd gepropageerd als een model voor geïntegreerde plattelandontwikkeling in Indonesië. Het project was in 1980 begonnen als het Pompengan Implementation Project (PIP), een irrigatieproject gericht op constructie en met weinig aandacht voor sociale aspecten van ontwikkeling. Onder invloed van de problemen die daarbij optraden, veranderende visies op 'ontwikkeling', en grotere aandacht voor sociale dimensies van gestuurde veranderingsprocessen veranderde PIP in het 'geïntegreerde' PIADP. In PIADP stond interventie in grondgebruik en bestaande grondrechten via een programma voor herverdeling van land en (her)vestiging van boeren centraal.

Ondanks deze verschuiving naar andere kernactiviteiten bleef het project vooral een irrigatieproject. Problemen met landgebruik, landrechten en bevolkingsdichtheid werden in de eerste plaats gezien als een bedreiging voor lokaal beheer van het toekomstige irrigatiestelsel, en landhervorming en vestiging van boeren als een oplossing voor deze problemen. De nieuwe aanpak betekende echter een verschuiving van een vooral technische interventie naar een veel radicalere, complexere en maatschappelijk meer gevoelige sociaal-juridische interventie. Daarbij hoorden nieuwe, uit het Nederlandse ontwikkelingsbeleid afkomstige sociale doelstellingen als het creëren van een egalitaire structuur van grondbezit en grotere rechtszekerheid met betrekking tot land. Een groeiend besef van complexiteit van de uitvoering van PIP had aldus geleid tot nog veel complexere oplossingen voor de problemen, gekoppeld aan steeds ambitieuzere doelstellingen. Om deze doelen te bereiken werd een 'projectrecht' gecreëerd op basis van donornormen en prioriteiten, en secties uit de Indonesische Agrarische Basiswet van 1960. In de landhervorming werden in het projectgebied bestaande claims (d.w.z. in het verleden opgebouwde, maar niet door de overheid erkende en van een rechtstitel voorziene lokale rechten) op land door het project geïnventariseerd en in een selectieprocedure gewogen. De claimhouders wier claims door het project werden erkend werden als 'begunstigden' van PIADP toegelaten en kwamen in aanmerking voor land en andere faciliteiten.

De belangrijkste onderzoeksvragen voor dit deel van het onderzoek zijn de volgende: welke definiëring van landrechten heeft in PIADP 'gewonnen', de lokale definitie gebaseerd op arbeid geïnvesteerd in en grenzen ontstaan door ontginning, of de definitie op basis van het projectrecht van PIADP? Wat was de invloed van het landhervormingsprogramma op landgebruik en landrechten? Hoe gaan verschillende actoren om met de ontstane situatie van rechtscomplexiteit? Hoe en door wie worden conflicten opgelost? Wat is daarbij de rol van juridische instituties? Hoofdstuk 4 bevat een beschrijving van de lokale context van PIP en PIADP en een analyse van de ontwikkeling van nieuwe ambities en doelstellingen voor PIADP. In hoofdstuk 5 presenteer ik een analyse van de uitvoering van het programma voor landhervorming en vestiging van boeren in PIADP, voornamelijk gebaseerd op mijn eigen ervaringen als adviseur voor het programma. In hoofdstuk 6 analyseer ik de gevolgen op langere termijn van dit programma voor rechtszekerheid met betrekking tot landgebruik in het voormalige projectgebied.

De landhervorming in het kader van PIADP had geresulteerd in een formeel door de overheid erkend eigendom vastgelegd in allocatieplannen, overheidsbesluiten en kadastrale eigendomstitels op land. Uitvoering van PIADP had tot grote conflicten geleid tussen claimhouders en door het

