OLA LEI:
DEVELOPING HEALTHY COMMUNITIES IN TUVALU

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ABSTRACT

My research examines the relationships between the formal health and education sectors, schools, external donors, non-government organisations (NGOs) and communities with regard to health in Tuvalu. A significant contribution of my research is the development of a Tuvaluan conceptual framework for health and wellbeing, which I have called the *Ola Lei* Conceptual Framework.

My thesis takes seriously the embeddedness of culture in health (Dixon, Banwell & Ulijaszek, 2013). Throughout my thesis I raise the issue of the autonomy of Tuvalu as a recipient of aid, and the necessity of developing cooperative partnerships between donor and recipient through which can be forged mutually agreed goals and practices. Indeed the concept of caring for relationships or partnerships (*tausi te vasia*) pervades the thesis, because relationships at all levels are central to all aspects of health. But even when there is equality in specific partnerships, Tuvalu is faced with a major challenge to its society and culture, which was introduced with colonialism and continued through the post-colonial period: that of a sharing-based economy which used mainly local products now being progressively integrated into a market-driven globalised economy with very different values and practices.

My research was based on a series of three fieldwork periods between 2010 and 2014 in Tuvalu on the contrasting islands of Funafuti and Vaitupu. Funafuti is urbanised, while Vaitupu is rural and the site of the national state secondary school. I employed qualitative methodologies including document analysis, interviews, participant observation, and focus groups, and I supplemented this material with available health and population statistics. My particular focus is to examine the 'gaps between' (*vasia*) health policies, what people say and do about health, what happens in everyday life, and the needs and desires of communities and schools in relation to health.

As a result, I argue that an approach to health and wellbeing development, which is built on frameworks drawn from contemporary health promotion and *ola lei,* can assist the health and education sector to work together with NGOs, communities, and external agencies to promote health and wellbeing in Tuvalu.

Keywords: **Pacific, Tuvalu, development, health, education, ethnography, indigenous**

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CHAPTER 1: INTRODUCTION

1.1. Introduction to the Research

As usual, I was telling stories with several men on top of a one-and-a-half-metre-tall concrete community water cistern while we watched some young boys playing soccer on the island's gravelly field. A breadfruit tree nearby covered the water cistern from the sun; hence it was a popular spot for men to sit on and watch young boys playing on the field. Behind the field – about 100 to 200 metres from the water cistern – is the ocean. We gazed at the sparkling ocean, caused by the setting sun, and saw several fishermen on their boats dashing along the fringing reef. The field and ocean provided us with lots of topics to talk about on that afternoon. I like listening to local men's stories about their experiences at sea, and about how some folks in those days used black magic to win games. At one point, we talked about the rising of sea level and implications of climate change. We began to identify coastal places around the island that had been badly eroded by the sea.

As we talked about climate change, sea level rise and the possibility of losing our land, a motorbike drove past between the water cistern and playing field. It was Pele and his diabetic wife, Taa.[1] Taa had had both her legs amputated due to diabetes. We waved at them, but Taa just looked at us without any response. She looked tired and unwell, clenching her folded wheelchair while sitting tight behind her husband. Then, the topic of discussion switched from sea level rise to health. As the men talked about the dramatic increase in the number of Vaitupuans with diabetes, hypertension and cardiovascular diseases, my concentration began to stray. Then, I heard nothing except my own thoughts of worry and concern about the future health and survival of our children and community (land and people). I thought hard: 'Here is a small community that is going to lose its land – if the level of the sea really rises, that is – and the people are getting diabetic and having their legs amputated… a number of premature deaths in the past years…'

I was thinking hard! This was a significant moment that was making me think in new ways. As a senior teacher at Motufoua Secondary School (MSS) and member of the Vaitupu Island community, I had recognised for some time that there were health and environmental problems at the school and in the community, but this

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[1] Names of private people are pseudonyms, while officials have their real names.

seemingly casual conversation made me conscious that we had an opportunity to address these problems by bringing health and education together. But was it the Department of Health or Education's sole responsibility to protect Tuvalu from these non-communicable diseases (NCDs) and the effects of climate change, or do we, Tuvaluans, have our own cultural ways that enable us to respond to these issues? These were some of the questions that lingered in my mind, until a loud bell echoed through the whole village. It was the community bell, warning people to stop what they were doing and prepare for evening devotion. I quickly got up; some men had already left the water cistern (Memories – Vaitupu Island, 2009).

For many days and weeks, I continued to think about the importance of the relationship between education and health, and ways of improving health in schools and communities. I started to be interested in health development and health promotion for communities, including schools. I began to work more closely with the school's nurse to identify health issues in the school and to probe solutions for them. Hence, when I saw an opportunity to pursue a doctoral scholarship in social science and health, I enthusiastically went for it. Social research is always positioned. To understand how this particular project is positioned I will describe a little of my own background as a Tuvaluan who was brought up and educated in Tuvalu, then educated further in Tonga, Fiji, Australia, and New Zealand, and briefly describe the larger project that my thesis contributes to.

Because I majored in geography, history, and education in my undergraduate studies, I developed a social science perspective, although I concentrated on education in my early career. Graduating subsequently with a Masters of Educational Leadership – in which I specialised in behaviour management and leadership in schools, particularly bullying – I became embedded even more in education, believing that education was the most important aspect of development. Of course, I knew that education needs to be linked to health, religion, and other aspects of life. However, I had never seriously been concerned about the inter-relationships and linkages between education and other formal and informal institutions, including those related to health. Fortunately, my mindset changed, on that one normal afternoon on Vaitupu Island as narrated above.

My research is part of a project funded by the New Zealand Health Research Council (HRC) on transnational Pacific health, which employs a syndemic framework – the interaction of two or more diseases or other noxious conditions (Singer & Clair, 2003; Littleton & Park, 2009) – to examine the experience of people in Tuvalu and in the Cook Islands, and those populations in New Zealand, in relation to health. The project uses the

specific diseases of tuberculosis (TB) and Type 2 diabetes as lenses into the history and current situation of health and health services in those places. It builds on previous work by WHO (www.who.int), SPC (www.spc.int), Littleton and Park (2009), and others, which identified a high incidence of TB among Tuvaluans both in their home country as well as in their new home in New Zealand. Other scholars in this project have researched the history of TB and health services in Tuvalu and the health and wellbeing of the Tuvalu community in New Zealand (Resture, 2010; Malua, 2014), and equivalent projects were also carried out in the Cook Islands.

My research examines the relationships between the formal health and education sectors, schools, external agencies, non-government organisations (NGOs), and communities with regard to health in Tuvalu. A significant contribution of my research is the development, based on my empirical research, of a Tuvaluan conceptual framework for health and wellbeing, which I have called the *Ola Lei* Conceptual Framework. I argue that this framework can be used at government, NGO, school, and community levels to promote health and wellbeing. My thesis takes seriously the mutual embeddness of culture and health (Dixon, Banwell, Ulijaszek, 2013). Throughout my thesis I raise the issue of the autonomy of Tuvalu as a recipient of aid, and the necessity to develop cooperative partnerships between donor and recipient through which mutually agreed goals and practices can be forged. Indeed the concept of caring for relationships or partnerships (*tausi te vasia*) pervades this thesis, because relationships at all levels are central to all aspects of health. But even when there is equality in specific partnerships, Tuvalu is faced with a major challenge to its society and culture, which was introduced with colonialism and continued through the post-colonial period: that of a sharing-based economy which used mainly local products, now being progressively integrated into a market-driven globalised economy with very different values and practices.

1.2   Health Promotion & *Ola lei* Conceptual Framework

In order to improve health in communities and schools, a 'new health promotion' is needed: a socially-informed approach which considers inequalities in access to health, dramatic increases of NCDs, and other health issues. The WHO (1985) states that health promotion is the process of allowing and empowering people to improve and increase control over their health. Scholars like Ewels and Simnett (2003, p.23) and Laverack (2004, 2007) also see the importance of empowering community people to have more

control over the determinants of their lives and health. The two elements – improving and promoting health, and empowering people to exercise control over their health – are important in the process of developing healthy communities, schools, and other places where people live. However, promoting health (in any context) needs the active engagement of the formal education authorities, schools at various levels, and appropriate curricula.

Empowering health-related stakeholders such as community people and students, so they can be involved in health decisions, is an important aspect of health promotion. In her suggestions for better health promotion outcomes in Australia, Wise (2008, p. 503) states:

> A combination of strategic, technical, and capacity-building steps are needed if it is to be possible for health promotion in Australia to contribute fully and effectively to improving the health and quality of life of all Australians in the twenty-first century. As policy makers, practitioners, researchers, teachers, advocates, professionals and simply as active citizens, it is critical, in the first instance, to reflect on the extent to which our own policies and practices replicate the pre-existing maldistribution of power and misrecognition that characterise our social institutions.

Wise's argument is that a combination of the strategic, technical, and capacity-building components of health promotion point to the need for education and health sectors to work more closely together. But the added imperative is to be sure these sectors formulate policies that promote equity and encourage empowerment for all people. Clearly, participation, involvement, engagement, and good management are at the centre of health promotion principles and processes.

The term 'health promotion' is used in a variety of ways. My use of health promotion, distinguishes between health education and health promotion. Green and Kreuter (1991, p.14), in their attempts to discuss the historic and epidemiological reasons for the emergence of health promotion in USA, wrote:

> In short, health education is aimed primarily at the voluntary actions people can take on their own, individually or collectively, as citizens looking after their own health or as decision makers looking after the health of others and the common good of the community. Health promotion encompasses health education…and is aimed at the complementary social and political actions that will facilitate the

necessary organizational, economic, and other environmental supports for the conversion of individual actions into health enhancements and quality of life gains.

Health promotion thus involves a higher level of organisation as it is a process that supports and facilitates individuals or communities to act healthily. For example, taxing sugar-loaded soft drinks in Pacific Island countries such as Fiji, Samoa, and Nauru (Thow et al., 2010) is an effective health promotion strategy and political action for improving health outcomes, as it may discourage consumers from buying soft drinks. In this example, a political action can support health education efforts to inform people about the adverse effects of consuming sugary drinks.

For this thesis, I will be using this health promotion framework alongside the *Ola Lei* Conceptual Framework of health, which is based on Tuvaluan ideas and which I developed through my fieldwork. The next chapter discusses this concept in detail and considers how it might be used in order to improve health outcomes. In later chapters, I will also consider how the *Ola Lei* Conceptual Framework can be used to help Tuvaluans attain better health outcomes.

Ola lei is the conventional translation used in Tuvalu for the English word health. However, as is will explain, *ola lei* and health are not exactly equivalent in meaning. Through my fieldwork I gathered and analysed the different aspects – actions, words, beliefs, and other features – that are related to the *ola lei* concept in order to produce the *Ola Lei* Conceptual Framework. This framework captures how Tuvaluans understand health. The *Ola Lei* Conceptual Framework illustrates the fact that health is both complex and attached to other Tuvaluan beliefs and practices. The *Ola Lei* Conceptual Framework has important implications for policy development, policy assessment, community development, health services, and health promotion. A key question guiding my analysis is: how can we promote and achieve *ola lei* in communities? I return to this question in detail in Chapters 6 and 7.

1.3   Research Aims and Significance

The main aim of my doctoral studies was to research how Tuvaluans perceive, understand, and practice health and wellbeing, and from this empirical base to develop a conceptual framework that can be used to promote healthy communities, including schools, in Tuvalu.

The key questions driving the research are:

1. How do informal structures and experiences contribute to the existing knowledge and practice of community people around health and illness?

2. In what ways do government and NGOs contribute to health in communities?

3. What do community people do and say about the health services and programmes provided by the government?

4. How well do government health policies and practices fit with communities' needs and desires?

5. How might the formal health sector, other arms of the government such as the education sector, NGOs, and communities work together more effectively to achieve better health outcomes?

This research is the first of its kind in Tuvalu. Based on my experiences as a senior teacher of the only public secondary school, Motufoua Secondary School, I believe that my research will provide a clearer picture for health and educational professionals (including teachers), enabling them (us) to work more effectively to prevent health issues such as TB and diabetes in Tuvalu. That is, a key outcome from my research will be an understanding of how communities and schools can help improve the health of young people in Tuvalu. Not only is this research significant for education and health, but it has the potential to be an 'eye-opener' for other sectors to cooperate as well.

Moreover, this research will provide information that can help the Department of Health better understand people's and communities' needs and worldviews. Health professionals can use this information to fine-tune health outreach efforts on the scattered islands of Tuvalu and provide effective awareness and intervention services to the schools and communities.

At the same time, this study contributes to international scholarship on community-based ethnographies of health, informed by the concept of *ola lei*, and set in a community context in a Pacific nation. I examine Tuvaluan children's and teachers' understandings of health and disease, their interactions with health services, and the role of the schools in health. I examine how education systems, curricula, and practices promote and develop health in schools and communities in Tuvalu. I argue that dynamic and multiple linkages

between personal, family, and community wellbeing in health and education are key paths to the achievement of many of the development goals for Tuvalu. It is intended that the findings of this research will strengthen the synergistic links between education and health development for individuals, families, communities, and the nation as a whole.

In the next section, I will briefly describe the Tuvalu context, in terms of its geography, population, history, development, education, and health. Understanding Tuvalu's unique history and its challenging current situation is necessary for situating this work.

1.4   Tuvalu Context

1.4.1   Geography and Population

Tuvalu consists of nine islands – Nanumea, Nanumaga, Niutao, Nui, Nukufetau, Vaitupu, Funafuti, and Niulakita – though its name literally means 'eight islands standing together'. This is because Niulakita, the most southern and smallest atoll (0.42 kilometres square), is considered part of Niutao Island. (See Table 1.1 for information on each island's population size, distribution and density.) The languages are Tuvaluan (related to Samoan), Nuian (related to the Kiribati language, which is spoken by the people of Nui Island), and English.

Island	Area (km^2)	Total population		Population change (1991–2002)			Population distribution (%)	Density (persons per km^2)
		1991	2002	Total	%	r^a	2002	
Funafuti	2.79	3,839	4,492	653	17.0	1.4	47.0	1,610
Outer Islands	22.84	5,204	5,069	-135	-2.6	-0.2	53.0	222
Nanumea	3.87	824	664	-160	-19.4	-2.0	6.9	172
Nanumaga	2.78	644	589	-55	-8.5	-0.8	6.2	212
Niutao	2.53	749	663	-86	-11.5	-1.1	6.9	262
Nui	2.83	606	548	-58	-9.6	-0.9	5.7	194
Vaitupu	5.60	1,202	1,591	389	32.4	2.5	16.6	284
Nukufetau	2.99	751	586	-165	-22.0	-2.3	6.1	196
Nukulaelae	1.82	353	393	40	11.3	1.0	4.1	216
Niulakita	0.42	75	35	-40	-53.3	-6.9	0.4	83
Tuvalu	25.6	9,043	9,561	518	5.7	0.5	100.0	373

Table 1.1: Total population size, change, distribution and density, by island, 1991 – 2002.[2]

Source: Tuvalu 2002 Population and Housing Census Volume Analytical Report, Table 1, p. 15.

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[2] The last published Census for Tuvalu was from 2002. The 2012 Census is not yet available.

The islands of Tuvalu are spread over 1.2 million square kilometres of the Pacific Ocean that stretch in a north-south direction between latitudes 5 and 11 degrees south, and over longitudes 176 and 180 degrees east (Figure 1). However, they only have a land mass area of 25.6 square kilometres. All the islands are low-lying and are only 4 or 5 metres above sea level. Hence, Tuvalu runs a risk of becoming one of the first nations to suffer from the effects of climate change and sea level rise (Fisher, 2011; Farbotko & Lazrus, 2012).
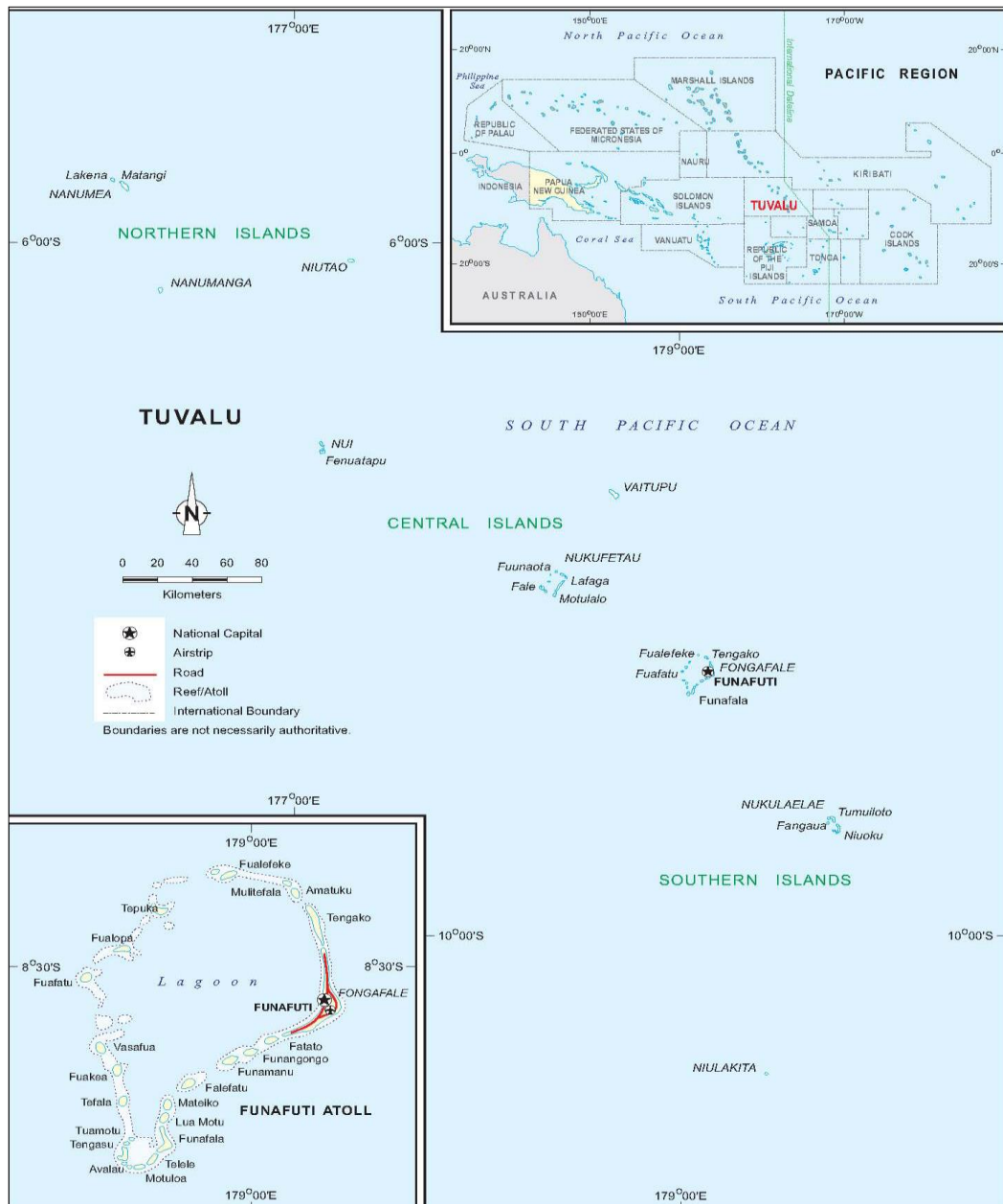
Figure 1.1: Map of Tuvalu.

Source: Government of Tuvalu, 2011b.

Nanumea, Nui, Nukufetau, Funafuti, and Nukulaelae are atolls, which have reef platforms that surround a central lagoon that opens to the ocean. In contrast Nanumaga, Niutao and Niulakita are coral islands. Nanumaga and Niutao have landlocked lagoons, while Niulakita has none at all. 'Only Vaitupu Island has the character of both an atoll and [coral] reef island' (Government of Tuvalu, 2011c, p. 7). Consequently, there is no significant variation in the soil types of Tuvalu. In general, Tuvalu's soil is mostly sandy, coarse-textured, porous, and infertile. There is also no major variation in the vegetation types of Tuvalu. The main tree crop is the coconut palm, followed by others such as pandanus, banana, and breadfruit trees. Traditional root crops such as *pulaka* (*Cytosperma chamissonis*) and *taro* (*Colocasia esculenta*) are cultivated in open pits known as *pulaka* pits.

According to the Koppen Climate Classification system, Tuvalu has a tropical climate, in which there is no winter season (Strahler & Strahler, 2002) and sunshine throughout most of the year. Tuvalu has a high humidity and high rainfall per annum, with a season of rain and westerly gales from November to February. However, droughts, which have life-spans of three or more months, have occurred in Tuvalu. In 2011, Tuvalu was hit by one of the severest droughts in its history.

1.4.2 Historical Background

From the perspective of Tuvaluans, the geographical features and characteristics of their islands, as well as their settlement histories, are based on their traditional knowledge. Different islands of Tuvalu have different stories. Tuvalu's history is passed down from generation to generation through storytelling, traditional songs, dance, chants, and legends. Legends relay different stories of how Tuvalu and particular islands were formed. Tuvaluan ancestors passed on those legends so that the current generation could see through their eyes how Tuvalu was formed (O'Brien, 1984, pp. 13-14). Unfortunately, those legends continue to fade in schools and communities unless people are reminded of them through conversation.

Even though linguistic evidence and migration theories based on archaeological research, such as the *Lapita* theory, claim that Tuvalu was first settled 2,000 years ago (O'Brien, 1984, p. 16; Kirch, 2000), there is no robust evidence to explain when and how our ancestors first discovered and settled the land. Nevertheless, it is generally believed and accepted that ancestors of modern Tuvaluans probably came from Samoa via Tokelau,

while others came from Tonga and Uvea (Wallis Island). Nui Island, however, was later settled by Micronesians – the I-Kiribati people (O'Brien, 1984, p. 16); hence, the Nuians speak the Kiribati language. Traditional stories and genealogies go back only 300 years (O'Brien, 1984, p. 16), and it is therefore unknown how the earliest ancestors lived, structured their societies, passed on knowledge, interacted, and communicated.

The first European explorer to spot Tuvalu in 1568 was Alvaro de Mendana de Neira from Spain. Between the 1700s and early 1800s, other European explorers sailed across Tuvalu's water and sighted the islands of Tuvalu. Table 1.2 lists some of the names that European explorers gave to each island of Tuvalu.

Islands	Names by which the islands have been known as
Nanumea	St Augustine Island, Taswell's Island
Niutao	Gran Cocal, Lynx Island, Smut-Face Island
Nanumaga	Sherson's Island, Hudson Island
Nui	Netherland Island, Isla De Jesus, Egg Island
Vaitupu	Tracy Island
Nukufetau	De Peyster's Group
Funafuti	Ellice's Group (this name was later applied to whole of Tuvalu...)
Nukulaelae	Mitchell's Group
Niulakita	Rocky Island, Sophia Island

Table 1.2: Names for islands of Tuvalu given by European explorers.

Source: Kofe, 1984, p. 103.

Now, only Niulakita's European name (Sophia) is still sometimes used. The name given to Funafuti Island (Ellice Island) was later applied to the whole archipelago. By the early 1800s, whalers, traders, and beachcombers began to pass through Ellice Island (Tuvalu) waters, and several of them ended up living in Tuvalu.

In 1861, a deacon from Manihiki in the Cook Islands landed accidentally on Nukulaelae Island, which became the starting point of Christianity in Tuvalu. Also in the late 1860s, blackbirders[3] raided the southern islands of Tuvalu (mainly Nukulaelae and

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[3] 'Blackbirders' refers to slave traders

Funafuti Islands) and deceptively recruited more than 400 people as labour for the guano fields and plantations in Central and South America (Roberts, 1958, p. 395; Besnier, 1993, p. 188). None ever returned (Kofe, 1984, pp. 108-109).

In 1892, the Ellice Islands became a British Protectorate. In 1916, Britain incorporated Ellice Islands into the Gilbert and Ellice Islands Colony (GEIC). During the colonial era, Tarawa, in the Gilbert Islands, was the administrative centre for the GEIC; hence, developments were concentrated on Tarawa (see Macdonald, 1982 [2001]). This meant that Funafuti Island was more an outpost during the colonial times. Moreover, during this period, pastors and missionaries of the London Missionary Society (LMS) were trying to gain a foothold in Tuvalu. With persistence and hard work they eventually missionised the islands (Goldsmith & Munro, 1992).

Due to political, economic, social, and cultural reasons, the Ellice Islands struggled for separation from the GEIC. In 1975, the separation started. Ellice Islanders who worked and lived in the Gilbert Islands began to move back to the Ellice Islands. On October 1st, 1978, the Ellice Islands gained independence, and changed its name to Tuvalu (Figure 1.2).

Figure 1.2: Removing the English flag and hoisting the Tuvaluan flag on mid-night 1st October, 1978. Funafuti Island, Tuvalu.

Source: Courtesy of Richard Dewar – a VSO from Scotland – who worked (taught) at Motufoua Secondary School in late 1970s.

1.4.3 Development of Tuvalu

Political aspects

After independence, Tuvalu had a twelve-member-parliament. Nanumea, Niutao, Vaitupu, and Funafuti each had two representatives, while Nanumaga, Nui, Nukufetau, and Nukulaelae had one seat each (Table 3). However, in 2000, the parliament increased to 15 members, with two members from each island except Nukulaelae Island, which still has one member (Panapa & Fraenkel, 2008, p. 3).

Islands	1978 – 1999	2000 – present
Nanumea	2	2
Nanumaga	1	2
Niutao	2	2
Nui	1	2
Vaitupu	2	2
Nukufetau	1	2
Funafuti	2	2
Nukulaelae	1	1
Total	**12**	**15**

Table 1.3: Number of parliamentary seats per island from independence (1978) to 1999 and 2000 to the present.

Since 1977 (the first election year for Tuvalu) there have been only two political parties in Tuvalu: the cabinet and the opposition party. The cabinet – which consists of the Prime Minister, seven ministers, and speaker of parliament – is responsible for policy-making, administration, and development.

After seven years (1977-1984) of stable parliament, the Tuvalu parliamentary sessions had a notable 19 motions of no confidence (Panapa & Fraenkel, 2008). In 2006 alone, four motions of no confidence were carried. Between 2000 and 2003, Tuvalu had three Prime Ministers. Recently, between 2010 and 2014, there was serious instability within parliament while the two political parties struggled for power. This led to some defamation court cases between politicians of the two parties, and two changes of government. This political instability has resulted in disappointed Tuvaluans missing the earlier stability of the government. The small number of representatives in the parliament and the reasonably equal division of the sides add to the potential for recurrent instability.

Tuvalu is part of the Commonwealth: Queen Elizabeth II is the Head of State, and is represented within the country by a Governor General (GG), who is appointed by the Prime Minister through consultations with cabinet members. It has a Westminster-style or parliamentary model of government. In 2008, there was a motion to make Tuvalu a republic, with the aim of removing any tangible attachments to Britain such as the Governor General and Union Jack. A referendum on the subject was not successful.

On each island there is an Island Council or local government (known as *Kaupule*), which acts on behalf of the main government and the island community. Each island has a court (the Island Court) that deals with minor criminal and civil matters. The highest court in Tuvalu is the High Court. The islands, however, have their own traditional structure, in which chiefs, elders, and members of the community (known as *Falekaupule*) make decisions and look after island matters. In fact, in the late 1990s, under the *Falekaupule* Act 1997, the government formally recognised the traditional powers of the *Falekaupule*. This Act defines '*Falekaupule*' as the supreme power on the island and '*Kaupule*' (local government or Island Council) as the implementing arm of the *Falekaupule*. The highest law in the country, however, is the Tuvalu Constitution. Unfortunately, there are sometimes clashes between islands' customs (customary laws) and the constitution because of some inconsistencies in the constitution. For example, in 2006 the Funafuti Island community (*falekaupule*) banned the Tuvalu Brethren Church members from practising and from constructing their church on Funafuti Island because members of the Brethren Church were not willing to make contributions to the community. This was a point of considerable community interest and discussion. Although the Tuvalu Constitution 2008 clearly spelled out the freedom of worshipping or practising religion in Tuvalu, the Constitution also has a clause that allowed the *Falekaupule* or elders to restrict religious freedom when religion is threatening the Tuvaluan values and customs.

When Tuvalu gained independence, the *Ekalesia Kelisiano Tuvalu* (EKT), which is a protestant denomination, became the major and national religion in Tuvalu. About 91% of Tuvaluans belong to the EKT, while the rest belong to other Christian denominations and non-Christian religion such as Baha'i and Muslim. The government recognises the EKT as an important part of its system. It was declared by the government as the State Church of Tuvalu that 'shall have the privilege of performing special services on major national events' (State Church Declaration Act, 2008). Undoubtedly, religion is one of the most important sources of Tuvaluan values. Religion, particularly Christianity, has influenced our individual, family, and community values. Each island has a pastor

(allocated by the EKT), who is placed in a much respected position in the community. However, there is a rising concern among Tuvaluans about the hardship they face due to financial obligations to the church, especially the EKT (Abbott & Pollard, 2004, p.8).

Politically, Tuvalu has relations with many foreign countries and organisations. In September 2000, Tuvalu became the 189th member of the United Nations (UN). Tuvalu is a member of several UN agencies and multilateral organisations such as: Asian Development Bank (ADB); Food and Agriculture (FAO); World Health Organization (WHO); United Nations Educational, Scientific and Cultural Organisations (UNESCO); International Monetary Fund (IMF); World Bank; International Olympic Committee; International Development Association; International Maritime Organization, and others. In the Pacific region, Tuvalu is a full member of the Pacific Islands Forum (PIF), Secretariat of the Pacific Community (SPC), Secretariat of the Pacific Regional Environment Programme (SPREP), South Pacific Applied Geoscience Commission (SOPAC), Polynesian Leaders Group, and others. These regional organisations have led Tuvalu to have firmer relationships with other Pacific islands nations.

Tuvalu's main bilateral development partners are Japan, Taiwan, Australia, and New Zealand. Tuvalu also has relations with the UK, USA, France, European Union, South Korea, Cuba, Russia, and Pacific countries such as Fiji. Of course, Tuvalu benefits from the political relationships with these development partners, organisations, and neighboring countries. Technical and economic assistance is the tangible benefit that these political relationships bring to Tuvalu's shores. However, as I will discuss in Chapter 4, the reliance of Tuvalu on external agencies and donors has sparked questions about their influence on government, community, and NGO policies and practices in Tuvalu.

Economic aspects

According to a United Nations Development Programme's (UNDP's) report on Tuvalu's Millennium Development Goals progression, Tuvalu's economy is 'small, fragmented and highly vulnerable to external economic influences' (UNDP, 2006, p. 4). This makes Tuvalu heavily reliant on foreign aid and remittances. As a result of this heavy reliance, 'Gross National Income (GNI) is sometimes referred to as a more practical indicator than GDP' (Government of Tuvalu, 2011c, p. 11).

In 2009, Tuvalu had a Gross Domestic Product (GDP) of AUD$35.8 million; and a GDP per capita of AUD$3 289 (Government of Tuvalu, 2011a, p. 16). The public sector

contributed about '70% of gross domestic product (GDP) and employment' (AusAID & ADB, 2007, p. 3). Figure 3 shows Tuvalu's GDP, GNI and GNDI (Gross National Disposable Income) from 2001 to 2008.
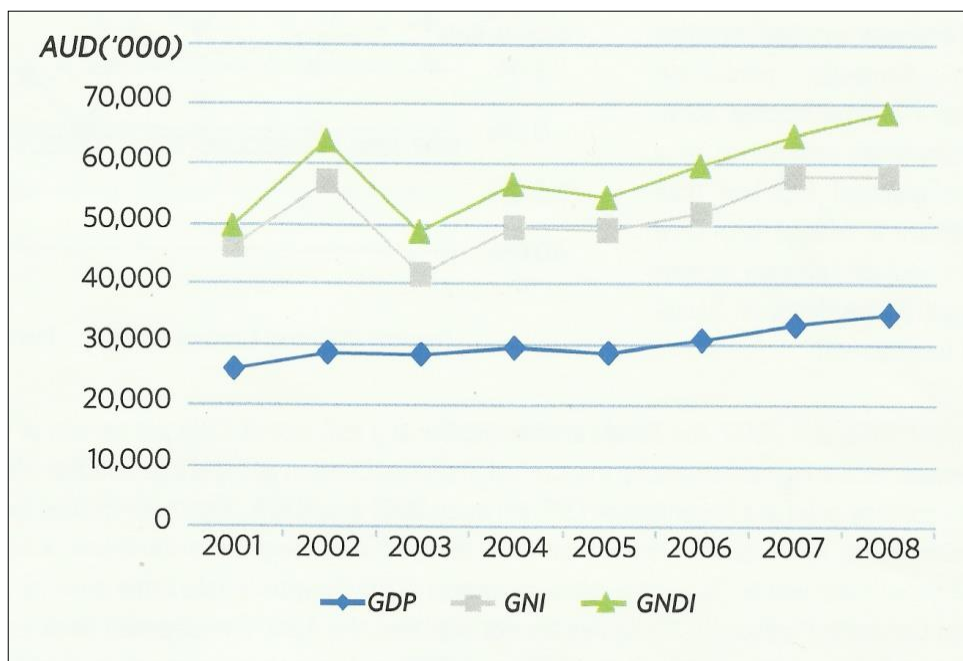
Figure 1.3: Tuvalu Gross Domestic Production (GDP), Gross National Income (GNI), and Gross National Disposal Income (GNDI), 2001-2008.

Source: Government of Tuvalu, 2011c.

Figure 1.3 illustrates that Tuvalu's GNI and GNDI was unstable between 2001 and 2005, but GDP in general had improving over the years. The GNI is almost double the value of the GDP, which literally means that Tuvalu is still heavily reliant on foreign aid and remittances rather than the domestic production, because GNI includes foreign aid and remittances. GNDI, on the other hand, includes payments or transfer of ownership, for example marketing of the Tuvalu internet domain name (dot TV), licensing of fishing vessels to fish in Tuvalu waters, and other forms of aid or gifts to Tuvalu. This is why GNDI is higher higher than GNI.

Tuvalu's economy is influenced and impacted by its very limited resource base, poor soil, remoteness from major markets, limited and high cost of transportation, and governance. As a result of the limited and high cost of transportation, it is hard to compete with neighboring countries such as Fiji for tourism revenue.

Tuvalu is largely reliant on imported foods and materials and has small export revenue from the sale of stamps. In previous years, Tuvalu derived a healthy income from

the export of copra. However, due to the decline in the world price for copra, exports have declined. Fortunately, Tuvalu's economy has been maintained due to 'windfall' revenue from fishing licenses, marketing of the Tuvalu internet domain name, and the Tuvalu Trust Fund (TTF). 'Income from these sources was low from 2003 to 2005, averaging AUD\$9 million p.a. compared to an annual average of AUD\$35 million over the previous three-year period' (AusAID & ADB, 2007, p. 3).

The Tuvalu Trust Fund (TTF) was set up in 1987 by Tuvalu, New Zealand, Australia, and the United Kingdom. Japan and South Korea also subsequently contributed. Tuvalu is the major contributor. A profile of the TTF written to commemorate its 20th anniversary describes the historical background of the TTF, along with its aims, growth, and how it has assisted the national development and budget of Tuvalu (see Tuvalu Trust Fund Board, 2007). In short, the initial contributions totalled to AUD\$27.1 million, and in 2007 TTF's market value reached AUD\$106.6 million. The Fund was set up to safeguard Tuvalu against deficits in government income and to assist Tuvalu's development. The TTF is a different form of aid modality as it is a 'sovereign wealth fund where income from investment of fund monies, provided by the donors and Tuvalu itself, is channelled automatically into the recurrent budget of the GOT [Government of Tuvalu]' (Wrighton & Overton, 2012, p. 253). Hence, TTF provided a vehicle for the sustainability of the country's economy. The success of the TTF led to the establishment of the *Falakaupule* Trust Fund in 1999 to assist and enable community development in the outer islands.

Tuvalu benefits greatly from the direct budgetary grants of millions of Australian dollars from Taiwan. Another important source of revenue, mainly to Tuvaluan families, is the cash remittances (about \$2 million – \$4 million per year) that flow from Tuvaluan seafarers who work on overseas liners (AusAID & ADB, 2007, p. 4). These remittances of money from seafarers to their families on outer islands are an important source of income for families. This is because most of the economic activities and developments are concentrated on the main island of Funafuti where there are much higher cash incomes.

1.4.4 Education and health

The following section describes the school system in Tuvalu. Other aspects of the education sector, including curricula, policy and relations with external agencies are described in Chapter 4. I then give a brief overview of health services in communities and

a health profile for Tuvalu. Further discussion of all the other aspects of the health sector is in Chapter 4.

The Formal Education System in Tuvalu

The name of the Ministry concerned with education – Ministry of Education, Youth & Sports (MEYS) – is enough to illustrate that there are three departments within the MEYS. In this thesis I will concentrate mainly on the Department of Education, particularly schools. Table 4 shows the number of schools, teachers, and students in Tuvalu in 2010.

Island	Number of schools			Number of teachers			Enrolment		
	ECCE[i]	Primary	Secondary	ECCE	Primary	Secondary	ECCE	Primary	Secondary
Funafuti	8	2	1	25	41	11	301	925	181
Nanumaga	1	1	0	3	8		51	135	
Nanumea	2	1	0	5	8		42	115	
Niulakita	1	1	0	1	1		6	9	
Niutao	1	1	0	3	8		47	156	
Nui	1	1	0	4	8		49	136	
Nukufetau	1	1	0	3	8		50	131	
Nukulaelae	1	1	0	3	5		34	72	
Vaitupu	2	1	1	7	12	35	95	239	491
Total	18	10	2	54	99	46	675	1918	672

Table 1. 4: School types by enrolment and number of teachers (2010)

Source: Tuvalu National Curriculum Policy Framework (TNCPF)

There are about 18 preschools in Tuvalu, which are mostly operated by Early Childhood Care and Education (ECCE) teachers and parents, together with the *Kaupule*. Note that ECCE is commonly known in Tuvalu as preschool or kindergarten school. There is one preschool on each island, with the exceptions of Funafuti, Nanumea, and Vaitupu. Nearly half of the total numbers of preschools in Tuvalu are located on the capital, Funafuti Island. Similarly, there is one primary school on each island, except Funafuti Island, which has two: one is public and the other is owned by the Seventh Day Adventist (SDA) Church. There are two secondary schools in the country: Motufoua Secondary School (MSS), a public co-educational boarding school; and Fetuvalu High School (FHS), a mission school owned by the *Ekalesia Kelisiano Tuvalu* (EKT). The number of students enroled in both secondary schools indicates that MSS is still the school that most parents prefer to send their children to for secondary schooling. It is important to note that FHS's curriculum is different, as it adopted the Cambridge syllabus. Unfortunately, there is no special provision for physically or mentally disabled children. In 2014, there was a small centre for children with disabilities in Funafuti, Fusi Alofa, which is run by an NGO.

The Formal Health System in Tuvalu

Unlike the Ministry of Education, Youths & Sports, the Ministry of Health (MoH) only focusses on health. On each island, except Funafuti Island[4], there is a small hospital with one or two nurses, an assistant nurse, and a sanitation officer. The nurses deal with medical examinations, prescriptions, dentistry, minor operations such as boys' circumcisions, wound stitching, and dressing. Nurses also deliver babies. More complicated cases are transferred to the central hospital on Funafuti Island, under the Tuvalu Medical Treatment Scheme (TMTS). Moreover, it is the responsibility of the nurses and sanitation officer (who sometimes acts as a community health inspector) to check the cleanliness and hygiene of the villages. Occasionally, nurses and the sanitation officer run health workshops in communities to promote family planning, cleanliness and hygiene, AIDS awareness, and other health programmes. These staff are supervised and directed from the main health headquarters on Funafuti Island; hence, they are acting as part of the Health Department outreach efforts.

Even though the Health Department faces problems such as financial constraints and lack of human resources (Ministry of Health, Tuvalu, 2009), in the last ten years it has

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[4] Princess Margaret Hospital (PMH) is the central hospital – located on Funafuti Island, Tuvalu.

tried its best to promote health on the eight scattered islands of Tuvalu. Some of the health campaigns of the last ten years include the Directly Observed Treatment Short-Course (DOTS) for tuberculosis (TB), elephantiasis and filariasis prevention, diabetes, and dentistry. Currently, the Department of Health is trying to adopt a more preventative than curative approach. This is especially important given the increase in non-communicable disease, especially cardiovascular disease and diabetes.

A health and disease profile for Tuvalu

I have used the raw health statistics for Tuvalu to supplement the Tuvalu Annual Health Reports and the official statistics published by WHO Western Pacific Region to build up a picture of the health of the people.

Tuvalu is estimated to have a population of around 10,000 to 11,000. Around half the population lives on Funafuti, although since the last published census was in 2002 this figure is only approximate. Roughly 30 to 35 percent are children under the age of 15 and seven to nine percent are elders of 65 or more. Life expectancy at birth in 2011 was estimated as 65 for males and 64 for women. The probability of dying before the fifth birthday is 30 per 1000 live births. Total expenditure on health per capita in international dollars in 2011 was $469, and expenditure on health as a percentage of GDP was 17.3 (WHO, 2014).

The number of births per year over the last five years ranged between 180 and 215, while the number of deaths per year ranged from 54 to 75 (2009: 68; 2010: 75, 2011: 65, 2012: 56, 2013: 53). As noted above, TB and diabetes are two focal diseases for this project. In terms of mortality, over the last 20 years the number of deaths in which TB was implicated per year has fluctuated between zero and five, rather than increased or decreased, to total 37. Over the same period the number of deaths in which diabetes was implicated has increased to total 52. Between the most recent decade and the last, the number of diabetes-related deaths doubled (Tuvalu Medical Statistics raw data, accessed Feb 2014). The leading causes of mortality over the last few years have been cardiovascular diseases, diabetes, and liver disease. A demographic and health survey carried out in Tuvalu in 2007 found that nearly 90 percent of adult women were classified as overweight or obese and 77 percent of men (Malua, 2014, p.5).

This brief overview, couched in biomedical disease terms, does not do justice to the complexities of health and does not touch on wellbeing. When one moves from the

medical records to life in the villages, schools, and institutions, the complex, multistranded interconnections of education, economy, environment, health, culture, families, and individuals are only too obvious and challenging to a researcher. I describe how I responded to these challenged in my research design in the next section.

1.5 Research Design and Methods

1.5.1 Research Context and Stages of Fieldwork

My research focussed on Funafuti Island and Vaitupu Island. As Funafuti is the capital island of Tuvalu, there is an obvious difference in terms of its economic, technological, infrastructural, and governmental developments compared to the outer islands. The biggest primary school in Tuvalu (Nauti Primary School) is located on Funafuti Island. The only mission schools (one primary school and one secondary school) in Tuvalu are also located on Funafuti Island. The education and health headquarters are also on this island, as well as the rest of central government infrastructure. Around 47% of Tuvalu's population lives on Funafuti Island, in urban conditions. Due to its small land area (2.79 square kilometres), the island's population density is 1,610 people per square kilometre, one of the highest in the world (Mellor, 2005). For all these reasons, including Funafuti Island in this research was essential.