project erkende rechthebbenden op land en faciliteiten. De overheid en het project hadden maar weinig machtsmiddelen om uitvoering van de landverdelingsbesluiten ook daadwerkelijk aan de door het project erkende en niet erkende claimhouders op te leggen. Hierdoor was er al in de projectperiode een grote kloof ontstaan tussen de formeel erkende rechten op land zoals vastgelegd in projectbesluiten en eigendomstitels enerzijds, en de feitelijke controle over land anderzijds. Deze kloof was vooral een afspiegeling van het geringe vertrouwen van boeren in de interventies in landrechten. De data met betrekking tot landrechten en rechtszekerheid in voormalig PIADP wijzen op een massale terugkeer van claimhouders naar de grenzen van de vóór de uitvoering van PIADP door hen geclaimde grond, in de meeste gevallen gebaseerd op in het verleden in ontginning geïnvesteerde arbeid. Deze definities van landrechten blijken veel sterker te zijn en meer zekerheid te bieden dan de door het project gedefinieerde en erkende rechten op land. De massale terugkeer naar de oude claimgrenzen leidde tot langdurige conflicten in het hele voormalige projectgebied. Daarbij bleek dat de grootste problemen zich voordoen in die landhervormingsgebieden waar ook een programma voor hervestiging van boeren werd uitgevoerd. De claimhouders die tijdens uitvoering van PIADP voor dit programma hadden moeten wijken en in de meeste gevallen nooit toegang kregen tot alternatieve grond die werd 'vrijgemaakt' door het creëren van een redistributie-effect, bleven door (dreiging met) geweld pressie uitoefenen op de nieuwe dorpskernen van het vestigingsprogramma. De minste conflicten over land kwamen voor in de gebieden met alleen een landbouwfunctie. In deze laatste gebieden konden de oude claimhouders relatief probleemloos terugkeren naar hun oude claimgrenzen. De verdere analyse van de effecten van interventie in grondbezit in PIADP richt zich dan ook vooral op de locaties waar vestiging van gezinnen in nieuwe dorpskernen plaats had.

De studie over de gevolgen van het bestaan van verschillende definities van rechten op land laat zien dat de overheid, ooit verantwoordelijk voor introductie van de landhervorming, zich direct na beëindiging van PIADP vrijwel geheel heeft teruggetrokken uit de ontstane problemen. Met uitzondering van een rechtszaak die al ten tijde van PIADP was aangespannen tegen de besluiten in het kader van de landhervorming, speelt ook de rechtbank nauwelijks een rol bij de beslechting van landconflicten in voormalig PIADP. De conflicten over rechten op land doen dan ook een sterk beroep op het zelfregulerend vermogen van alle betrokkenen, met name de betrokken boeren zelf en lokale bestuurders op het niveau van dorp en subdistrict. De meeste conflicten eindigen met het verdwijnen van de door het project in de nieuwe dorpskernen gevestigde boeren en de inbezitneming van het land door de vroegere claimhouder. Eén van de weinige alternatieven is betaling van financiële compensatie door de houder van de van staatswege erkende eigendomstitel aan de niet meer door de staat erkende claimhouder die zijn of haar land weer opeist.

De derde case study betreft een analyse van de rol van de hulpbronnen land en water in Kertoraharjo, een Balinese nederzetting van transmigranten in het Kalaena-gebied in Noord-Luwu (zie de hoofdstukken 7 t/m 10). Hoofdstuk 7 beschrijft de geschiedenis van vestiging in het gebied en ontwikkeling van een relatief welvarende Balinese samenleving in Luwu. Specifiek Balinese arrangementen op het gebied van religie en dorpsbestuur, sociale zekerheid en lokaal waterbeheer kregen daarbij een plaats naast de blauwdrukken van het overheidsbestuur. De diversiteit van afkomstgebieden van de Balinese transmigranten en de verschillende traditionele normen en opvattingen (adat) die deze groepen meebrachten maakten het proces van éénwording lang en moeizaam. Hoofdstuk 8 gaat nader in op de rol van land in Kertoraharjo. In dit hoofdstuk analyseer ik vooral de verschillen in toegang tot land voor drie statuscategorieën van migranten: de oorspronkelijke transmigranten, hun kinderen, en spontane migranten. Verder analyseer ik het sinds eind jaren tachtig sterk toegenomen belang van de cacao-teelt naast (en soms in plaats van) de geïrrigeerde rijstbouw. In een analyse van de historische ontwikkeling van grondbezit laat ik zien hoe Balinees grondbezit zich vanuit Kertoraharjo in korte tijd over een steeds groter gebied heeft

verspreid. Vooral de toenemende belangstelling voor de cacaoteelt heeft hieraan bijgedragen. Expansie van Balinese controle over land ten behoeve van de cacaoteelt vond overigens geheel plaats buiten de sfeer van overheidsregulering van grondbezit. Tenslotte besteed ik aandacht aan enkele vormen van toegang tot geïrrigeerde grond die een belangrijke rol speelden in strategieën van economische stijging van vooral de afstammelingen van de oorspronkelijke transmigranten en de spontane migranten: deelbouw en verpanding van land.