Vaitupu Island, by contrast, is the biggest island in Tuvalu with a total land area of 5.63 square kilometres. It has the second-largest population after Funafutui, with around 1,591 people (2002 Tuvalu Census). In terms of infrastructural development, Vaitupu is also second to Funafuti Island. For example, Vaitupu Island had a multimillion boat harbor, an Agriculture Department station, and is home for the only government secondary school (MSS).When I began my research, Vaitupu had the highest number of new TB cases (personal communication with nurse on Vaitupu Island, 2009). These features make it a unique site for my research project with some important contrasts with Funafuti.

I was initially interested in selecting a third island for my research. This is because Funafuti and Vaitupu Islands are considered big islands in terms of economic development and size. However, due to limited time and the unreliable shipping schedule, I decided to stick to these two islands. The lifestyles, or traditional ways of living and doing things, are generally the same on all the outer islands of Tuvalu. People on the outer islands still largely subsist on land and sea. Even the ways of ruling and administering the local island

government (*Kaupule*) and island communities (*Falekaupule*) are generally similar all around the outer islands. Although I carried out my fieldwork on Funafuti and Vaitupu, I interviewed several participants on Funafuti Island and in Auckland, New Zealand, who had come from other islands; thus, their views were often related to examples and experiences from their original home islands. I was also able to draw on the work by other researchers in the 'Transnational Health Through the Lens of TB' group to investigate Tuvalu's culture and health (for example, see Chambers and Chambers, 2001, who have worked over many years on Nanumea, and Resture, 2010).

1.5.2 Stages of Field Research and Research Participants

There were two major stages of my fieldwork:
1. Background or preliminary consultations;
2. Fieldwork on Funafuti and Vaitupu Islands, Tuvalu.

Stage 1: Background or Preliminary Consultations

Time: Mid-November 2010 – early February 2011

In this stage I introduced my research project to key informants, possible participants, and to the government of Tuvalu. Table 5 shows the key people with whom I had the opportunity to talk to in relation to my research.

Vaitupu Island	Funafuti Island
Five chiefs of the island	Minister of Health
Five members of *Kaupule* (Island Council or local government)	Minister of Education, Youths & Sports
Acting secretary of the *Kaupule*	Secretary of Funafuti Island's *Kaupule*
Leader of Tumaseu Village[5]	Director of Health
Leader of Asau Village	Secretary of Health
Leader of the island's *Lima-Malosi*[6] organisation	Secretary of Education
Island's nurse	Principal of Fetuvalu High School (FHS)
Sanitation Officer (also referred as Health Inspector)	Head teacher of the Seventh Day Adventist (SDA) Primary School

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[5] Vaitupu Island has two main villages – Tumaseu and Asau villages. Tumaseu village has a bigger population and size than Asau village.

[6] *Lima Malosi* is an island's organisation of all the men and women in the age group who are fit to work, i.e. approximately 15-55 years old.

Acting principal of MSS	Head teacher of Nauti Primary School
Two senior teachers from Tolise Primary School (TPS)	Some leaders of island communities on Funafuti Island
Chairwoman of TPS' Parents-Teachers' Association	
MSS staff	

Table 1.5: Key people with whom I talked during preliminary consultation, mid-November, 2010 – early February, 2011.

The main aims of these preliminary meetings with key people were to outline my research project and how I hoped that they would assist me during the main fieldwork, and to gather how they felt about the research topic. I did not get any major additional views from the key people I talked to. However, they gave me their blessings and indicated willingness to support and help me in any way. Some of the local leaders were even prepared to give me any answer that I wished to have, as a way to help me! However, I knew that this would be risky, since it might mean that community people would answer my questions but would not indicate their own genuine inner feelings and thoughts. I had to explain to these leaders that the best way to help me was to honestly tell me how they felt about the things that are related to my research. I saw that they understood my point.

Stage 2: Fieldwork on Funafuti and Vaitupu Islands, Tuvalu

Time: June 2011 – January 2012

This was the major fieldwork stage. I gathered and produced my data through interviews and my interactions with people from various places such as schools, hospitals, communities, NGOs, Departments of Health and Education, and consultation forums.

The original plan was for me to remain on Funafuti Island from late June to early October before proceeding to Vaitupu Island. However, this changed, as my daughter was sick and was admitted to hospital on Vaitupu, so I had to go there sooner than expected. I realised that it was possible for the researcher, during the course of the fieldwork, not to follow the original plan when unexpected matters arise, as they did in my case.

Going to Vaitupu Island to see my sick daughter was valuable because although it was a misfortune, I was able to directly observe the health services provided at the health clinic on an outer island. Not only that, I also noticed how relatives and community members acted around sick people who are admitted to the health centres. I also used my

stay on Vaitupu to conduct interviews in schools, and to undertake participant observation and other research methods such as informally conversing with people and undertaking community work.

Due to shipping delays, I arrived back on Funafuti Island late. Carrying out research in places like Tuvalu, where shipping is unreliable infrequent but is the only means of inter-island transportation, is a hindrance. Other researchers such as Paton (2009, p.14) have reported similar experiences with shipping in Tuvalu. Paton advised:

> When researching in Tuvalu it is important to be flexible. For instance, boat travel between Tuvaluan islands can be very intermittent and unpredictable, and researchers travelling to outer islands may not be able to organize interviews and workshops in advance.

The unreliable shipping made my movement across the islands difficult and inflexible. I longed to travel to Funafuti Island to continue my research there, as I knew most of the government key people and departments are all on Funafuti.

When I arrived on Funafuti Island in early August 2011, I tried hard to promptly plan things out and conduct interviews with key people. I also did participant observation in several places like hospitals, schools, and water rationing stations. In the meantime, the 2011 drought was at its peak in Tuvalu, and Funafuti Island was one of the few islands severely affected. Therefore, this was also an opportune time for me to observe and take notes on how communities, the government, NGOs, and development partners interacted during this drought. I also attended three big governmental consultations or summits on the Tuvalu Education Strategic Plan (TESP) II, Tuvalu Millennium Development Goals (MDGs) Report, and *Te Kakeega* II (National Strategy for Sustainable Development) Review. These were important forums as they provided better insights and information on the development status of Tuvalu, particularly in terms of its education and health sectors.

Since I still needed to complete interviews with students and community people, especially MSS students before school finished, and also to escape from the severe drought on Funafuti, I boarded the first boat that was scheduled to sail to Vaitupu Island in October 2011. This island was also experiencing the drought, but fortunately it has good underground water. Hence, community people and MSS students used well water for bathing, laundry, cleaning, and agricultural purposes. From this, I realised that not only economic factors like unreliable shipping could affect my movements and research plan, but natural factors such as droughts could also force me to change course.

Participants in New Zealand

After returning from my major fieldwork in early 2012, I traveled to visit and interview some Tuvaluans in different parts of New Zealand. For example, I traveled to Porirua, Wellington, and Rotorua to interview three Tuvaluan medical doctors; this was a way to learn more about *ola lei*. Traveling to Whangarei to stay and meet with some Tuvaluan also gave me the opportunity to share my research, listen to their *ola lei*-related stories, and have a bit of laugh with them. I also spent valuable time with people from the Auckland Vaitupu Community Trust, Auckland Nui Community Trust (ANCT), Nukulaelae Community Trust, and Malie Tasi Church community. I attended their social functions – camps, feasts, church service, games, and other social functions – in which, through informal conversations and interactions, the community people provided support to the information I had collected from Tuvalu. For example, the relationship between *ola lei* and working hard or having faith in God is often heard in elders' speeches, which aligned with the *ola lei* framework.

Some prominent Tuvaluan officials, such as the Director of Health, General Secretary of the Tuvalu Red Cross, and Secretary of Education, stopped over or transited through New Zealand on their way to or back from conferences overseas. I used these opportunities to meet these officials, wherever they were, and to talk with them about issues related to my research. I greatly valued these opportunities, as these officials updated me with new developments in Tuvalu, especially relating to health and education.

The final research phase

Shortly before my doctoral thesis was due to be submitted, in February 2014, I travelled with four other members of our research group to Funafuti to present my findings, particularly the *Ola Lei* Conceptual Framework, which by then I had visualised as an octopus (*feke*) (see Chapter 3). Our presentation – to the Ministers, Directors, and staff of the Ministries of Health and Education, and other key people from government, NGOs, schools and communities – engendered much reflection and comment and was very warmly received. *Te feke,* in particular, was commented on frequently by those who attended, both at the time and during the subsequent days, as people thought of other aspects that were part of the framework. The potential of this visual model as an educational and community development device was demonstrated at this time. During this visit our team was also able to collect the final sets of health statistics, to become updated

on the progress of several health programmes such as the TB programme, and to revisit many people.

1.5.3 Methodology

I primarily used a qualitative exploratory methodology, and took an interpretive, analytical, and holistic approach to the research subject (see Hesse-Biber & Leavy, 2006; Holliday, 2007). I used this approach in order to explore why events or behaviour occurred from the perspectives of the people who engaged in the behaviour or were involved in the events. I employed a range of specific research methods, which allowed me to learn more about how community people view health and feel about health services, and to compare what happens in practice with the aims of health initiatives and the nature of community needs. These enquiries produced different lines of evidence, which complemented one another and offered different perspectives on my research questions, and therefore led me towards more in-depth analysis and robust conclusions. The methods I used were document analysis, participant observation, interviews, and focus groups.

The sequencing of my work was also important. For example, I did not begin my interviews with students and community people until I had spent some time undertaking participant observation, as I wished these to be informed by my observations before conducting interviews. My interviews with some senior education and health officials were done at the beginning of the fieldwork, though I went back to interview these people again toward the end of my fieldwork because I wanted to check my conclusions and to explore the issues that had arisen during my fieldwork.

The philosophical underpinnings of this research rest on an epistemology that is grounded in an indigenous understanding of the world, more specifically by the fact that I spent the formative years of my life on a small island in the South Pacific. Growing up and living in Tuvalu meant that when I began this research, I already had an idea about the concept *ola lei*.

As my epistemology is an indigenous or Pacific epistemology, the way in which I researched the concept of *ola lei*, was through an ontology that required me to talk to and engage with people, hence my use of interviews, participant observation and focus groups. These methods are consistent with my being a Tuvalaun. Furthermore, my ethnography, for example, is based on the mutual interaction and construction of knowledge. My methodology, which was informed and influenced by my epistemological position,

required quality social relationships to produce the information, knowldege and conceptual framework found in this thesis.

Document Analysis

Document analysis is the study of documentary or secondary sources (Laws, Harper & Marcus, 2003, p. 301). I analysed and reviewed secondary documents, including strategic plans, acts, syllabus documents, and other departmental documents. In many cases, I read whole documents; while in some cases, I only read sections of documents that were relevant to the thematic questions that I had in mind. I considered using NVivo – a qualititaive data analysis computer software package – to analyse my data but in the end I decided to spend the time manually undertaking content analysis of all documents, including my fieldnotes and transcribed interviews. In fact, to ensure that I got a thorough understand of the ideas in documents, I read, re-read, wrote and discussed ideas with relevant people.

Even though there are critical discussions about the validity of documents as a source of data (see, for example, Bogdan & Biklen, 1992), document analysis is one good way to learn about the research topic from someone else's point of view. In other words, analysing these documents' contents helped me to see and understand more about the reality of the institutions' systems, operations, and policies (Krippendorff, 1980). Looking at and analysing the content of the Tuvalu Strategic Health Plan, for example, is one way that we can see how and what the Department of Health requires in order to improve health services and programmes for Tuvalu.

I also examined government written records and reports in order to analyse the health and education aid projects and services that were funded by external donors or agencies. These sources were important for my research because they allowed me to see what influences international and national agencies have on educational and health projects in Tuvalu.

I reviewed and analysed available academic writings about Tuvalu and the Pacific. Among other things, I examined academic articles written about Tuvalu's development (e.g., Boland & Dollery, 2006; Wrighton & Overton, 2012), governance (e.g., Panapa & Fraenkel, 2008; Richardson, 2009), climate change (e.g., Mortreux & Barnett, 2009; Fisher, 2011), health and diseases (Harmen, 2009; Resture, 2010), culture (e.g.,Chambers and Chambers, 2001), and church (e.g., Goldsmith & Munro, 1992). These articles

provided me with preliminary frameworks and indicated how other scholars have thought about these aspects.

However, the most difficult part of this method is the fact that the researcher has to collect and identify relevant documents prior to the analysis phase. The Department of Education has a lot of policy documents; hence, I had to ensure that I collected and identified the valid ones related to my research. There is difficulty when you analyse documents from a field that you do not know much about. For example, I felt more confident when analysing the Tuvalu Education Strategic Plan (TESP) rather than the Tuvalu Strategic Health Plan, due to the fact that I am a teacher. Hence, in some cases I had to seek help from officials to explain some of the documents' contents.

Participant Observation

I used participant observation to learn the ways in which community people, health and educational officials, and students do things around health. This method drew me closer to my research participants (Wind, 2008, p. 80). The method is distinctive because the researcher approaches participants in their own environment rather than having the participants come to the researcher.

Primary and secondary schools on Funafuti and Vaitupu Islands were studied ethnographically to discover how students and staff understand and experience health practices and programmes. The knowledge and experiences of people from selected communities about health in general were also sought and explored. Table 1.6 summarises where I carried out participant observation and what I aimed to observe and gather.

Location of Participant Observation	Focus of Participant Observation
Primary school on Funafuti Island – Nauti Primary School. Primary School on Vaitupu Island – Tolise Primary School.	Learned how much students know about and participate in health-related activities such as: physical education, sports/games, healthy eating, hygienic practices, and others. Gathered information from parents about what they thought about: education, health, the school's system and programmes, teachers, facilities, curriculum and environment, what food they brought to their children, and why they brought such food to their children during break and lunch times.

Motufoua Secondary School (a boarding school) – Vaitupu Island	Learned how students responded to health-related issues such as: dormitory conditions, bullying, smoking, physical activities, water facilities, access to clean water, meals, curriculum, and diseases.
Community people at water-rationing stations; hospitals; community functions/activities; playing fields; and socialising areas such as the *kava* drinking area, jetty, and meeting halls.	Learned how community people lived communally and interacted during the 2011 drought. Learned how they responded to health services and advice at hospitals and how much they knew about health issues. Learned how people acted around health issues.

Table 1.6: Location and focus of participant observation

I aimed to use participant observation as a lens to see trends and practices in schools and communities 'through the eyes of people being studied' (Angrosino, 2008, p. 165). I spent many hours each week sitting with patients in the outpatient areas, mingling with community people in social functions and water-rationing spots, or interacting with students on the playing field. However, it was a challenge, at least to me, to learn what life is like for an 'insider' while trying to remain, inevitably, an 'outsider'.

The process of participating 'to the extent that people get used to your presence and start to act naturally around you' (O'Reilly, 2005, p. 96) was more like a 'waiting game'. It was difficult in a short period of time for me to become a normal member in groups that I observed, such as the parents who come to school to give their children food during break times, patients in the local clinics in the outpatient areas, and students at the schools' canteens. For example, I noted that my presence around the students was not an easy thing for them. The students always felt uncomfortable when I appeared and it was actually hard for them to act normally, as if I was one of them. Perhaps I needed to spend more time with them in order to be though of as one of them, or as an ordinary person.

However, in locations and functions where a large number of people gathered and interacted (such as game of local cricket at the community field and water-rationing spots), I noted that my presence was not a big deal. For example, a lady at the water-rationing spot yelled at me to give my bucket to her so that she could fetch my share of water. She did not realise that I was only there to do participant observation. The large number of people in that location, plus the fact that most (if not all) of them know me, made me become like any other ordinary community person fetching my share of water.

For planned activities or events that I observed and participated in, I wrote extensive fieldnotes. In most cases, I also had my digital recorder turned on. Immediately

after participant observations, I wrote up my notes to ensure that I captured almost (if not everything) that I observed and participated in. This process was very intensive because it required me to remain alert to the possibilities of interesting insights everyday.

Interviews

Interviewing – either through formal interview or informal conversations – was perhaps the most useful method of data collection that I used during my fieldwork. Interviewing allowed me to interact with, collect information, and learn from research participants (DiCicco-Bloom & Crabtree, 2006). For my formal interviews with selected participants from schools, communities, government, and NGOs, I used semi-structured interviews, since this method allowed me to 'probe the answers [provided by interviewees] to ascertain additional information' (Kervin, Vialle, Herrington & Okely, 2006, p. 88).

I interviewed 92 selected participants from different communities or institutions – villages, churches, schools, hospitals, traditional healers, governmental departments, and NGOs (Table 1.7) – and particularly asked people about their experiences and perceptions around the concept of health (*ola lei*), health services and awareness programmes, and the contribution of education, external agencies, and NGOs to health in Tuvalu.

I also had informal or unplanned interviews and conversations with community people and governmental officials whom I happened to 'bump into' on roads, playing fields, at social functions, or elsewhere. These conversations provided me with valuable information and knowledge related to my research project.

Interviewees	Vaitupu Island	Funafuti Island
Primary School (staff & students)	9 (4 staff & 5 students)	14 (6 staff & 8 students)
Secondary School (staff & students)	11 (6 staff & 5 students)	11 (6 staff & 5 students)
Government (Departments of Education and Health officials, and other governmental officers)	3	10
NGOs	2	6
Community people	12	14
Island Totals	*37*	*55*
Grand Total	**92 interviewees**	

Table 1.7: The number of interviewees from different locations

During my fieldwork, I noted that semi-structured interviews had an advantage over other qualitative methodologies such as focus groups and participant observations because they allowed for 'talking more freely'. During the semi-structured interview sessions, I found that interviewees were quicker to talk more openly than some participants in focus group discussions. This was probably because the interviews were held privately in a room, hence participants had the opportunity to talk more freely without fear of being overheard (Elwood & Martin, 2000).

I sensed that my status as a senior teacher and educated local individual caused an uncomfortable space between myself and the participants. In one case, a student interviewee asked after sitting down to face me if she could be replaced, as she was a bit nervous. Even community members and teachers would think that because I am an academic researcher and senior teacher, they should not discuss their opinions about education openly as I know more than them. For this reason, I had to build good rapport with such interviewees so that they would 'feel comfortable to express their innermost thoughts and feelings' (Simons, 2009, p. 47) and share with me their experiences and perceptions on health (*ola lei*), diseases, health services, and health programmes in Tuvalu.

I did full transcriptions of 92 interviews in Tuvaluan language, and then translated about 50 of them into English. For the rest of the interviews, I did partial translations into English. Then I read them again and marked or labelled sections and extracts that were relevant to my research questions.

Focus Groups

On Funafuti and Vaitupu Islands, several different focus groups were convened to discuss selected open-ended questions or issues related to health (*ola lei*) in Tuvalu. I organised twelve focus groups that were homogenous in at least one sense (Hyden & Bulow, 2003; Breen, 2006, p. 467), including four student groups divided by gender, one women's group, one men's group, three teachers' groups, one health staff group, and two youth groups. I hoped that the within relatively homogenous groups participants would feel free to share and express their views, and to explain why they thought in such ways (Krueger & Casey, 2000). The focus group interviews allowed me to better understand the complex and multi-dimensional nature of their experiences. My main goal with using focus groups was to explore and understand a certain topic through the interactive perspectives of the group.

From experience, I realised that focus group interviews provide rich and cumulative data (Fontana & Frey, 2008), which allow new concepts to emerge (Breen, 2006). My group interview with male students at MSS, for example, gave me new insights on the smoking issue at the boys' dormitories. Of course, as expected, at the beginning of the group interview, the boys were not comfortable openly discussing the issue of smoking at the dorms and ablution blocks. However, as they realised that I was a researcher – not a teacher who would report on them – they began to openly talk about how and why so many boys smoked tobacco. Moreover, as a result of the interaction and exchange of thoughts between participants about smoking in the focus group interview, new concepts and questions emerged (Axinn & Pearce, 2006). For example, the relationship between skipping classes and smoking emerged while the participants talked about smoking in dormitories. I could not have obtained this kind of rich data, which was built on by different group members to make a more complete story, in individual interviews.

Another issue related to focus group interviews is the fact that in Tuvalu, an argument within a discussion forum is seen as a sign of disrespect. Arguing means that one is not on good terms with another. In other words, agreeing is the general acceptable norm in our culture. This means that our cultural backgrounds and beliefs often influence our methods of data collection in terms of how we interact in that process of collecting data (Matsumoto, 1994). Consequently, the interaction that was needed to lead the discussion into a more rich, active, or lively discussion was not often easy to achieve. For this issue, I

had to facilitate and motivate the participants with brainstorming to let them interact and talk more about the given topics.

It is also the duty of the researcher to facilitate the discussion by creating opportunities for the inactive members to open up, and stopping the active ones from dominating the discussion (Simons, 2009). However, I realised that it was still hard to do so since members' adherence to the mentality of agreeing is too strong, and I only had a short period of time to guide the discussion. Some participants became passive listeners and their responses were not as deep as those of other members who had a more open approach. It is important to note here that focus group interviews are a new thing, and my participants were not used to this kind of discussions as a data collection method. Therefore, it was hard for them to adapt. They are more familiar, however, with everyday discussions, which are primarily for the sake of socialising and talking rather than research. This has an effect on their responses. Knowing that their views would be taken into account for important research like mine made some participants feel reluctant to open up, as they feared that their views might not be in line with the general consensus.

I noticed that there were also other people who refused to participate in focus group interviews. For instance, some groups such as the traditional healers were not at ease when asked for such an interview. For example, when I asked one of the traditional healers to be a member of the traditional healers' focus group interview s/he replied: 'It is not easy to make us sit together to talk about our own knowledge of or perceptions about traditional healing. Each traditional healer lives with and sticks to his/her knowledge…' Hence, the selected traditional healers were individually interviewed.

Since I knew everyone in the focus groups I was able to recognise each participant's voice so I did not need a video camera to capture the discussion but I used a digital recorder and hand notes. I then did a full transcription and translation of the ten focus group interviews in English language.

All these methods that I used were effective as they all allowed me to delve deeper into the concept of *ola lei*. In fact, these methods also depend on each other. For example, what I observe in a school through participant observation can be contrasted with or confirmed by interviewing teachers. I therefore feel that using just one or two methods would not be sufficient to gather valid and reliable data about what people say and do. In social science research on health, knowledge about everyday practices as well as about ideals, norms, and narratives, are all essential.

Limitations

There are three main limitations of this research. First, as mentioned earlier, I only looked at two islands of Tuvalu. Selecting a third island – smaller in size, population and economic development actvitivites – from the northern group would have provided a more balance representation of the country. Second, I did not have a method to include the insights of people who are mentally disabled. This meant I failed to capture the views of such people, who are also an important part of the community. Finally, my particular position in Tuvalu and Vaitupu Island, as a teacher and an educated member of community, affected how some participants reacted or replied to my questions and presence. For example, students found it hard to openly discuss things such as smoking and bullying because they still saw me as a teacher, who might report them. On the other hand, some colleagues in the community willingly assisted me in whatever way I liked. They even asked me to tell them what I expected from them (as participants). This is the problem often faced by any insider, like me, who studies their own community.

1.6 Structure of the Thesis

My thesis opened with an account of how I became interested in health. Then I briefly introduced two key concepts, health promotion and *ola lei*, both of which are relevant to efforts to improve health in Tuvalu with the *Ola Lei* Conceptual Framework. Subsequently, I discussed the aims and significance of my research as well as Tuvalu's geography, history, and its development context, particularly in terms of education and health. I then outlined my research design and methods.

Chapter 2 reviews relevant concepts and approaches to 'health', including the 1948 WHO definition of health, which is enshrined in Tuvaluan government documents. Chapter 2 also addresses the linkages between education, health, and development, and explores the complexity of the health concept.

In Chapter 3 I examine the usage of, and the explanations by, the Tuvaluan people about this word 'health', according to their own words and understandings. This is the central chapter of my thesis. In it I ethnographically describe the *Ola Lei* Conceptual Framework: the way in which Tuvaluans view and understand health. This framework provides a guide for my critical reflections on the topics discussed in subsequent chapters: government and NGO health initiatives, community perspectives on health issues, and the relationships between these two topics.

In Chapter 4, I switch the focus from the *ola lei* worldview to government initiatives in health and education, NGO contributions, and development aid. I discuss the government perspective on health as it is presented to people in both policy and practices, and explore how consistent health and education initiatives, policies, and plans are with the *ola lei* framework.

Chapter 5 discusses and analyses the different health-related issues that were voiced by community people and students when they talked about health services and programmes. I then discuss what the community people and students need and desire in terms of health services and programmes.

In the sixth chapter of the thesis, I compare government health policies and initiatives with community needs in order to identify tensions and mismatches. The three main questions that this chapter focusses on are: In what ways do the Government's policies, initiatives, and practices differ from the communities' needs? To what extent do these tensions or gaps impact *ola lei*? In what ways does the *Ola Lei* Conceptual Framework not reflect real life in Tuvalu, or vice versa?

Finally, in Chapter 7 I sum up the thesis, by drawing together the findings of each chapter and discussing how *ola lei* might be achieved in order to improve health in schools and communities. In this final chapter I also discuss the theoretical argument and contribution of the thesis to policy formulation.

CHAPTER 2: COMPETING CONCEPTS AND APPROACHES TO 'HEALTH' AND 'EDUCATION'

2.1 Introduction

It is not easy to discover a formula of health broad enough to fit Voltaire and Jack Dempsey, to encompass the requirements of a stevedore, a New York City bus driver, and a contemplative monk. (Dubos, 1995, p. 9)

It is important to begin this chapter with a reminder that the concept of health is not the same throughout indigenous, non-western, and western societies (Blaxter, 2001; Dubos, 1995; Freeman, 2012, p. 11), and that for health services to be effective and accessible the local meaning of health needs to be understood. As Yurkovich and Lattergrass (2008, p. 437) warned: 'Discrepancies in definitions of health exist. These discrepancies, if not acknowledged, create major communication gaps between health-care professionals and their clients, which interferes with the provision of culturally responsive care'. Research into the different meanings of health from different contexts will provide information that can help health providers, promoters, or institutions better understand local people's needs and worldviews. If these understandings are recognised and embedded then the organisation and delivery of health services, health promotion, and education programmes in local settings will be culturally appropriate and relevant.

This chapter will review and discuss the literature on competing concepts about, and approaches to, health. I examine literature from the Pacific, western countries, and the World Health Organization's (WHO) ideas around health, in order to examine different ways of perceiving health and wellbeing. This review adds to contributions from other scholars on the complex concept of health, and will highlight the similarities and differences between Tuvaluan understanding of health and those of other people and institutions. This is important for developing relevant and appropriate ways of promoting and improving health in Tuvalu. I will also review the literature on the linkages between education and health, and their connection to development.

2.2 Health

Health is a concept that is multidimensional, inherently complex, and attached or related to cultural values and practices, as well as the economy, politics, institutions, and

the environment of people in any community. Health is one of those words or concepts that appears simple from a distance, but its simplicity fades as we get closer to it (Dubos, 1961). However, we should not stop concerning ourselves with the concept of health even when its clarity ebbs away. We need to take the concept of health further. As Seedhouse (1986, p. 3) warned, 'it is not enough to say that health is desirable, and to leave the issue there', as this will not help in improving our health. Moreover, 'in any discussion about the determinants of health, definitions of health and wellbeing are important' (Howden-Chapman, 2005, p. 52). Because my research considers Tuvaluan understandings of health, the difficulties involved in verbalising this taken-for-granted idea are central.

Health as a conceptual category may include or involve a multiplicity of aspects. Some commonly noted aspects include freedom from pain, physical and mental fitness, and personal strength or optimal functioning (see Blaxter, 2001). Due to the numerous ideas and beliefs around health, it is challenging and probably impossible to find a consensus definition, even within a single community. As Seedhouse (2001, p. 6) wrote:

> The idea of health is not to be found within the pages of a dictionary. The nature of health is disputed and different understandings can be legitimately held. No matter how established the source, no one has privileged access to health's true meaning.

Health is a cultural construction; this means that the meaning of health varies from society to society, with all cultures holding their own definitions (Dew & Davis, 2005, p. xx). Health means different things to different individuals because of what they have learnt, observed, and experienced (Keleher & MacDougall, 2009, p. 5; Spector, 2003). This is why Ewles and Simnett (2003, p. 3) strongly advise health promoters that 'it is fundamental that you, as a health promoter, explore and define for yourself what being healthy means to you and may mean to your clients', because different people and institutions hold different perceptions of health.

My research responds to the aim proposed by Dixon, Banwell and Ulijaszek (2013, p. 2) in their recent volume on culture and health: 'to encourage more sophisticated research design, based on the inclusion of culture, however framed, in a range of public health research and intervention approaches'. Culture – as a guideline for action, a set of institutions, and embodied ways of doing things – is central to my research analysis.

Last but not the least, it is important to note that the meanings of health 'are subject to change' (Freeman, 2012, p. 1; Larson, 1999); thus, the definition of 'health is not a static

entity' (Dew & Davis, 2005, p. xx). In other words, the meaning of health is dynamic, both as a condition and a worldview, because communities and people's views about health are subject to change.

2.2.1 Ola Lei Conceptual Framework.

Tuvalu, like other Pacific islands, has its own understandings and practices around diseases and good living. There are no words in the Polynesian languages, including Tuvaluan, that have exactly the same meaning as biomedical constructs of 'health' (Toafa, Losa & Guthrie, 2001). However, Tuvaluans have conventionally used the phrase *ola lei* as a translation for this more narrow meaning of health. '*Ola*' means 'life' or 'live', and '*lei'* means 'good'. Hence, to Tuvaluans, 'health' (*ola lei*) is mostly about 'living well' or 'having good life', and corresponds more closely to a holistic sense of wellbeing than health. This conceptual framework will be discussed in detail in Chapter 3. In fact, *ola lei* shares some common ground with accepted international ideas of health, such as the WHO definition of health, which is also broad and holistic, although there are also some significant differences.

2.2.2 World Health Organization's (WHO) Concept

In 1946, the WHO declared its definition of health as 'a complete state of physical, mental and social wellbeing, and not merely the absence of disease or infirmity' (WHO, 1948). Bircher and Wehkamp (2011, p.378) note that: 'At that time this was a significant advance because for the first time it officially postulated the importance of mental and social factors for health'. The WHO definition focusses on the subjective assessment of a person's general health. That is, its definition 'combines the subjective experience of acute and chronic, fatal and nonfatal diseases, and general feelings of wellbeing, such as feeling rundown and tired or having backaches and headaches' (Mirowsky & Ross, 2003, p. 208).

This 1946 WHO definition is the official biomedical definition of health used in Tuvalu. The WHO should be given credit for its attempt to give a holistic definition of health, which at least considers the overall wellbeing of a person. However, unlike *ola lei*, the WHO definition of health is oriented to the individual. This was clearly indicated by a nurse whom I interviewed:

> *Ola lei* is not only referring to diseases, but it is also referring to the physical,
> social and mental wellbeing of a person. This is the definition I learnt when I

studied in the nursing school… and I think it is the definition according to the WHO. (Nurse – Diabetic Section, PMH)

It is clear here that this WHO definition has been a powerful influence on Tuvaluan doctors and nurses, as they were trained in medical or nursing schools in which the WHO's definition of health is used. Interestingly, but not surprisingly, the nurse was referring to *ola lei* as the 'physical, social and mental wellbeing of a *person'*. For Tuvaluans, however, it is almost impossible to talk about *ola lei* without considering family and community, because Tuvaluans have strong ties with their communities and extended families (see Chambers & Chambers, 2001). As a result, *ola lei* and health do not mean exactly the same thing.

Doctors and nurses within the Tuvalu Department of Health use this WHO definition, which at least considers the overall wellbeing of a person rather than just focussing on their biology or physical experiences. As Seedhouse (1986, p.31) stated: 'The [WHO's] definition tries to focus attention on wider aspects of human life to show that health is something which is positive and enhancing, and is not achieved just by not being ill and diseased'. Consequently, the WHO's definition 'can seem radical and overreaching to someone steeped in medical science, with its emphasis on correcting specific disorders' (Mirowsky & Ross, 2003, p.41). Thus, it was appropriate for our Department of Health and medical staff to adopt the more holistic WHO definition rather than a more narrow western medical model. This is because the latter focuses primarily on the person's disease and 'assumes that diseases are universal biological entities' (Freeman, 2012, p. 12). In contrast, in the eyes of Tuvaluans, *ola lei* is an optimal and ideal state, not just for individual persons but for people embedded in a community and family.

Although the WHO definition of health is widely accepted as the official definition for its 191 members (Yurkovich & Lattergrass, 2008, p. 439), some scholars and communities still criticise it. Two main points of critique are usually made. First, the WHO definition does not include other dimensions of health such as spiritual and emotional aspects (Ewles & Simnett, 2003). In the Pacific Islands, for example, spirituality is an important part of the indigenous people's life (Capstick, et. al., 2009), but unfortunately this is not mentioned in the WHO definition.

Secondly, the WHO definition is criticised for being inflexible and utopian (Saracci, 1997). To define health as an 'ideal state' seems to be a weak way of seeing, describing, or measuring someone's health, as it is just too broad (Seedhouse, 1986, p. 32).

What would such a person with an ideal state of health look like? According to Bircher and Wehkamp (2011, p. 378), '…the WHO definition is now considered to be idealistic to an extent that almost no one can consider him or herself to be healthy'. In other words, it seems that no one, or very few people, in this world perfectly fit into this definition. This is because the definition does not face up to the many controversies about what is meant by the phrase '…complete physical, mental and social wellbeing…'. The qualities demarcating these states are disputed and mean different things in different contexts.

This made me consider two questions. First: Is this WHO definition relevant to Tuvalu? Second: What are the main reasons behind the adoption of the WHO definition of health by the Tuvalu Department of Health? I believe that this is a classic example of colonialism and Eurocentrism, whereby a foreign idea is inserted into a local context with the hope that it may assist in the development process of that country. From a post-development perspective such an international trend can serve as a way of exerting dominance (Simon, 2006). Post-development theory argues that 'development has artificially naturalised an ideal state, modelled upon the "developed" West, and promoted this state as universally desirable and achievable for all peoples and cultures' (McGregor, 2007, p.156). In essence, global ideas are allowed to supplant and obscure local concepts and expectations. As will be described in Chapter 3, Tuvaluan communities and individuals have their own ways of understanding and defining health. Unfortunately, these concepts are not fully and explicitly included in the nation's health initiatives because the official definition for health is the 1946 WHO one. However, the WHO has long since moved along towards a more comprehensive and socially-focussed definition, at least in its health promotion arm. For example, the Ottawa Charter of 1986 includes the idea of empowering people at a community level. The Charter proclaims on its first page:

> Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical mental and social wellbeing, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to wellbeing.

Furthermore, the Charter lists preconditions for health and wellbeing:

The fundamental conditions and resources for health are peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice and equity. Improvement in health requires a secure foundation in these basic prerequisites.

More recently still the Bangkok Charter of 2005 built on this by greatly strengthening the community aspects and the idea of partnerships, and embedding the determinants of health in its text:

The Bangkok Charter affirms that policies and partnerships to empower communities, and to improve health and health equality, should be at the centre of global and national development.[7]

I will come back to these more comprehensive and community-focussed concepts of health and wellbeing in Chapter 7.

2.2.3 Communities' Conceptions

In this section I analyse a range of health conceptions from Pacific and non-Pacific countries in order to examine differences in views and provide a comparative context for my analysis.

Generally, western biomedical concepts of health privilege biology. Hence, people often look, and are expected to look, for solid biomedical explanations for their diseases (Swami et al., 2009; Winkelman, 2009, p. 15). Critics of biomedicine have argued against this emphasis only on the 'detection, diagnosis, and treatment of disease, rather than health and wellbeing' (Winkelman, 2009, p. 15). They argue that the medical model does not adequately consider emotional and psychiatric disorders (Larson, 1999). It was because of this very point that medical anthropologists such as Helman (1994, p. 144) strongly recommended that:

Medical treatment should never deal only with physical abnormalities or malfunctions; the many dimensions of 'illness' – emotional, social, behavioural, religious – should be treated by adequate explanation and reassurance in terms which 'make sense' to the patients, and those around them. Where necessary, treatment may have to be shared with a psychotherapist, counsellor, priest, alternative practitioner, or with a social worker, self-help group, community organization, housing or employment agency – or even, in some settings, with a

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[7] http://www.who.int/healthpromotion/conferences/6gchp/hpr_050829_%20BCHP.pdf?ua=1

culturally sanctioned folk healer. In this way, *all* dimensions of the patient's 'illness' can be treated, as well as any physical 'disease'.

Despite disparagement and criticism, the medical model has been responsible for the remarkable progress of western and non-western people's health. Larson states: 'It continues to be the dominant model of health in the United States… [which] sharply focuses on diseases and disability – their causes, prevention, and cure' (Larson, 1999, p. 126). In fact, the 'health providers of the Pacific have [also] been largely focused on diseases' (Pande, Finau & Roberts, 2004, p. 109). These include aid organisations and national health institutions.

However, it is important to bear in mind that not all people and communities from western or industrialised countries see health from a narrowly biomedical perspective. There are laypeople who define health according to their experiences, and these ways of defining health are also acknowledged by professionals and scholars. The following are four selected health emphases used by laypeople and professionals in western countries that are worth looking at because they each prioritise different aspects of health:

    i.   Health is the physical and mental fitness to do socially-expected daily tasks.

    ii.   Health is a commodity that can be bought or given.

    iii.   Health is the ability to access material and non-material resources that sustain life/health at a satisfactory level.

    iv.   Health is a dynamic state of wellbeing. (Seedhouse, 1986)

Taken together, these emphases raise interesting questions about the complexity of health as a general concept. The idea that health is the physical and mental fitness to do socially-expected daily tasks has been a central theme in several scholars' research on health (Parsons, 1985; Durch, Bailey, & Stoto, 1997; Mirowsky & Ross, 2003). Durch and colleagues (1997, p.40) critiqued the medical and WHO definitions of health in arguing for a more person-focussed approach:

> Neither [the medical nor WHO] definition explicitly takes account of how individuals experience disease. Individuals can feel ill in the absence of disease and vary dramatically in their responses to a disease. Indeed, what matters to individuals is not simply the absence of disease, disability, or death, but also their response to symptoms or diagnosis; their capacity to participate in work, family and community; and their sense of wellbeing in many spheres (e.g., physical, psychosocial, spiritual).

Similar to Durch and colleagues' emphases, Mirowsky and Ross (2003, p.41) found out from their respondents that health is 'feeling sound, well, vigorous, and physically able to do things that most people ordinarily can do'. These definitions point to the recognition that people need the optimum capacity to fight diseases and to participate in their families and communities for survival. Hence, particular people often define health as the fitness and capability of the physical body and mental being to perform socially-expected daily tasks (see Blaxter, 2001). However, this orientation is perhaps too narrow; if you have a disabling condition, you would be categorised as unhealthy (Seedhouse, 1986).

Seedhouse (1986, p.34) argues that the theory that health is a commodity has mostly 'stemmed directly from the approach of medical science'. Further, Seedhouse explains 'health as a commodity' by stating:

> …health can be given or purchased without personal involvement in the process. For example, 'medical health' can be purchased by buying surgery or drugs to cure a person's heart disease. The use of a drug gives health. The drug brings health with it. Health is seen as somehow substantial. It seems to be a nebulous entity which can be gained and lost.

However, this is an emphasis that is often invoked by both professionals and laypeople (Williamson & Carr, 2009, p.108). Moreover, scholars such as Blaxter (1990) and Breslow (2006) have also portrayed health as a capital resource.

Williamson and Carr (2009) have portrayed health as a capital resource, but also as a stock of biopsychosocial resources which individuals inherit at birth. People use these stocks or reserves of biopsychosocial resources in the family and community when needed. Therefore, Williamson and Carr (2009, p.116) conclude that 'consistent and active promotion of health as a type of capital could foster individual investments into health, facilitate the development of intersectoral collaborations, and increase the proportion of upstream investments that maintain and improve health'.

Thirdly, health can be seen not as some idealistic or 'absolute state of being but an elastic concept that must be evaluated in a larger sociocultural context' (Baer, Singer & Susser, 2003, p.5). As critical medical anthropologists emphasise, 'health can be defined as access to and control over the basic material and nonmaterial resources that sustain and promote life at a high level of satisfaction' (Baer, Singer & Susser, 2003, p.5). From a critical medical anthropological perspective, health is analysed in terms of the factors that create and distribute the resources and threats to health (Winkelman, 2009, p.16). This

perspective stresses the importance of looking at the impact of political and economic structures and processes on health.

The last orientation to health that I am going to look at is a definition that is much promoted by scholars such as Johannes Bircher and Karl-Hinz Wehkamp (see Bircher, 2005; Bircher & Wehkamp, 2011). It is a definition based on the Meikirch model, which states that:

> Health is a dynamic state of wellbeing characterized by a physical, mental and social potential, which satisfies the demands of a life commensurate with age, culture, and personal responsibility. If the potential is insufficient to satisfy these demands the state is disease (Bircher, 2005, p.336).

This orientation is interesting because it is based on experiences reflected by physicians (see Bircher & Wehkamp, 2011, p. 379). The ability to characterise a person as healthy or not is assumed to lie with professionals, primarily physicians, who tend to see health as a biological entity. The 'potential' that this definition talks about is referring to the biologically-given and personally-acquired potential (see Bircher, 2005; Bircher & Wehkamp, 2011).

The Meikirch model uses six criteria to assess or describe health: biologically-given potential, personally-acquired potential, demands of life, personal responsibility, age, and culture. The advantage of this health definition is that it respects the 'dignity of each person, distinguishes between health and disease, provides essential elements for the process of diagnosis and reimbursement and clarifies the relationship between individual, and society' (Bircher & Wehkamp, 2011, p. 378). Bircher and Wehkamp (2011) recommended that this Meikirch model is effective if implemented in medical and health care systems because it is a medically realistic concept of health.

Indigenous groups – such as Native Americans and Aboriginal people of Australia – also have unique ways of defining health, which differ from those presented so far. Native Americans see health as the state of 'being in balance or a sense of harmony, having equilibrium, and not being out of control of their being, which includes the spiritual, cognitive, emotional, and physical domains' (Yurkovich & Lattergrass, 2008, p.448). In contrast, Australian Aboriginal people believe that health is not just the wellbeing of the individual but the social, emotional and cultural wellbeing of the whole community (Thompson & Gifford, 2000). Similarly, the Māori concept of health tends to be associated with community (or *whānau*) rather than an individual (Durie, 1998).

In the Pacific region, particularly among Polynesians, including Tuvaluans, health not only refers to the wellbeing of the community, but also to cultural competency (Butt, 2002). A Tuvaluan man, for instance, who is capable of doing cultural chores such as climbing coconut trees and fishing will be labelled a healthy man, and as a consequence his family will be also be seen to be healthy. To be unable to carry out local chores in a Tuvaluan community is seen as an embarrassing deficiency as well. For example, in their anthropological study on Nanumea Island, Tuvalu, Chambers and Chambers (1985, p.44) noted that the:

> …implicit connection between strength and health also finds a reflection in the Nanumean attitude that a 'man' is incongruous with being a 'sick person'… Nanumean men clearly find sickness embarrassing… Men take conspicuous pride in their ability to perform strenuous male activities like climbing coconut trees, paddling long distances in a canoe, and carrying heavy loads, well into middle and even old age.

In the Pacific region, generally, there is a link between health and cultural identity, as well as a collective focus (Butt, 2002; Capstick, et al., 2009; Tamasese et al., 2005). This perspective, with its recognition that health includes 'the physical and mental fitness to do socialised daily tasks' (Seedhouse, 1986, p. 29) is parallel to the orientation described by Seedhouse earlier.