De hoofdstukken 9 en 10 vormen samen een case study van lokaal waterbeheer in de tertiaire eenheden waar Balinezen hun geïrrigeerde grond bezitten. Achter de technische en organisatorische éénvormigheid van de door de overheid aangelegde irrigatiestelsels in Luwu gaat een grote mate van etnische diversiteit van de verschillende migrantengroepen schuil. Wat betekent dit spanningsveld tussen standaardisering van arrangementen voor lokaal beheer en lokale diversiteit in het geval van de Balinezen in het irrigatiesysteem van Kalaena? Waterbeheer is een in hoge mate collectieve activiteit. Het Kalaena-systeem kent gescheiden beheer: terwijl het hoofdsysteem wordt beheerd door de overheid, worden de zogenaamde ‘tertiaire eenheden’ (TUs) beheerd door watergebruikers, verenigd in eigen organisaties (WUAs) op het niveau van de TUs. Deze technische en organisatorische structuur is standaard ingevoerd in alle ingenieursstelsels in Indonesië.

De Balinese transmigranten brachten ook hun eigen kennis en tradities op het gebied van waterbeheer mee naar Luwu. Deze zijn sterk verbonden met de subak, een eeuwenoude Balinese institutie voor de geïrrigeerde rijstbouw in de breedste zin van het woord (subak omvat bijvoorbeeld ook de religieus-rituele en agronomische dimensies van de geïrrigeerde rijstbouw). Dit gedeelte van het onderzoek richtte zich op de geschiedenis van lokaal waterbeheer onder de Balinese migranten in het spanningsveld van de technologie, normen, regels en organisatorische arrangementen gebaseerd op de ingenieursopvattingen van lokaal waterbeheer in de TUs enerzijds, en die gebaseerd op de subak-traditie anderzijds. De belangrijkste onderzoeksvragen waren: wat is de rol van subak en WUAs in tertiair waterbeheer van Balinese boeren? Hoe verhouden beide zich in de dimensies van technologie, normatieve regulering en organisatorische arrangementen? In welke mate en op welke wijze hebben beide elkaar beïnvloed, veranderd of gevonden in ‘hybride’ vormen van lokale regulering van waterbeheer? Wat is de invloed van de verschillende definities van en opvattingen over ‘waterbeheer’ in beide benaderingen?

Dit gedeelte van het ‘Balinese’ onderzoek laat zien dat subak en het complex van TU / WUA zich, in hun wederzijdse beïnvloeding, op geheel eigen en locatie-specifieke wijze hebben ontwikkeld. De subak is als formele organisatie een relatief marginale positie gaan innemen onder invloed van de oprichting van de wettelijk verplichte en aan de tertiaire structuur van het irrigatiestelsel verbonden WUAs. Als institutie (in de zin van geregulariseerde patronen van gedrag) is subak echter een belangrijke rol blijven spelen. Technische, normatieve en organisatorische elementen van de subak hebben hun intrede gedaan in de formeel door het TU / WUA complex gedefinieerde wereld van lokaal waterbeheer. Daarmee zijn zowel subak als WUA ‘hybride werelden’ geworden.

De studie wordt afgesloten met een concluderende beschouwing over de rol van de in Luwu ontstane complexe samenleving en de betekenis hiervan voor beleid op het gebied van beheer van natuurlijke hulpbronnen. Het bestaan van een grote mate van complexiteit op het gebied van normen en definities van rechten, etniciteit en daarop gebaseerde identiteiten, en politiek-bestuurlijke vormen van regulering, zoals duidelijk aanwezig en zichtbaar in de drie case studies van dit boek, maakt benaderingen van regulering van natuurlijke hulpbronnen gebaseerd op het instrumenteel gebruik van recht binnen een mechanistische visie op ontwikkelingsprocessen bij voorbaat kansloos. In een epiloog wijs ik tenslotte op de bredere sociale en politieke dimensies van Luwu als complexe samenleving in tijden van snelle sociale en politieke verandering.