A literature review of the relationships between health and culture in Polynesian island countries of the Pacific by Capstick et al. (2009) reveals that health is associated with traditional living and communalism, harmonious living in the community and family, spirituality, and religion. Peacefulness, or being in harmony with the environment and community, including family members, is an important dimension of health in the eyes of many Pacific people (Sobralske, 2006). As a result, 'Pacific definitions of health often include a notion of maintaining social order and harmony' (Capstick, et al., 2009, p.1343). For example, in Tikopia in the Solomon Islands,

> Social disorder brings misfortune in the shape of sickness, sterility of land and people, or other disasters. The remedy therefore is to restore order by resolving a quarrel, by confession and apology or, in the case of extreme recalcitrance, the *ariki* may expel an offender from the land. (Macdonald, 1985, p.70)

In fact, maintaining social order and harmony are also aspects of health and illness for Fijians (Groth-Marnat, et al., 1996), Samoans and Cook Island people (Laing & Mitaera, 1994), Tongans (Parson, 1985), and Tuvaluans (see Chapter 3). This health concept around social order and harmoniousness is conceptualised by Anae and colleagues (2010, p.5) in their '*teu le va*' model. The '*teu*' (nurturing) of the '*va*' (relationships) will sustain optimal relationships among people (Mila-Schaaf & Hudson, 2009). Although the *teu le vaa* is a Samoan epistemological approach (Anae, 2007) that mainly emphasises the importance of sustaining good relationships between researchers and studied participants and communities, the importance of living harmoniously is also found in Samoa and other Pacific islands such as Tonga and Tuvalu. In this orientation, maintaining social order and harmony in Pacific communities and families must also have strong links to health.

Another cultural aspect that is linked to the definition of health in the Pacific is spirituality and religion (Capstick, et al., 2009). Generally, there is a firm belief that spirits do exist and that they can affect the health of the Pacific people. Such a view is found among Samoans and Cook Islands people (Laing & Mitaera, 1994), Tongans (Parsons, 1985b; McGrath, 2003), Kiai-speaking people in central Espiritu Santo, Vanuatuans (Ludvigson, 1985), Tikopia people from the Solomon Islands (Macdonald, 1985), East Futunans, Wallis and Futuna Islanders (Biggs, 1985), and Tuvaluans (Chambers & Chambers, 1985). Of course, in biomedicine, spirit-related illness is seen as a myth or as irrelevant, since every illness or disease is assumed to have a primarily biological cause.

However, some research has linked religion and spirituality to physical health (see George, Ellison & Larson, 2002; Seybold & Hill, 2001) and mental health (see Larson et al., 1986). In this modern era, when Christianity is by far the most widespread religion in the Pacific region (Capstick, et al., 2009, p.1344), Pacific people such as Tuvaluans (see Chapter 3) often define health in association with being faithful to and believing in God. Finau, Wainiqolo and Cuboni (2004) argued that one of the multiple transitions that need to be considered or taken into account in understanding health in the Pacific is the 'religious transition': the arrival of Christianity.

The close association of spirituality and religion with health is reflected in several Pacific health-related conceptual frameworks. For example, see: the *Toku Fou Tiale –* Tuvalu Conceptual Framework for addressing family violence (Taniela et al. 2012); *Te Vaka Atafaga –* a Tokelauan mental health model (Kupa, 2009); and *Fonofale* (see Drummond & Va'ai-Wells, 2004) and *Fa'afaletui* (see Tamasese et al., 2005), which are both Samoan conceptual models of health. All these Pacific health models include the

dimension of spirituality and religion, which reveals the significance of spirituality in Pacific culture and identity.

Anae and colleagues (2002, p. 11) describe these Pacific health models – specifically, the *Fonofale* and *Fa'afaletui* – as models that 'incorporate the environment, the social and psychological... [that] encompass dimensions of physicality, spirituality, mentality, and other dimensions'. Pacific people see health holistically. The biomedical, WHO, wellness, and environmental models of health (see Larson, 1999 for discussions of these health models) fail to precisely grasp the Pacific holistic ways of perceiving health and wellbeing.

Looking at all the aforementioned lay and professional models, it is obvious that definitions of health arise because of the different situations, belief systems, and experiences that people have in life. Examining these various models gave me the confidence to continue framing up the *Ola Lei* Conceptual Framework*:* the specific Tuvaluan way of viewing health.

2.3 Development Context – Education and Health

Although there are many different definitions of and ideas about health, one area in which there is a good deal of agreement is the two-way linkage of health and education. It is to this linkage, fundamental to societal development, that I now turn.

It is important to note that by 'development' I am talking about societal, economic, and human development. As a junior researcher in Development Studies, I was impressed by the way Richard Peet and Elaine Hartwick (2009, p.1) defined the meaning of development as simply 'making a better life for everyone'. This is a straightforward way of defining a complex concept and process. In fact, there are quite a number of different theories and models of development, including modernisation, dependency theory, and neoliberalism.

However, the core focus of development is the need to bring changes that enable people to meet basic needs, such as: 'sufficient food to maintain good health; a safe, healthy place in which to live; affordable services available to everyone; and being treated with dignity and respect' (Peet & Hartwick, 2009, p. 1). Hence, in this thesis, I am interested in the outcome of development: a better life for a community of people. In order for community people to have better lives, education and health need to be improved, for they are important aspects of the development process. In this section, I am not going to

review the literature around the different models of or approaches to development, because my focus is on health and education. I believe that discussing health and education also means, in a sense, that I am discussing development, or creating a better life for community people.

GOALS	TARGETS
1. Eradicate extreme poverty and hunger	Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day and the proportion of people who suffer from hunger.
2. Achieve universal primary education	Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.
3. Promote gender equality and empower women	Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015.
4. Reduce child mortality	Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.
5. Improve maternal health	Reduce, by three-quarters, between 1990 and 2015, the maternal mortality ratio.
6. Combat HIV/AIDS, malaria and other diseases	Halt and reverse the spread of HIV/AIDS, malaria and other major diseases.
7. Ensure environmental sustainability	Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.
8. Develop a Global Partnership for Development	Develop further an open, rules-based, predictable, non-discriminatory trading and financial system, including a commitment to good governance, development, and poverty reduction – both nationally and internationally.

Table 2.1: The Millennium Development Goals and Targets

See complete list of MDGs, Targets and Indicators at http://www.un.org/millenniumgoals/

Health and education are of prime importance to the United Nations (UN), hence the formation of the UN's Millennium Development Goals (MDGs) (see Table 2.1 below). Five of the eight MDGs are directly related to health and education. MDGs 1, 4, 5, and 6 are all targeted to improve the health and wellbeing of people, while MDG 2 directly

targets universal primary education. Hence, the idea of promoting good health through sound education is an important issue in the various communities of the Pacific Islands (Figure 2.1). Health has already been recognised as a top priority in the education system of the Pacific Islands, including Tuvalu (Government of Tuvalu, 2005, p.9), because governments use the MDG framework.
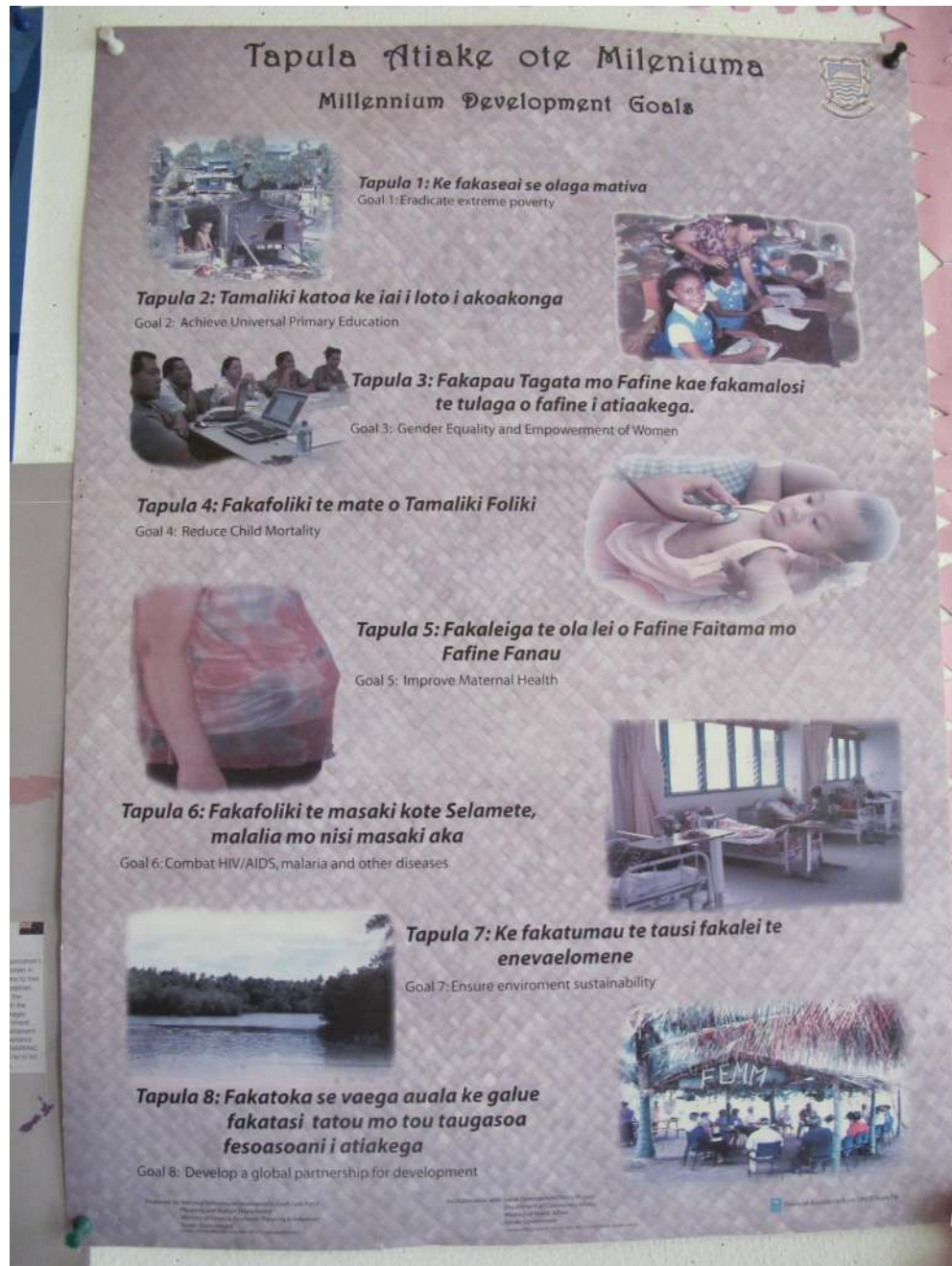
Figure 2.1: A poster, hanging in the TuFHA office, in Tuvaluan of the Millennium Development Goals.

2.3.1 Education and Development

UNESCO (2000), under the '*Dakar Framework for Action: Education for All*', came up with six goals and purposes of education, which primarily aimed for all children to have access to equal and quality education. Clause 1 of Article I of the World Declaration on Education for All is the only section that provides a definition of education. It states:

> Every person – child, youth and adult – shall be able to benefit from educational opportunities designed to meet their basic learning needs. These needs comprise both essential learning tools (such as literacy, oral expression, numeracy, and problem solving) and the basic content (such as knowledge, skills, values, and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning. The scope of basic learning needs and how they should be met varies with individual countries and cultures, and inevitably, changes with the passage of time.

While this definition emphasises the purpose and importance of education, it still fails to provide an adequate definition of education. The question is still there: what is education?

Garforth (1962, p.12) put forward three definitions for education: the delivery of knowledge in formal subjects, the learning that takes place in hidden and extracurricula activities, and learning that takes place from birth to death. In short, 'whatever helps to shape the human being; to make the individual what he is, or hinder him from being what he is not – is part of education'. The knowledge that is received via education should help the learners to choose their paths and actions (O'Cadiz, Wong & Torres, 1998, p.243). Education helps us to perceive accurately, think clearly, and act effectively to achieve self-selected goals and aspirations (Lawrence, 1991). Moreover, Higgins (2010) strongly stressed that education also encompasses learning that happens outside a formal education setting.

Learning is a process where we acquire information and knowledge. There is no universal rule that can clearly distinguish education from learning and vice versa. The two words or concepts can go hand-in-hand or may differ depending on how different people look at them. However, I would argue that it is useful to distinguish education from

learning because it means that one can be more specific. For the purpose of my thesis, I propose that education be seen as the whole system and process of education, which includes many components such as curriculum, assessments, workforce, structure, facilities, types of schools, funds, environment, communities, and other aspects. Each component has its contribution to the education system in both formal and informal settings. What the education system does is provide learning opportunities (Garforth, 1962). Garforth (1962, p.12) believed that whatever we learn in formal or informal settings is part of education: that is, 'whatever helps to shape the human being... is part of education'. As Tight (1996, p. 21) puts it: 'Learning, like breathing, is something everyone does all of the time'. We learn from what we are taught, what we see, what we hear, what we read, and what we smell. We also learn from experience.

Kolb (1984, p.38) developed the Experiential Learning Theory (ELT), in which he theorised that 'learning is the process whereby knowledge is created through the transformation of experience'. According to Dewey (1963, p.69), 'the most powerful learning occurs when the student is dealing with uncertainty'. Thus, learning or education can occur in formal settings such as schools, and also in nonformal contexts such as a family's household.

For the purpose of this research project, I will distinguish between the following two concepts:

1) Education – the formal system provided by the Department of Education – includes officers, workers, students, curricula, schools, infrastructures, system, and others.

2) The learning process itself includes the transmission and acquisition of information, knowledge, values, and attitudes.

This will remind myself and readers that education not only represents the formal system such as the curriculum and workforce, but also the transmission and acquisition of knowledge. Consequently, the formal system, or education sector, and the learning process are both significant to the development of health and societies, as I will discuss next in this chapter.

Education is important to the development process. To achieve development, educational equity, curricula, facilities, workforce, funds, leadership, and administration must be improved and supported. Education has a role in the development process (Ginsburg & Pigozzi, 2010) as it is a building block for various aspects of social and economical development such as health, employment, economic security, and democracy (Glaeser, Ponzetto & Shleifer, 2007; Mula & Tilbury, 2009). Education provides individual

students with opportunities to achieve learning outcomes and reach their potential. Those educated people, in turn, contribute to the social and economic development of a country as a whole. In addition, education is seen as a way to increase the resources needed for creating new ideas; hence, education will directly accelerate technological progress and human resources, which leads to development (Olaniyan & Okemakinde, 2008).

It is obvious here that there is a link between education and development, both economically and socially (Department of International Development, 2000; Vila, 2005, p.8). Education, an agent for transformation, is still believed to be the 'most widely available mechanism for social and economic mobility' (Smith et al., 2007, p.7). Ahmed (2010, p.516) considers education to be a transformative agent:

> The transformative view of the future is premised on looking at education and learning as both the means and the purpose of building sustainable societies where human potential is unlocked and human dignity and rights are cherished.

This is the role of education: to foster personal, economic, and social developments. There is substantial evidence about the benefits of formal education with respect to a wide range of development goals (UNESCO, 2002). Without education it would be hard to attain development. In order to achieve MDGs, developing and developed countries need to prioritise education. Education allows individuals to see, synthesise, analyse, and evaluate concepts that may contribute to development. In some developing regions in Africa, for example, development is held up due to a lack of education. This is because low adult literacy hinders the development process (Jogwu, 2010; Rogers & Street, 2012). Literacy is important to development because it enables people, for example, to utilise written information that may help them to improve or develop the health of their families and communities.

Along the same lines, Sen (2001) reminds us of the linkage between development and people's freedom. Sen (2007) put forward the capability approach, in which education is seen as the means to develop people's capabilities and freedom. Bhog (2005) also stresses that education for women will achieve national demographic and development goals such as improved nutrition, and maternal and child health. The goals of poverty reduction and empowering women could be addressed through education (Lewis, 2004). Education is a vital tool for realising other human rights and the MDGs (UN, 2010) because education 'enables people to live with dignity, develop their full capacities,

participate fully in development and improve the quality of their lives' (UNESCO 1990, cited in Miles & Singal, 2009, p.3).

Although education has an underlying potential to empower people and uphold development, it can also constrain people's thinking. I believe that it is important for education policy- and decision-makers to create curricula and produce learning outcomes that promote and encourage empowerment, but do not to restrict students' thinking to a particular outcome or pathway. It is education that should assist the students and adults to become creative thinkers and active participants in their communities (see Lawrence, 1991).

2.3.2 Health and Development

Like education, health is an important aspect of development. The 'health of any nation is the sum of the health of its citizens, and the communities and settlements in which they live' (Mukhopadhyay, 2010, p. 72). An unhealthy person is less able to function normally within, and contribute constructively to, his or her community. As a result, health is a priority in the eyes of local communities, governments, and the UN. The predominance of health-related goals in the MDGs reflects the significance of health.

Of course, there is a high demand for funds to achieve the health-related MDGs, but Freedman (2005, p.19) has argued that 'the answer is not just money; it is the entire way in which we think about the connection between health and development – and the priority actions that result'. If money is only part of the answer to achieving these health goals, what provides the rest of the answer? As I have argued above, part of the answer lies in understanding what health means in particular contexts, as well as in understanding what development means and how health links to development.

Sen (2001), for example, believes that health enables people to achieve the end goal of development, that is, the freedom to achieve what they value. Moreover, some economists argue that being healthy is a preliminary condition for economic growth, which is considered important for development as a whole (Commission on Macroeconomics and Health, 2001). Health – as an ideal state and the ability to function satisfactorily – is therefore seen as a precondition for individual and social development, whether development is understood as primarily economic or primarily in terms of freedom.

According to MDGs 4, 5, and 6, countries have to deal with reducing child mortality, reducing maternal mortality, reversing the spread of HIV/AIDS, and reversing

the incidence of malaria and other major diseases. The UN (2008) reports that in developing countrie there is still a high child mortality rate, a high maternal mortality rate, and that every day about 7,500 people become infected with HIV and 5,500 die from AIDS, mostly due to lack of HIV prevention and treatment services. Promoting health is essential if we want to achieve the aforementioned MDGs.

Moreover, health is widely recognised as contributing to human development. Having good health, for example, means having access to the basic requirements for life such as food, shelter, safe water, good sanitation, and security. Gani (2010, pp.108-109) writes: 'Human health and development is reciprocal. Economic development tends to improve human health while better health contributes to economic development'. It is clear that health, like education, is important in the process of development. Good health allows mothers to have healthy children, which leads to longevity and healthy families. Good health gives people a better chance of resisting diseases or recovering from infections. On the other hand, Gani (2007, p.21) adds that 'health contributes to development in a way that better health for workers can provide direct and immediate benefits by increasing their productivity and that better child health and nutrition promotes future productivity growth'. In other words, poor health outcomes negatively affect employment rates, which strengthen the poverty cycle. The important point here is that good health is linked to societal, human, technological, and economic development.

2.3.3 Challenges to Education and Development

Sadly, many countries, especially in the third world, will likely fail to achieve universal primary education. Miles and Singal (2009, p.11) concluded that 'the enormity of the challenge of providing universal primary education in countries of the South can seem overwhelming, and the analysis presented by many international agencies tends to adopt a deficit approach'. Enormous efforts have been made, both nationally and internationally, to achieve universal primary education in developing countries. However, these attempts are often thwarted, with proponents 'struggling to cope with poorly trained teachers, inadequate budgets, large class sizes, and more recently the HIV/AIDS crisis' (Miles & Ahuja, 2007, p.133).

Moreover, the UNESCO Institute for Statistics (2006) reported that there is a shortage of 18 million teachers globally, which is a challenge to achieving universal primary education. In African countries, the 'problems of relevance, unequal and low

access to educational opportunities, poor quality of education, poor managerial and planning capacity, poor financing mechanisms, [and the] weak link between education and labour market, still remain as major constraints' which challenge attempts to achieve universal primary education in Africa (Gakusi, 2010, p.241). Gani (2010), on the other hand, revealed that the Pacific Island mini states – Pacific Island countries with populations less than 100,000, including Tuvalu – have a high total net enrolment ratio in primary education. In the global south, the countries of the South Pacific have very high participation rates in primary education. However, Sanga (2003) argues that weak leadership – and, hence, a lack of clear national vision – is another challenge to education in the Pacific Island countries. External aid flows in to address such challenges, and as a result some national visions and parts of the curriculum are influenced by the external agencies.

In order to attain and improve education, international assistance is needed (see Feeny & Clark, 2008). However, on some occasions, donors have taken the 'top down approach', in which they fund educational projects that they think are a priority; the recipients are not given a choice. As Wrighton and Overton (2012, p.252) note: 'Donors want recipients to want what donors want'. Even at a national level, such as in Tuvalu, policy development and decision-making begins at the macro level (national and regional) and descends to the micro level (community, school, and classroom). This trickle-down approach assumes that central governments will develop education, and the benefits of education will in due course trickle down to the community and schools. However, many times, trickle-down approaches fail. All these factors make it difficult for education to thrive in many countries, particularly those that are developing.

2.3.4 Challenges to Health and Development

There are challenges that hinder health sectors from thriving in many countries, especially in the third world. In his South African study, Pillay (2006) strongly stressed that the main challenges to health include inequality of primary health coverage, poor provision of quality health care services, lack of human resources, and the absence of legislation around social insurance. In fact, many developing countries find it hard to achieve health as defined by WHO because this requires enormous effort and resources – human, capital, and natural – and good governance. WHO (2006) reported that it needs approximately 4.3 million additional health care workers by 2015 to meet the MDGs. In Tuvalu, generally,

there is a shortage of medical officers and health specialists such as surgeons (AusAID & ADB, 2007). Consequently, more cases are referred to Fiji and New Zealand, under a medical referral scheme: the Tuvalu Medical Treatment Scheme (TMTS). The TMTS will be discussed further in Chapter 4.

Pillay (2006) states that we need public health care that covers all people. Disadvantaged people are usually the ones who find it hard to get a fair share of the health system, while the more affluent enjoy easy access to health systems. Miller, Tejada and Murgueytio (2002) agree that poor people often experience abuse in health facilities. In Tuvalu, however, all medical and health services are free. The more serious cases are sent to Fiji, India or New Zealand under the TMTS. In fact, the biggest challenge to the area of health care in Tuvalu is not so much the curative services but the capability of people to afford a good diet and living standard in order to prevent diseases. In the *Tuvalu Economic Report*, AusAID and ADB reported the challenges in the areas of health care and preventative care:

> In the area of health care, the main challenge is to maintain the present system of [free] primary health care and not allow it to be eroded by the rising cost of curative health services. In regard to preventative care, the most disadvantaged are those who cannot afford an adequate diet (particularly because they must rely on inferior, imported foods) because this exposes them to nutrition-related illnesses; people who are exposed to sexually transmitted disease, particularly youth, seafarers, and women; and people exposed to waterborne illnesses ...' (2007, pp.16-17).

It is important to bear in mind that the challenge does not stop with these services-related problems, but rather extends to the lack of the fundamental elements of health, such as sanitation, food, water, and security. In many developing countries, these very essential elements of life are lacking; this is a blow to health.

The lack of respect shown by health providers towards developing countries' cultures is another challenge that is worth mentioning. Health projects will be ineffective if health providers do not understand or consider the cultures of the communities that they intend to help. For example, according to statistics, Pacific Islanders in New Zealand do not fully utilise the health care services available. Many health care providers do not take into consideration the fact that many Pacific Islanders are not aware of, or are uncomfortable with, primary care services due to language, cultural norms, and health

beliefs (Wright & Hornblow, 2008). In Tuvalu this is not a problem as most medical officers are Tuvaluans who are aware of the culture. However, there is a tension between medical staff and ordinary community people in terms of how they see and view health, disease, and illness.

2.3.5 Development?

The problems and challenges that hinder health and education in developing countries still persist. In addition to the aforementioned challenges, there is evidence that 'children continue to die annually in the Pacific Island countries with PNG, Kiribati, Marshall Islands and Micronesia recording high incidences of infant and child mortality rates' (Gani, 2009, p.184). Prasad (2008) added that many Pacific Island countries lag behind on many aspects of life including health, water, and sanitation. Poverty is also hindering people in the developing world from having access to education and health. In his paper, *The Millennium Development Goals and the South Pacific*, Naidu (2002) concluded that Melanesian and Micronesian countries of the South Pacific would find it hard to achieve the MDGs. These ongoing problems and challenges made me wonder: where is development? Could not development boost or develop education and health, as promised, in developing countries? Is development a solution or just a fairy tale concept? Similarly, Pieterse (2000, p.176) stated: 'Development is the management of a promise – and what if the promise does not deliver? For those living in Chiapas or other oppressed and poor areas, the chances are that development is a bad joke'. This is because development has 'always been embedded in a sense of hope': a hope to produce a 'better world' (McKinnon, 2007, p.772; see also Peet, 1999).

With these doubts in mind, I began to question the capacity and capability of development to cope with the educational and health issues in this complicated world. With this kind of mindset, I agree to an extent with what Sachs (1992, p.1) stated about development:

> The idea of development stands like a ruin in the intellectual landscape. Delusion and disappointment, failures and crime have been the steady companions of development and they tell a common story: it did not work. Moreover, the historical conditions which catapulted the idea into prominence have vanished: development has become outdated.

Sachs is not alone in critiquing development. Scholars such as Escobar (1992), Latouche (1993), and others also argue that development has failed because it is largely a western and external concept. I believe that we should consider other factors that may affect the positive aspects of development, such as leadership and culture. I am therefore not going to completely rule out development as an important and useful concept and process. However, I would like to see the process of development actively involve local communities. I agree with Sanga (2003) that trust is important when it comes to the relationship between donors and recipients, since this trust will ensure that educational and health development projects are relevant, operational, and locally-owned.

2.3.6 Education and Health: Making the Link

The Tuvalu Director of Education stated during one of my fieldwork meetings with her:

> If we look at education and health, we do not know which one is the egg and which one is the hen. Was it education that creates or bears good health, or is it good health that produces well-educated citizens? Which one comes first, education or health? I think education and health are inseparable.

The age-old metaphorical puzzle about the hen and the egg, which was invoked by this experienced Director of Education, interests me because I think it accurately shows how tricky the problem is. We do not really know which sector produces which sector. All we know is that education and health are linked, and they are significant components contributing to the economic, political, and social development of a nation (Lee et al., 2003; Rogers & Street, 2012). Thus, to an extent, I wonder: do students, community people, education and health officers know how and why education and health are linked? Do they, or do they not, think that education and health are two totally different things? Does it matter which sector is the egg and which one is the hen? Is good health or education a consequence or a prerequisite of a country's development, or both?

Of course, education and health are two separate things, but they are inseparably linked. There is evidence that improving the health of young children can improve children's attendance in schools and academic attainment (Healy, 2004; St. Leger and Nutbeam, 2000). In other words, the success of education depends on good health (Lee et al., 2003, p. 174; Subramanian, Huijts & Avendano, 2010) because good health has a

positive impact on the cognitive development of children (Jukes, 2005; Bloom & Canning, 2001, p.147). Moreover, quantitative work in New Zealand based on population studies concluded that better-educated citizens are more likely to be healthy (Johnston, 2004). Other scholars such as Goesling (2007), Ross and Wu (1995), Mirowsky and Ross (2003), and McMahon (1999) have also written about the effects of education on health. This means that if education and health 'walk side by side', they can bring positive transformation and development.

If education and health work together, the two sectors will tend to improve and positively affect members of the community simultaneously. Health is not the only sector that is responsible for promoting and developing community health and wellbeing. There is a need for other interventions from outside the health sector (Lonnroth et al., 2009) and collaboration among other sectors, for example to fight diseases such as TB. In the Pacific Islands, for instance, the incidence and prevalence of communicable and non-communicable diseases are high and have reduced the health of the Pacific population (Gani, 2009). How can this be solved? It is highly recommended that to improve this situation the education and health sectors work together (Lee et al., 2003; Beattie, 2002; Englberger, et al., 2007).

According to the World Bank (2004), countries with high levels of health and education generally show significant progress in terms of their economic development. Conversely, in poor countries, such as some of those in Africa, it is obvious that 'the inadequacy of and inefficiency in delivery of resources to education and health has led to limited human capital in Africa and prevented African countries from taking substantial benefit from economic globalization and development support' (Gakusi 2010, p.241). In the beginning of their short report about Hong Kong's experience in joining the efforts of its health and education sectors, Lee et al. (2003: p. 174) argue that 'both health and education are linked to economic performance'.

Community people and students learn about health issues and diseases through education and experiential learning. Theoretically, if community people or students are not aware of health issues and diseases, then education and health in that society or institution are not closely working together. Of course, this does not mean that community members do not have any idea about health. The understanding they have about health and diseases might be quite different from those of medical providers. For education and health to work together it is important to know how and where people gain their knowledge about health and disease.

The intersection between the Departments of Education and Health can be seen in their policies, funded projects, and services. Analysing what the Department of Education policies say about health, and vice versa, is a good way to see the intersection between the two departments. The funded projects within the departments may intersect in terms of their aims and purposes. For example, an educational project to improve water storage in a rural school is definitely related to health promotion and development. An analysis of the services that each department offers or provides is another effective way to see the intersection between education and health. For example, a TB awareness programme in a school combines and requires the services of both the Department of Education and the Department of Health. These interrelationships between the two departments' policies, projects, and services reflect the intersections and linkages between education and health.

Examining and analysing the intersection of education and health in terms of what is learnt is one way that we can establish a clearer picture of people's awareness of and ideas about health. In a study to assess awareness and perceptions of TB among the general population of Delhi in India, Sharmer et al. (2007) concluded that there is a need to intensify education to provide TB awareness to the population. Studies have also demonstrated that suitable training of health professionals and awareness programmes on diabetes is a key issue (Azevedo & Alla, 2008; Sircar, et al., 2010).

Willows et al (2009) also found that the majority of those Cree school children whom they interviewed in the province of Quebec, Canada, were not aware of diabetes. Possibly this may be the case in Tuvalu. It is important to investigate the level of awareness of students, teachers, and members of communities about TB and diabetes in Tuvalu. The level of awareness would reflect how health, communities, and education cooperate.

2.3.7 Development Links to Education and Health

We now recognise the importance of human resource development, particularly in the areas of health and education, to the development process as a whole. Now the question is: does development, in turn, benefit the education and health sectors? The answer is yes, if we consider the benefits of economic and technological developments for education and health. It is obvious that countries that perform highly in terms of economic development also have higher levels of health and education (World Bank, 2004). In her historical writing about the changing patterns of health in Papua New Guinea, Luker (2008, p.261)

revealed that 'most gains in people's health … could be attributed to dedicated campaigns, using new technologies, against specific diseases'. However, it is important to bear in mind that a technological fix without change in the sociocultural context, is rarely effective in the long run, as the history of TB has taught us (see Zafran et al., 1994). Yet if these new technologies are sustained and fully utilised, they can be tangibly useful in improving health and education. As Gani (2010, pp.108-109) has noted: 'Human health and development is reciprocal. Economic development tends to improve human health while better health contributes to economic development'.

In fact, technological innovations can help make jobs in the education and health sectors more effective and efficient. In education, technology helps make the teaching and learning processes easier and more convenient for both students and teachers. As an example of how technological innovations can help in the health sector, the introduction of efficient internet and telephone on outer islands in Tuvalu helps nurses on outer islands consult with doctors on Funafuti about serious cases. In addition, economic development leads to the generation of jobs and money, which can be invested in education and health. As Marphatia (2010, p.171) noted:

> Investment in health and education can also promote economic growth, because with more skilled (and healthy) workers contributing to the economy, there is a better potential for growth and increasing revenue (from taxes) that the government can use to hire more teachers and health care workers.

Here, we see both that education and health are linked to development, and also that development is linked to education and health.

2.4 Conclusion

In summary, this chapter outlines two main theoretical ideas:

1. Health is a complex, dynamic, and multidimensional concept that is defined and approached uniquely by individuals according to what they learn and experience from education, culture, community, family, and environment.
2. Health and education are inseparable and linked, and are both imperative to development.

The different ways of defining health are understandable, as different communities and individuals have different contexts and experiences (Baer, Singer & Susser 2003;

Laverack, 2007). Health can mean different things to different people, as the opening quotation from Dubos (1995, p.9) at the beginning of this chapter illustrates.

Looking at the different definitions of health from different communities, institutions, laypeople, and scholars, the concept of health covers various dimensions such as: biology, medicine, disease, having an ideal state of fitness to do tasks, family, community, spirituality, religion, culture, harmony, and satisfaction. This clearly shows that it is impossible to attain a universal, valid, conceptual definition of health because 'health is a value-laden term whose meaning is highly tied to different objectives which govern its use' (Boruchovitch & Mednick, 2002, p.177). The overlapping and contradictory nature of the definitions of health is a problem, since practitioners and policymakers find it hard to 'internalize and commit to any one definition to the extent that is required for programme and policy development' (Wiliamson & Carr, 2009, p.108). Despite the various meanings of health, no one wants bad health. Good health – in terms of health as services, personal wellbeing, commodities, or satisfaction – is what most people want in order to live a happy life.

Examining and discussing the various concepts of health is important, but it should not stop here. We should not just examine and try to understand the culturally-constructed models of health simply for 'translation' purposes (Macdonald & Park, 2005, p.95). Rather, '[a] widespread discussion of new concepts [of health] is needed in order to render them useful in practice' (Bircher, 2005, p. 335). We need to examine the overlapping definitions of health to help us create relevant and culturally-appropriate models for our own communities.

Health and education are inseparable. Although there are barriers to education and health projects that stop them thriving in some countries, education and health remain key mechanisms for development. A substantial body of literature discusses the linkage between health and education, and their contributions to the overall development of a country. A newly healthy and educated population, for example, will experience better quality of life and improvements in human capital, which will contribute to higher levels of collective output, which will generate higher incomes. This will result in community wellbeing. It is important to look at the intersections and linkages between health and education in order to understand more about how the two sectors may assist each other in efforts to help members of the community have better lives.

Therefore, the most important question to ask is not, 'What are the contributions of health and education to development?' Rather, the question should be, 'How can we make

health and education contribute to development?' The latter question will allow us to look at constructive ways to improve health and education. For example, improving equity in and access to education and health services is one way to enhance human development (Pillay, 2006). We must not only focus on how the hen and the egg – education and health – link together, but should also pay attention to how economic, political, social, environmental, and other factors enhance and nurture the hen and egg for the ultimate benefit of the community.

CHAPTER 3: *OLA LEI* – TRADITIONAL CONTEXT OF 'LIVING WELL'

3.1 Introduction

Me: You may know that this Tuvaluan word, '*ola lei'*, is now used by us as a Tuvaluan word for this English word 'health', right? What is your understanding about this word '*ola* lei'? What is '*ola lei'* to you?

Interviewee: *Ola lei*? You mean *ola lei*?

[*He looked at the ceiling with a stony face*]

Me: Yes! *Ola lei*.

Interviewee: Oh! Oh ... Oh.
[*Paused and silent for eight to ten seconds*].
Ola lei, huh?

Me: Yes ...

Interviewee: You mean to which *ola lei*? *Ola lei* in terms of having good life or *ola lei* in terms of the Department of Health?

Me: Any.

Interviewee: Uhmmm ...*ola lei*, huh? Oh... oh... it is hard, aye? I don't know... I could not express it in words...

Me: Why not?

Interviewee: I don't know... probably because *ola lei* is a very big word aye? *Ola lei* has so many tentacles… like the tentacles of an octopus [*laugh*].

This interaction helped me to fully realise the complexity of *ola lei*. In fact, I went on to use this interviewee's metaphor of *ola lei* being like an octopus with tentacles as the basis for the visual model I developed for the *Ola Lei* Conceptual Framework.

This chapter documents Tuvaluan understandings of *ola lei*, drawing on the explanations offered by community members[8], traditional healers, students, and health and

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[8] There is considerable ovelap between community members and the other categories. Nearly all people in the other categories (e.g. teachers, medical professionals, traditional healers) are also community members.

education professionals about what it means to 'live well'. My accounts of what people 'do' are based on both my own observations and also on people's descriptions of what they do. This ethnographic information can be used to answer the following two questions: How do cultural assumptions and personal experiences contribute to local knowledge and practices around health and illness? More specifically, what do students, teachers, and the community understand about health and good living, and how have they learnt this?

3.2. What is *Ola Lei*?

The question, 'What is *ola lei*?' was presented to research participants from different types of communities and institutions. I phrased this question carefully (as outlined below) so that the interviewees knew that they were going to talk about *ola lei*, which, as discussed in the last section, is the conventional Tuvaluan translation for the English word 'health':

> *Kaati la e iloa ne koulua me i te muna Tuvalu tenei, 'ola lei', ko fakaaogaa ne tatou mo fai a te pati Tuvalu ki te muna palagi tenei 'health', ne? Seaa a te oulua iloa ki te muna tenei 'ola lei'? Seaa a te 'ola lei' ki a koe?*

> You may know that this Tuvaluan word, '*ola lei*', is now used by us as a Tuvaluan word for this English word 'health', right? What is your understanding about this word 'ola lei'? What is 'ola lei' to you?

This question led people to talk about *ola lei* and what they think about it. I analysed patterns of ideas voiced by interviewees with reference to their personal experiences, age, and status in the family and community. Participant observations also provided additional information about health practices. My participant observations were done in schools, a few families' households, at communal activities and festivities, and in hospitals.

Tuvaluans typically see *ola lei* as involving four related qualities:
1.   *Filemuu* (harmoniousness, peacefulness);
2.   *Fiafia* (happiness, contentment);
3.   *Malosi* (fitness);
4.   *Ola leva* (longevity).

In Tuvalu, these words are often used to define and describe the nature of *ola* lei in specific contexts. As Figure 3.1. illustrates, these key qualities of *ola lei* are interrelated in complex ways.
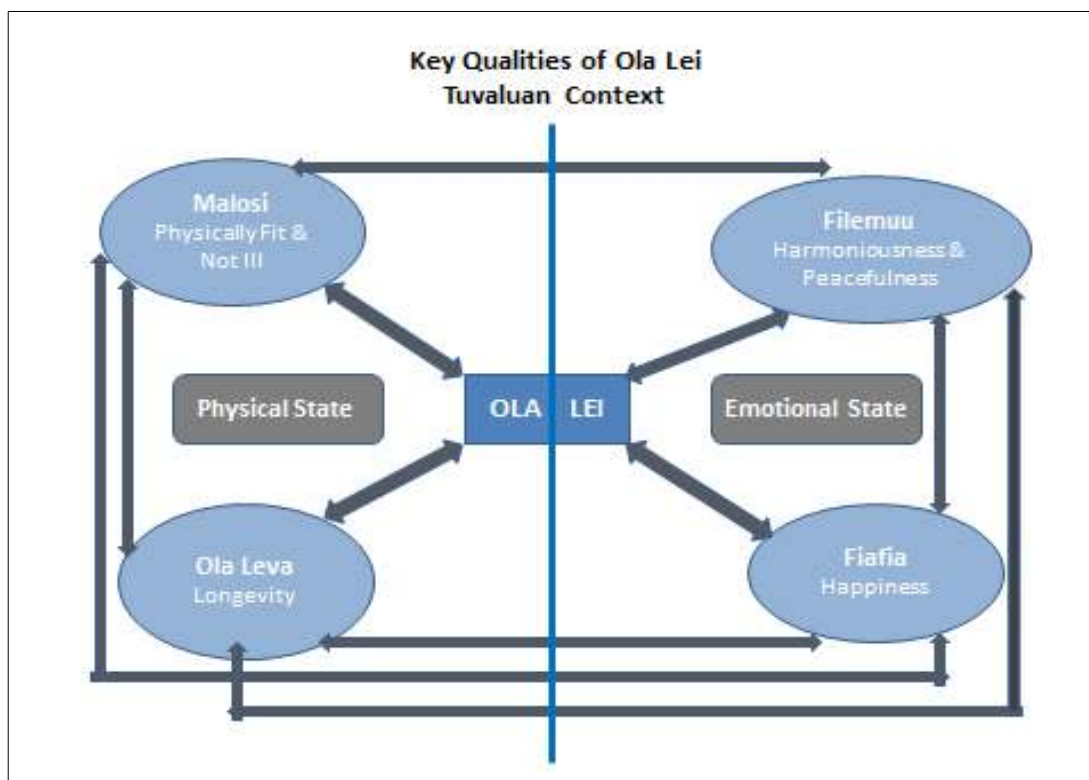
Figure 3.1: Key qualities of *ola lei* in a Tuvaluan context.

If we think of a continuum, *ola lei* is the positive pole, the ideal physical or emotional state of a person or people. *Malosi* and *ola leva* are aspects of a physical state of a being, while *filemuu* and *fiafia* are parts of the emotional state. Ideally, all four of these qualities coexist. There is also a causal relationship among the various key qualities. For example, a physically fit person is likely to be happy, and vice versa (Veenhoven, 2008). *Malosi* by itself would not be worth much if other qualities such as *fiafia* were absent. On the other hand, *ola leva* is only likely if other qualities of *ola lei* are present, since longevity by itself is not worth much if you are not physically fit and happy. But in order to fully explain what people mean by *ola lei*, it is important to describe each core aspect in more detail.

3.2.1 Filemuu (Harmoniousness and Peacefulness)

In the church services that I attended, children were often seated in the front area of the church, with a few Sunday school teachers surrounding them. If some kids

were rowdy, a teacher would call out with a stern voice: '*Filemuu*!' The kids would quickly calm down. (Fieldnotes, 2011)

This example shows the value put on peacefulness and harmoniousness is taught and reinforced in many situations. Adults often remind young children, in public and in private, to live and play peacefully. It is the word that calms down children and adults in times of argument and misbehaviour. In this way, harmoniousness and peacefulness have been deeply embedded into the value system and customs of Tuvaluans. For example, on Vaitupu Island a customary law prohibits people from making noise after ten o'clock at night and from drinking alcohol within the boundaries of the main village. However, community elders often voice their worries about the peacefulness of the community in the future, as they see a change in the younger generation's attitude towards the value of *filemuu*. This concern was clearly explained by one interviewee:

> *A niisi mea kolaa e matea nei ne au i taimi nei…ko niisi tino kolaa e taumafai o ofa ne latou a tuu mo aganuu a tatou. Seai laa se ola `lei e maua mai ei. Au e faipati ki tino kolaa e ofa ne laatou a tuu mo aganuu…tino kolaa e koonaa valevale kae paakalaga i te kano o te fakai…seai se ola `lei maua ne tino konaa, penaa foki tatou tino o te fenua, manafai e kosukosu penei ne `tou tamataene a tapu o te fenua ne?*

> Some other things that I can see these days… those people who are trying to break our customs and traditions. No *ola lei* can be achieved from that. I am talking about people who break customs and traditions… people who carelessly [get] drunk and [go] shouting around in the village… That's not *ola lei*! No *ola lei* can be achieved by those people as well as the people of the island, if our young men are breaking the taboos of the island, eh? (Community elder & traditional healer, 60+ years old)

Filemuu assumes the absence or minimisation of violence, fights, and arguments, and that people will interact in peaceful, respectful ways, thereby creating a harmonious society. In Tuvaluan, the literal meaning of *filemuu* comes from *muu* which means 'quiet' or 'calm'. Thus, achieving *filemuu* in a community means that there will be fewer disturbances from people's behavior and actions. In general, Tuvaluans see themselves as peaceful people, and they take pride in that peacefulness.

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Community people look upon *filemuu* not only as an important dimension of a peaceful life but also as a word that has a similar or close meaning with the word *ola lei*.

Ola lei, if we look at it, it has a wide meaning… it is living peacefully. Human beings live peacefully… with blessing lives. (Community Leader- 50 + years old)

To me, *ola lei*… is just you are living peacefully in the community or family. Don't need to have a kind of leadership that can make life suffer. (Women Organisation Leader, 50+ years old)

The interviewees placed great importance on *filemuu* for the whole community. They spoke of *filemuu* as a community resource that all members of the community could share. As one school matron stated, '*Ola lei* is when we or students live happily and peacefully…' (School Matron, 50+ years old).

However, such peacefulness might be interrupted when there are conflicting relationships and strongly differing views within a community or institution. When this happens, the relationship or space between different people should be negotiated and reconciled. Pacific scholars have recently developed a Polynesian cultural concept known as *va*. This term is a Samoan, Tongan, and also Tuvaluan word that means 'space' or 'relationship'. In their report to the NZ Ministry of Education, Anae, Mila-Schaaf and colleagues (2010) extended the term *va* into a concept that emphasises actively working together and creating a new *va'a* between researchers, policymakers, and participants in Pacific education research. This is the '*teu le va*' concept (Anae et. al, 2010, p.5). By nurturing (*teu*) the relationships (*va)* among people and between them, optimal relationships can be created and sustained, within which everyone will practice behaviour and actions that promote good 'space' or relationships within the whole community (see also Mila-Schaaf, 2009).

Interestingly, while *filemuu* was widely discussed by adults, none of the students I interviewed mentioned *filemuu* in defining *ola lei*. Why did students, unlike older community people, not think about *filemuu* as an important aspect of *ola lei*? This question became more significant for me when a primary school head teacher stated:

Ola lei is one of those things that we should prioritise… and the students, or our children, should know what is right and to do that right thing. A school should teach students to feel genuinely what should be done and what should not be done, aye? For example, the students should know how to respect to teachers, parents

and all other people. The students should know to talk respectfully to people and live peacefully among the community people.

Did students not mention *filemuu* as a key quality of *ola lei* because they live in an already-peaceful place? Were they taking peacefulness for granted, perhaps? Or was it that the schools' curriculum largely focusses on the physical side of health? This means that the school curriculum might supplant Tuvaluan values as the curriculum focusses more on aspects such as cleanliness and diet. Respecting other people, particularly elders, is a central aspect of *filemuu*. And living peacefully in the community was expected to be taught to children by their families.

3.2.2 Fiafia (Happiness and Contentment)

Most afternoons I went to chief Seu's house to tell stories and play board games, particularly the games of chess and *'Sorry!'* Seu is well-known on the island for his great sense of humour. He is a great orator, who never stops talking and teasing, especially when playing board games. Hence, my wife and I could not resist going to Seu's house every afternoon to have a good laugh from his great stories and jokes, and to listen to his comments on chiefly politics. One afternoon, just as we were about to begin our game of *'Sorry!'*, the chief told me that he heard from one of his friends that I had interviewed him about *ola lei*. Our conversation began:

Me:	*Ao… ne silisili au ki a ia me seaa tena iloa mo tena fakamatalaaga ki te muna tenei ola lei.*
	Yes… I did interview him on what he knows or what his explanation is about this word *ola lei*.
Chief:	*Ola lei?*
	Ola lei?
Me:	*Ao, ola lei. Seaa tau faka`tau, mata nei a taa tafaoga tenei e fai faeloa i aso katoa se vaaega o te 'ola lei'? [Laughs]*
	Yes, *ola lei*. What do you think? Is this board game we play every day part of *ola lei*? [Laughs]

Chief: *[Laughs] Taina, a taa tafaoga tenei e fai saale, e maua ne taaua a te fiafia. Me i te fiafia, ko te ola lei tenaa. A te ola lei ko te fiafia! E lavea ne koe a te taa`fao fiafia o tamaliki kolaa, mo te logoaa mai o tamataene mo tamafine i te voli-poolo… e fiafia ne? Ke oko ki fafine konei e bingo mai koo, e maua foki ne latou a te fiafia, e tigaa i ei e luusi a olotou sene [laughs]. A loto mo mafaufauuga o tino e fiafia… a te agaaga mo te tagata e malie, e maamaa te mafaufau, taatou e katakata kae see fanoanoa. Te mea tenaa se fiafia… se ola lei! Kaeaa e tonu nei oku mafaufauuga konaa? Io me ka kilo ki ei ou faiakoga konaa i Niu Sila, ko see fakatau loa i te `see-palakii [laughs]. Kae ui ei, saga mai ke taa koe ne au i te sorry… ko koe ke fanoanoa, ko see ola lei i ei koe… [laughs].*

[Laughs] Brother, this game that we used to play makes us happy. Happiness is *ola lei*. *Ola lei* is happiness! You see those children who play there… and you hear the cheery shouting from the young men and women who play volleyball there… they are happy, right? Even those women who played bingo over there, they are happy, though they are losing their money *[laughs]*. Hearts and minds are happy… the souls and bodies are satisfied, the minds are at ease and relax; we laugh but are not sad. That's happiness… it's *ola lei*. Am I right with my thoughts and ideas? Or would your lecturers in New Zealand see my ideas as the most stupidest ideas of all? *[Laughs]* Anyway, let's play the game of *Sorry!*… let me defeat you so that you may get sadness, then you will not get *ola lei*… *[laughs]*.

Me: *[Laughs]*

As we laughed, I quickly looked around and studied the joyful atmosphere of this part of the community, at this time of the day. I listened to the cheery voices around me. All the afternoons that I had been here, I did not notice these things. I only heard voices but never thought about the deeper meaning behind those cheery noises coming out from this part of the community, every afternoon. Perhaps it was because I am used to this cheery atmosphere in my own village, which made me wonder if an outsider, for example a researcher from a troubled area in the Middle East, would notice this cheerfulness and happiness more quickly than I, an insider?

Seu was right. Behind his local house, a group of men were drinking *kava* (*yaqona*) as they sang old songs along with the melodious sounds of the guitars and ukulele. In one of the houses nearby, a crowd of women were quietly playing bingo. A few metres away

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from where we sat, more than twenty young men and women played a friendly volleyball game, with loud shouting voices. Evidently, the bingo players often 'shushed' the volleyball players, as the noise disturbed their concentration. Under some nearby breadfruit trees, a dozen young kids were playing casual games of cricket and soccer, while others rode their nearly fallen-apart bikes around the dusty dirt paths. From where we sat, I also heard children's joyful voices from the lagoon, probably 80–100 metres away. This is the normal routine, for this part of the community, almost every afternoon, except Sundays when reverential quiet is expected. I realised that I am surrounded by and am part of the *fiafia* in this part of the community.

Fiafia is the Tuvaluan word for the English word 'happiness' and 'contentment'. *Fiafia* is a state of being that this community, for example, created in the afternoons: a sense of contentment created through people's social activities and way of life. Seu defined *fiafia* from different emotional directions, ranging from satisfaction (in spirit and mind) to deep joy. In Tuvalu, *fiafia* is characterised by cheerful behaviours or actions such as laughing, singing and dancing, playing games, being willing to do communal work, and not being sad. In other words, *fiafia* is a key emotional aspect of *ola lei*.

Like peacefulness, happiness is not included as an indicator of development by the UN when they formulated the Millennium Development Goals. However, some countries such as Bhutan have included 'gross national happiness' as an index to measure people's quality of life (Zuzanek, 2013, p.796). However, during the launching of the Tuvalu MDGs Progress Report for 2010 and 2011 in August 2011, not a single member of the invited audience asked how happiness and peacefulness connected into the development spectrum of the nation[9].

In times of communal works and festivities, the concept of happiness is often voiced. During community functions, I usually hear from the old men's exchanges when they feel that the function is a bit dull that they want more happiness. They may say, '*a te aso e pelaa me `noga. Tai muumea aka a te matagi,*' which literally means, 'the day seems to be quiet. Increase the wind'. This means that that the atmosphere of this day's function seems a little bit dull, thus there is a need to create more happiness or lift up happiness, referred to metaphorically as the wind. It is shown here that happiness is a state of being that community people desire and aim to maintain in the community. Some of the most

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[9] I attended the launching of the Tuvalu MDG Progress Report 2010/2011 in Funafuti Island, Tuvalu. It was held on 24th August, 2011. Invited audiences included retired senior governmental officers, government secretaries and directors, NGO representatives, and others. The Minister of Finance chaired the launching, with the help of his senior officers.

common 'happiness' phrases that are often heard in the communities are: '*Te olaaga nei ko koe loa ke fiafia,*' which simply means, 'the most important thing in this life is just for you to be happy'; '*Fiafia koi taulealea koe,*' or 'Be happy while you are still young'; '*Mea katoa loa ko te fiafia,*' or 'Everything is but happiness'; and '*Te koga e nofo i ei a te fiafia, e nofo i ei a te Atua*', or 'Where there is happiness, God is in that place'. These phrases are geared to promote or boost people's morale or moods, in times of arguments or during dull moments.

However, some of these phrases may also negatively influence people's attitudes towards *ola lei*. For example, there are people who often used such excuses as '*te olaaga nei ko koe loa ke fiafia*' ('the most important thing in this life is just for you to be happy') to wave off medical advice that eating oily foods such as pork or drinking alcohol every day is bad for their health. One health officer complained:

> *Ka fai atu nei me i te kai mea `sinu e faka-aatili maafua ne ia a te suka io me ko te toto maluga, kae olo aka foki loa laatou mo olotou fakamasakooga penaa…ko te tinae loa e paanaki mo ia… kae ko koe loa ke fiafia ona ko koe ne kai ki te moomona ne? [laughs]*

> When telling them that eating oily or starchy foods triggers diabetes or hypertension, they [community people] come up with excuses such as… let the bowel deal with the things we eat… but just become happy by eating the yummy oily food, hey? *[laughs]* (Nurse, 40 years old)

In other words, 'happiness' is used as an excuse for people to carry on what they have been doing even when those practices are unhealthy, since those things make them happy. This is a challenge to health officers who often hear such excuses from community people when they run awareness programmes or give health-related talks to communities.

On the other side of this, there is a Tuvaluan proverb that cautions people that 'happiness leads to sadness': experiences of extreme happiness are often followed by sadness and disappointments. The idea is that people should control their happiness and maintain it at a level that is not too high. This issue of control is culturally important, as it is a painful experience when that high level of happiness eventually is turned into sadness. This is because excessive happiness, for example at a community function, could lead to disruptive behaviour, which may break up *filemuu* in the community. On Vaitupu Island, for example, several forms of entertainment – such as dancing, and indoor and outdoor

games – for young people were cancelled because of young people's disruptive behaviour, such as shouting and laughing loudly.

Fiafia is a significantly valued state of Tuvaluans. This explains why *fiafia* was often mentioned by community people, particularly the community leaders and less affluent people, in their definition of *ola lei*. This is because one of the things that characterises a good leader is his or her ability to make decisions that can bring about happiness, satisfaction, and peacefulness in the community. Leaders must be especially aware of this aspect of *ola lei*, as these comments illustrate:

> *Ola lei* is happiness and good living of the people of Vaitupu. If their life is good and peaceful, they will live pleasantly on the island, eh? (Paramount Chief, 70+ years old)

> …Members of the organisation or community to be satisfied of what we [leaders] do or decide… so that all people are happy and satisfied with what we [leaders] set up for the community… Happiness and satisfaction in organisations is *ola lei*. (Community and Church Elder, 70+ years old)

> The *ola lei* is anything that you do, you should feel contented. Your body and mind are fit and function well. You are happy with the people you live with, in the family and working place. Anything that you do, you do it in good heart and happiness right? (Secondary School Principal, 60 years old)

As community leaders are assessed on their ability to create and maintain happiness and contentment, as well as *filemuu*, in the community, it is no wonder that *fiafia* was what leaders talked about when they described *ola lei*. In fact, it is not only the leaders who concentrate on the value of *fiafia* when defining *ola lei*; ordinary community people do so as well.

Less affluent community members and those without leadership status in the community also tended to consider *fiafia* to be an important component of *ola lei*. Due to the social and economic challenges they face, these families seem especially aware of how a lack of access to material items and the social status generated by consumption and contributions can impact their 'contentment'. Interviewees from a poorer part of the Funafuti community mentioned *fiafia* as a state of being, which they consciously worked to create.

I aso katoa, e taumafai malosi matou o fiafia ki mea ko maua io me talia ne matou a mea ko maua i te aso. Kae `talo foki matou ke maua ne matou a te ola mo te fiafia mo te manuia i te suaa aso. A te fiafia ko te ola `lei o te kaaiga ne? Ka seai se fiafia, ka maofaofa a te kaaiga ne?

Every day, we try hard to be happy with what we've got or graciously accept the things we got on the day. And we also pray that we may get life, happiness and blessings on the next day. Happiness is *ola lei*, right? If there is no happiness, the family would break up, right? (Mother, 40+ years old)

These quotes demonstrate that *fiafia* is a motivating force that keeps members of poorer and ordinary families united in Tuvalu, as for those who enjoy a more privileged way of life. It also seems to promote acceptance and hope.

However, like *filemuu*, it seems that *fiafia* (and *filemuu*) become serious components of *ola lei* only as age increases. Just one primary school student mentioned *fiafia* when defining *ola lei,* and only about 25 percent of the secondary school students interviewed included *fiafia* as a component or key value of *ola lei*. By contrast, primary school students tended to focus on aspects of heath such as cleanliness, having a good diet, and being physically fit and not ill. I will discuss these aspects further below. According to the school teachers, the health science education curriculum, and my own experience, these notions – cleanliness and hygiene, having good diet, and being physically fit – are the key ideas of health that are taught to students in schools. Possibly, this was one reason why students, especially the younger ones, did not include social and emotional aspects of health, such as peacefulness and happiness, as key values of *ola lei*. It would appear that many students are missing out on learning the significance of these emotional aspects in their understandings of *ola lei*. It seems that schools are a bit narrow in teaching the students only the biomedical meaning of health or *ola lei* at the expense of a more holistic understanding. Apart from the child knowing how to define health, or understanding more about the concept of *ola lei*, it might be helpful for the children to recognise the importance of the different components of *ola lei,* such as *fiafia* and *filemuu,* to their wellbeing. Learning the importance of these aspects will give them a broader basis for understanding wellbeing and for making decisions.

3.2.3 Malosi (Fitness)

In Tuvalu, *malosi* literally means fitness, but the word also carries connotations of the fitness, commitment, and strength that enable people to be active and effective in daily life. *Malosi* is a broad concept that covers the physical, mental, and spiritual spheres of a person, or of people collectively within a community. Figure 3.2 shows the three main aspects of *malosi* in a Tuvaluan context.

The Three Aspects of Malosi- Tuvalu
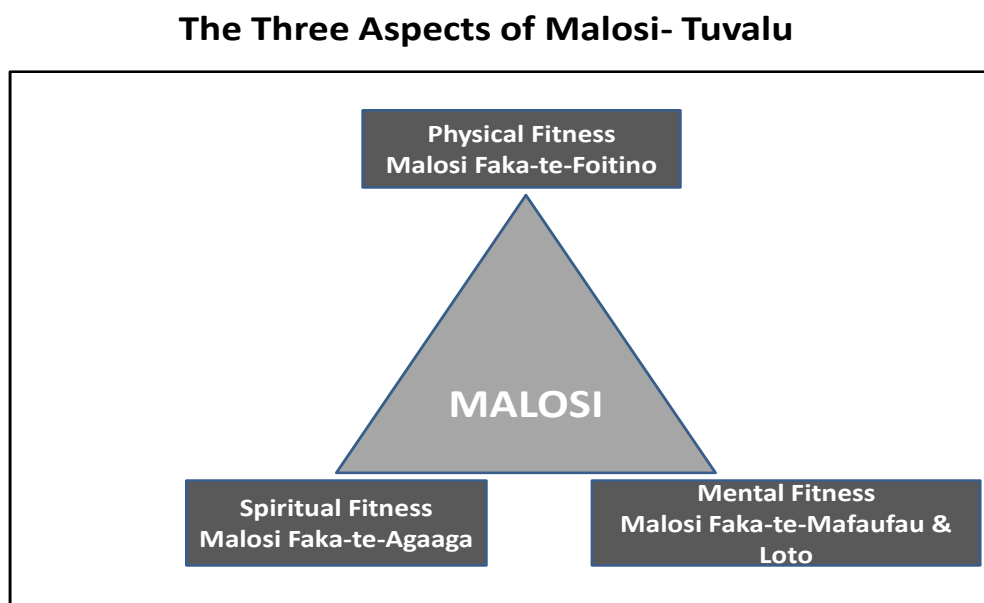
Figure 3.2: Aspects of *Malosi* – in a Tuvaluan context.

In fact, *malosi* is often used or heard in a Tuvaluan everyday greeting:

Person 1: *Talofa. Eaa mai koe i te aso tenei?* (Good day. How are you today?)

Person 2: *Fakafetai. Au e malosi fua.* (Thank you. I am *malosi.*)

Malosi is mostly used by the respondent. That is, instead of relaying each of the three aspects – physical, mental, and spiritual fitness – in separate accounts, the respondent may just use *malosi* to represent them all. However, at times the respondent may separately describe the three aspects of *malosi*, particularly when he or she feels that his or her fitness in one or two aspects is or not good. On such occasions, for example, he or she might reply to the first person's greeting by saying:

Person 2: *E malosi a toku agaaga mo te mafaufau/loto, kae ko te foitino e vaivai.* (My spirit/soul and mind/heart are fit, but my physical body is weak.)

> *E malosi a te foitino, kae vaivai a te agaaga mo te loto*. (The physical body is fit, but the spirit and mind are weak.)

So, in order to carry out activities and work, community people need to be physically, mentally, and spiritually fit, besides having access to other assets such as money, land, and good leadership.

From the interviews, only some of the older community people recognised and referred to the fact that *malosi* not only refers to the physical side of health and fitness, but also includes positive spiritual and mental states of being. Some community people focussed only on one or two aspects but left out the others. For example, a strong Christian believer whom I interviewed claimed that we only need spiritual fitness in this life to make us *ola lei*. For most participants, however, it did not seem practical to rely entirely on spiritual fitness to achieve *ola lei*. Some interviewees, on the other hand, talked about physical fitness and spiritual fitness but left out the mental fitness aspect.

Interestingly, the most frequently specified aspect of *malosi* was the *malosi faka-te-foitino*. This refers to physical attributes, such as physical strength, endurance, hard work, and good body strengthening and growth, all of which the interviewees talked about.

> *Ola lei* is a thing that we live with… if we are strong and hard working, our family will be *ola lei* right? These are the words of our ancestors, that is… if we are strong enough to look after our family, our children will live happily, right? To have *ola lei*… is the one thing that we struggle for. (Community Member and *Kaupule*; 60 years old)

Malosi faka-te-foitino (physical fitness) – in terms of being physically strong, having endurance, or being hard working – was seen by community people as a key quality of *ola lei*. *Malosi faka-te-foitino*, which is indicated by being 'not ill', or at least not being seriously ill, is by far the most popular definition of *ola lei*, particularly for those community people who have experienced serious illnesses such as diabetes. In other words, sick people whom I interviewed – such as diabetic, arthritic, and cardiac patients – mentioned that *ola lei* is the *malosi faka-te-foitino;* that is, the physical body is not suffering from any serious disease because it is fit and well. Obviously, these interviewees have endured suffering for so long that when asked about *ola lei*, they promptly thought of their sickness and wished that they were not ill but rather had *malosi faka-te-foitino*. As one diabetic patient with an amputated leg explained:

…I also saw the link between *ola lei* and sicknesses. *Ola lei* is the taking care of our bodies to prevent us from getting sick. *Ola lei* is us doing the things that we should do in order for us to grow strong and healthy and far from sicknesses… Now I see that a good complete body [pointing to his amputated leg] with a strong body… or not ill is *ola lei*, right? I think this is because I am having this illness, because when I was young, I did not care about the definition of *ola lei*. I just heard the word *ola lei*, but did not know what it is… or did not care to know what *ola lei* was… and now, I know now the importance of *ola lei*… I wish I had listened to [diabetic] awareness programmes and been careful about my diet. It's just too late... (Male Diabetic Patient, 50–60 years old, Funafuti Island)

The painful 'I wish I am not ill' feeling was a significant reason why almost all patients interviewed focussed particularly on *malosi faka-te-foitino*, which is associated with 'not ill', as an important aspect of *ola lei*.

Moreover, not a single child or student mentioned *ola lei* with respect to *malosi faka-te-agaaga* and *malosi faka-te-mafaufau*. However, about 50 percent of the students interviewed defined *ola lei*, in general, as 'physically fit, and being not ill'. That is, there is a very popular view, from the students, that *ola lei* is about ensuring that illnesses and diseases are far away from our physical bodies, so that we have *malosi faka-te-foitino*. From the viewpoint of older Tuvaluans, this is an incomplete understanding of *malosi*. These young ones are more concerned about their physical than their mental and spiritual states of being.

3.2.4 Ola Leva (Longevity)

Ola leva literally means living a long life. This concept of *ola leva* is interesting because, first and foremost, not a single adult from the communities mentioned it, and it was only mentioned by two young informants: a primary school student and a teenager who had dropped out from primary school a few years back. This led me to wonder why the older community people did not mention this concept of *ola leva*. Are the elders not the more experienced ones, in terms of Tuvaluan life, concepts, and language? I was not certain if these children who said *ola leva* knew or thought about the meaning of the concept. This was because when I tried to make them elaborate a little bit more on what they meant by *ola leva* and how it is a key quality of *ola lei*, they just shrugged their shoulders and simply said that *ola lei* is *ola leva*. These doubtful questions and the fact that

two young members of the community were the only informants who mentioned *ola leva* as a component of *ola lei* made me think of putting this concept of *ola leva* under my pillow and moving on. Fortunately, a local game of cricket which I was involved in, plus an old man's great advice, saved the concept of *ola leva* from being overlooked.

It was my turn to bat. The man on my team whom I was going to replace was sent off, as his wicket got hit on the very first ball. Loud laughter was the result of such funny incidents such as hitting your wicket with your own bat or being a 'duck'. Anyway, I got up and walked over to a breadfruit tree where our team's bats were kept. As I was in the process of choosing a suitable bat, an old man, who is well-known in the community for being good at cricket in his day, called my name and gave me a tip:

> *Tufoua, taumafai kae talo ko te poolo muamua loa ke fano mo koe. E fano loa mo koe, e iloa loa ne koe me ko ola leva koe…*

> Tufoua, try and pray that you hit the first bowled ball. If you hit the first bowled ball, you will know that you will *ola leva…*

The old man gave me the advice, based on his experience that hitting the first bowled ball will make me stay in the game for a longer time. What interested me was the word *ola leva* that the old man used in his 'batting tip' to me, before I went in to bat.

A few days later, during a community function, I ran into this same old man. Quickly, I asked him for an interview and took out my notebook and digital recorder. I reminded him of his 'hit the first bowled ball' advice and its relation to *ola leva* and *ola lei*. The old man theorised:

> *A te ola leva i te kilikiti, e pau loa mo te ola leva i te olaaga. Ola leva e maua i te puke ne koe a te uluaki o mea katoa. Me e iloa ne koe, a te uluaki-mea e aogaa ki te ola lei. Maanava koe ki te ea foou o te taeao `malu o te aso, e maua ne koe a ola lei; te kai ne koe a fuataga muamua o te taukai, e aogaa foki ne? A te inu o kaleve o te taeao, e magalo fakaatea loa i loo kaleve o te afiafi, ne? Ko te tomua o te tautai ki te moana i te vaveao… ka poa a ia i ei. Tufoua, e tenaa foki te agaaga o te fano koe mo te poolo muamua… e pakee loa a te poolo i tau pate i te tea muamua… e iloa loa ne koe me e `poi a faatea, ke oko ki loto i tautuaa ka tukaki… e iloa loa ne koe, me ka ola leva koe kae ka olaola foki te otou kau…*

> Living long [batting for a long time] in cricket is just the same concept as living long in this life. *Ola leva* is often associated with 'having the first thing'. To use a

new or first product/item/thing is important for *ola lei*. Breathing the fresh air of the early morning makes you *ola lei*; you eat the first fruit/crop of the harvest, it is important, right? The toddy juice[10] of the morning is more fresh and sweet than the afternoon toddy juice, right? The earlier the fisherman goes to the sea… the more fish he will catch. Tufoua, that's the same concept of why you have to hit the first bowled ball… because as that first bowled ball hits your [cricket] bat, it will give out an important thudding sound… you will know that [thudding sound] will make the bowlers panic, even the field players will be slacked… and you will know that you will be *ola leva* [batting for a long time] and your whole team feel alive as well… (Elderly Community Member; male of more than 80 years old)

This old man is envisioning *ola leva* as associated with consuming good and fresh local food from the land and sea, and living in a fresh and clean environment or community. It was his testimony for living up to 80 years old, in a developing country that only has a life expectancy of 67.4 years for males (Government of Tuvalu, 2011b, p.23). It seems, in other words, that various threats to *ola lei* are the first challenge that must be overcome if people are to attain *ola leva*.

In fact, after talking to the old cricket star, my skepticism towards the two youngsters who mentioned *ola leva* when they defined *ola lei* faded away. I had to go back to revisit two older community members whom I had previously interviewed and asked for their thoughts on *ola leva* as a component of *ola lei*. They agreed that *ola leva* is a component of *ola lei*, and added the idea that *ola leva* is given only to good people.

Ola leva se meaalofa a te Atua ki tino kolaa `lei. Tino kolaa ne alofa kae aava… tenaa te taui o ia. E tonu, ne ola leva a kita ona ko te `lei ona meakai kae see masakisaki… e ola `lei a ia ne? Kae ko te ola leva, i toku talitonu, e ave ne te Atua ki tino kolaa e aava kae loto-maulalo ne? Mea nei ko te mea-tauloto foki loa a matou i taimi koi foliki i ei matou, ke oko mai foki loa ki taimi nei, koi fai loa a te tulafono e lima tenei ne tamaliki i olotou mafaufauuga... [spoken in Samoan language] 'Ia e aava i lou tamaa mo lou tinaa, ina ia e faalevaleva ai lou aso i le nuu o le afio na mai o Ieova lou Atua ia te oe', ne? A te ola leva i a te Atua e tuku atu e pelaa me se taui ki a kita telaa e aava ne?

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[10] Toddy juice, locally known as '*kaleve*', is collected from a coconut palm tree's shoot (flower). Cutting or gathering toddy is a man's job, which is done twice a day (dawn and dusk).

Living a long life is God's given gift to 'good' people. Those people who were loving and respectful… that is their reward. It is true that one lived long due to good food s/he ate and not being sickly… s/he lived well isn't s/he? But I believe that *ola leva* is given to those respectful and humble people, right? This was our memory verse since childhood up until now; even to this day kids still memorise and say this 5th commandment during their mafaufauga[11]. [Quote from the Bible in the Samoan language.][12] 'Respect your father and your mother, so that you may live a long time in the land that I am giving you,' right? Long living is given by God as a reward for those who are respectful and polite eh? (Old member of the community, female, 60+ years old)

Undoubtedly, *ola leva* is an important concept in a Tuvaluan community. The most respected group of people in a Tuvaluan community is the elders. The level of respect should increase as age increases. *Ola leva* symbolises respect and authority as well as *ola lei*. For example, elderly family members are served first or are often given the best food at meals. The relationship between *ola leva* and 'respect' is often taught and discussed in families and also in church. That is, community people not only highly respect old people but they also believe that respecting and being kind to people will help you live long. This relationship will be discussed in more detail in Section 3.3.

However, for many people, longevity is not seen as a primary goal in itself. As another older interviewee explained:

Au ki a au e pelaa me see fakataaua ne au a te ola leva, ke fai mo se taaketi o toku olaaga. E tonu, a te ola leva e aogaa me ka mafai ne koe o matea a te olaaga ki se taimi e tai leva, io me lavea ne koe ou mokopuna mo ou mokopuu ne? Kae ko au laa e fakataaua atu loa ne au a toku ola fiafia i te vaitaimi e ola i ei au. Te taimi e mate au, e malie fua au ki ei me e pule a te Atua. Kae ko au e manako fua ke ola `lei au kae ke see puapugaatia au i te taimi e ola ei au.

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[11] *Mafaufauuga* is the prayer fellowship that children often do every afternoon, just before sunset, in their own homes. Church mothers go from house to house to ensure that children do their *mafaufauuga*. Parents will be penalised if their children are not present during the check.

[12] This is God's fifth commandment written in Exodus 20 verse 12. It is one of the most common Bible verses used daily by children in their evening prayer fellowships, locally known as *mafaufauuga*. Tuvaluans used the Samoan Bible and hymns until the Tuvaluan Bible was available in the late 1980s.

To me I don't value *ola leva* as a target in my life. It is true, long living is useful as you can be able to see life for a longer time or see your grandchildren and great grandchildren, eh? However, what I value more is living a happy life while I live. When I die, I am satisfied as it is God's will and power. But I only want to live well but not suffer during the time I live. (Community member, male, 60+ years old)

Perhaps this is why this person did not mention *ola leva* as a component of *ola lei* when first interviewed. He saw that *ola leva* is not guaranteed because death can always step in, taking away young and old people at any time, and no one knows when this time will come. For this reason, this participant felt that the most important thing to do is to 'live well' while you are alive.

3.3. How to Achieve *Ola Lei*?

In this section, my description shifts to what is done to ensure *ola lei*. My interview analysis showed that interviewees were strongly focussed on practices that enable the achievement of *ola lei*. Community people in all age groups talked about features or practices related to *ola lei* in the process of defining it. These practices are vital for the achievement of *ola lei* and for key qualities of *ola lei* as *fiafia* and *filemuu*. I describe eight key practices in detail below, explaining how they contribute to achieving *ola lei* in the context of Tuvalu. These practices are:

1. *Meakai e lava & lei* (Food abundance and quality)
2. *Tuu-maa* (Cleanliness)
3. *Toka* (Readiness)
4. *Galue malosi* (Hard work)
5. *Maumea* or *Maukoloa* (Richness/wealth)
6. *Poto faka-Tuvalu or Logo* (Traditional skills and knowledge)
7. *Talitonu & Fakatuanaki ki te Atua* (Belief and faith in God)
8. *Lei a te masaki* (Recovery)

3.3.1 Meakai e lava & lei (Food Abundance and Quality)

Food (*meakai*) plays a central role in the lives and cultures of Pacific people in the Pacific region (Moata`ane & Guthrie, 2000). This is also true in Tuvalu, where food is not only considered to be a source of energy needed for physical growth and wellbeing but

also as a representation of generosity, hospitality, and prosperity. Moreover, food presentation and consumption are regarded as ways of showing appreciation, celebrating important events, and even as a way of apologising to the community. There is no doubt that food in Tuvalu is one of the most valuable instruments for creating solidarity in families and communities.

Water is as important as food, and it is also a necessity of *ola lei*. That is, no water means no life. In order to drink 'safe' water, Tuvaluans boil their water and store it in their houses in large containers such as buckets. Some people who can afford it buy bottled water from shops, which unfortunately exacerbates the waste issue in Tuvalu, particularly on Funafuti Island. Thus, adequate access to quality food and clean water are essential for promoting people's health and social interactions. No food means no life, and lack of food also means shame for that family or community.

One interviewee restated this shamefulness in relation to the 'no food' situation:

Koe ka tagitagi i te fiakai mo te puapuagaa, a te mea tenaa e see se ola lei ne? I te faigaa-muna a Vaitupu pelaa mana tagitagi a tamaliki – 'e tagi laa kaia a tamaliki'? Kae tali mai – 'e fiakai'. Se leva ko tuu mai a tino mo tapola meakai ki te fale tenaa ke kai a tamaliki…. a te kai makona o tamaliki, mo te see tagitagi, se ola lei tenaa ne?

When one cries of hunger and suffering, that is not *ola lei* right? A Vaitupu saying like when kids always cry – 'why are the kids crying? And one will answer, 'They are hungry.' Not long the people will arrive with baskets of food to that house for the kids to eat… kids eating enough, not always crying, that is *ola lei*, right? (Member of the community, male, 60+ years old)

It is important for children in the household to cry quietly, no matter what causes them to cry, because neighbours who hear crying will assume that the family has no food. On several occasions, I heard parents scold their children, telling them not to fight, argue heatedly, or cry loudly: '*Se taua/tagi i tino ma fai pelaa ia tatou e seai ne `tou meakai.*' ('Don't fight or cry as people may think that we don't have food.') This shows the cultural importance of food abundance in the community and family.

I also vividly remember one occasion when I was preparing to interview one elder, Tipa, in his small thatched-roof sleepout. Tipa's house is located near the island's primary school, thus every time school finished many students walked past Tipa's house on their

way back to their respective homes. As I checked my digital recorder, notebook, and guiding questions before starting the interview, I saw a group of students appear along the track that runs past Tipa's house. Tipa told me to wait until the students had passed by as they were noisy. So we waited and talked about what we did in the morning. We just ignored them. Suddenly, we heard the sound of someone cracking open a husked drinking coconut[13] for its soft flesh. Tipa quickly turned around and shouted, 'Who is that?' The boy stopped cracking open the empty drinking nut while other children giggled and blamed him: 'It's Tala'. Tipa then admonished the boy: 'Don't you have food in your family? Stop that!'

This is a custom that was stronger in the past. When I was a child, I was taught that eating the soft inner flesh of a *pii,* rather than just drinking its liquid, implied a lack of food and hunger in your family, and could prompt people to come with baskets of food to help out the family. So, whenever you want to eat *gaati* then you have to make sure you crack open the drinking nut quietly. Tipa's admonition illustrates people's sensitivity to the issue of obtaining sufficient food and of eating food that is considered to be of adequate quality.

Households in Tuvalu generally are expected to be self-reliant and to provide themselves with food and other resources, though people also have an obligation to help each other by sharing and by responding to requests. To really help other people should anticipate their needs rather than waiting to be asked. Households are also asked to contribute food and other resources to community and church projects and events (Chambers & Chambers 2001).

In community gatherings and feasts, food is central. It should be both abundant and include 'high quality' prestige items. For example, in January 2011, while I was still doing my fieldwork, I participated in the farewell feast for the island's outgoing pastor. Reverend Karl was completing his four-year term on Vaitupu Island. The feast recognised both his high status and honoured his years of service to the community. On this occasion, the plate of food presented to the pastor was so big that it took several men had to carry the plywood platter to the pastor's seat in the *falekaupule* (hall) (see Figure 3.3.). Figure 3.3 also shows that during a feast, it is culturally important and an expectation to have an abundance of high-quality food.

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[13] This is a young coconut (*pii*) that is suitable for drinking, and its flesh (*gaati*) is softer than a matured brown coconut's flesh (*sagaaniu*). *Gaati* is a common food for babies. After drinking the juice (*suaa-pii*) in the young coconut (pii), someone who is hungry might crack open the drinking nut and scoop out its flesh (*gaati*). Often the empty drinking nut is simply discarded or used for animal food.

Figure 3.3: Pastor's plywood platter of food, January 2011. After the feast, this platform of food was taken to the pastor's house. The pastor's guardians would decide what to do with the food, perhaps redistribute some to other people (particularly non-Vaitupuans), and keep some food for people who might visit the pastor's house.

Community members then each served up their own plates from trestle tables stacked high with various foods. In Tuvalu communities, the success of feasts is assessed by both quantity and prestige value of the food served.

When a community feast is held in open areas, such as beach or bush, Vaitupu people often have a food fight. This is a custom locally known as *kai-laku*[14] (food throwing), whereby people at the feast grab food items from the feast table and throw them at each other. These days, the *kai-laku* is criticised as wasteful. However, this cultural practice symbolises the pride of Vaitupu in having the largest land area in the country, and thus hardly ever being in danger of running out of local foods. It signifies that Vaitupu has so much food, in fact, that they need never even worry about wasting it. As one elder boasted, when I asked him about the meaning of *kai-laku*: 'The *kai-laku* is our own culture… it means Vaitupu has plenty of foods… people are *ola lei* because food is abundant… *pulaka* and fish are plenty, aye?'

All the above examples clearly show the importance of food abundance. Food is so important in the community that it was usually the first thing that people mentioned when talking about health or *ola lei*. However, it is primarily food quantity, rather than quality, that is seen as the way to achieve *ola lei* by most adults. Only students and educated community people, such as teachers and other civil servants, mentioned the importance of

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[14] *Kai-laku* practice is unique to Vaitupu Island.

a good or balanced diet when defining *ola lei*. For students, food quality was the second most commonly mentioned feature, next to cleanliness, of *ola lei*. This may indicate the positive contribution made by education to students' knowledge about the association of good diet and health.

The concept of food quality is interesting. Community people assess the quality of foods largely by their cultural importance, but this not necessarily the same as an assessment of the food's nutritional quality. In feasts, for example, cultural foods such as turtle meat, fish, pigs, *fekei*[15], coconut crabs, lobsters, and green coconut juice are perceived to be quality foods. Other nutritious foods and drinks such as green vegetables and water are secondary in importance and quality in the eyes of community people. However, some cultural foods such as coconuts, *fekei,* and pig meat are starchy and oily, which may aggravate diabetes and hypertension. This biomedical fact shocked Tuvaluans, especially elders, who had been eating local foods such as coconuts since they were young and regarded them as a 'healthy' food choice.

I saw this clash of perception in terms of food quality between community people and health professionals when I undertook participant observation in the Princess Margaret Hospital (PMH) on Funafuti Island. Every Tuesday afternoon, diabetic and hypertension patients are checked at PMH. About 20 to 24 of the total documented diabetic and hypertension patients on Funafuti Island are selected to be checked at the hospital each week. Before these patients went individually into the consultation room to have their blood pressure, weight, and cholesterol checked, a public health officer gave a talk to all the patients. I saw that patients were interested during these brief health talks. In one health talk session that I observed, the nurse talked about foods that diabetic patients should eat more of and foods that should be consumed less. She had a tray of different foods, in which foods were grouped into two major categories: 'eat this food more' and 'eat this food less'. After the brief health talk, the patients asked questions. It was good to see a lively discussion between the public health nurse and the patients, which indicated that patients desired to learn more about this 'new disease'. I still vividly remember how patients reacted to some health information that was passed to them.

Patient: *Ko tena uinga nei a te niu e tai too i meakai kolaa e tau mo*
             tatou o see kai malosi ki ei?

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[15] A baked pudding made from grated pulaka roots, coconut cream, and toddy molasses.

Does this mean that coconut is also included in the foods that we should not eat more of?

Nurse: *Ao! Masaua me i te niu e lasi a te lolo `sinu i loto, telaa e see naa loa ko `lei ki a tatou kolaa e maua ne te masaki ko te suka. Kai fua ki ei [niu] fakatasi i te vaiaso.*

Yes! Remember that the coconut has a lot of creamy oil within it, so it is not quite good for us who have diabetes. Just eat it once a week.

Patient: *Tapa! Ko fai a te mea! Au nei e fia kai `ki loa ki niu. Ko fai te mea! [kata]*

Oh! Oh my! I really like to eat coconut. Oh my! *[Laughs]*

Though I laughed together with the patients, I saw the importance of this conversation to understanding the gap between cultural and biomedical practices. This disparity between what ordinary community people and health professionals understand about food quality is something that definitely hinders health development. Because local food is often used as a cover term for healthy food choices, it can be really difficult for Tuvaluans to understand the advice they have been given. This is especially confusing because different cooking methods and different parts of plants and animals have different nutritional values. Coconut is an excellent example.

Food abundance and quality are key features of health and are very significant to other features of *ola lei*. In a normal meal, families just ensure that there is sufficient food on the table. As often as they can, families in Tuvalu may try to get fish and crops such as pulaka, breadfruit, and coconut for lunch and dinner. Breakfast mostly consists of bread or biscuits, and possibly leftover food from dinner. Rice is also now a common staple food for many families. Similar to Tokelau, it is important to note that coconut cream (*lolo*) is a common ingredient for local dishes such as *fekei* and fish soup. Grated (*niu valu*) or chunked (*niu sali*) coconut is also often eaten with meats, particularly fish (Huntsman, 1983). During feasts, on the other hand, community people ensure that food is in abundance, and also that the food served has a high cultural value, such as *fekei*, pigs, and fish.

Food quantity and quality enhance the key qualities of *ola lei*: happiness, physical fitness, longevity, and peacefulness. For example, the presence of high value food in abundance at a feast will enhance happiness and contentment among the community people in that feast. In general, without food, the four key pillars of *ola lei* seem worthless

and ineffectual, which is another reason why community people regard food as central to *ola lei*.

3.3.2 Tuu-maa (Cleanliness)

Tuu-maa (maintaining cleanliness) was the most frequently discussed dimension of *ola lei*. Cleanliness means having a clean environment, house, clothes, food, water, and body. As some community members explained:

> *Ola lei* refers to the cleanliness of the place that we live in. That is the first thing about *ola lei*, the place we live in has to be clean right? If the place that a human being lives in is clean, the things that we use like food will also be clean. Apart from the cleanliness of and good food we eat, our house and surrounding should also be clean… then we can have this thing called *ola lei*. You will hardly get diseases and sicknesses since the place we live in and the food we eat are also clean right? (Kaupule Officer and community member, nearly 60 years old)

> The *ola lei* is also taking care of our bodies to be good and clean, the food to be clean and the place we live in that will enable us to be far from sicknesses, right? (Primary school teacher, 40 years old)

> It included the food that we eat and the clothes and places that we live in should be good and clean. (Student)

Cleanliness of the environment and home was the most common type of cleanliness that the community people and secondary school students talked about. It might be possible to infer from this that Tuvaluans are concerned that their islands are not clean, but it is equally likely that cleanliness is a culturally valued practice that has been further reinforced by western health initiatives.

In Tuvalu, practically every morning and late afternoon someone – often a girl or woman – in almost every household sweeps the surroundings and interior of her house. It is shameful for members of the family, especially girls and women, when their home's interior or surroundings are dirty with trash, leaves, and so on. In terms of the community as a whole, local governments (*kaupule*) have monthly health inspections to control and maintain the cleanliness of households' interiors and surroundings on the islands. This common practice of cleaning and sweeping has become a culturally important aspect of

cleanliness. Community people also see a relationship between cleanliness and diseases. Cleanliness was usually seen as a vehicle that enhances *malosi faka-te-foitino* and *fiafia*, both important components of *ola lei*.

The older students in secondary schools also talked about cleanliness as an important dimension of *ola lei*. It seems that in secondary school students are taught about the importance of cleanliness and personal hygiene. However, through participant observation and personal experience, I know that the cleanliness of dormitory interiors and surroundings, ablution blocks, kitchens, dining halls, and water reservoirs is often questionable. The students mentioned cleanliness as an important dimension of *ola lei*, but in fact ablution blocks and dormitories were not cleaned regularly. This led me to question the effectiveness of schools' roles in educating students and staff about cleanliness and how to achieve it.

On the other hand, only two primary school students mentioned cleanliness as part of *ola lei*. To the young students, cleanliness of the environment and living places is not an important part of their lives. This is probably because the students have not yet internalised the links between cleanliness and health. However, even young students were familiar with personal hygiene such as brushing teeth, wearing clean clothes, and washing hands because they practised these activities in schools. It is also possible that young students find it difficult to articulate the linkages between cleanliness, hygiene, and health.

Of course, *tuu-maa* (cleanliness) is achieved through other practices which I will discuss later in the chapter, including hard work and readiness. Community people are required to work hard in order to maintain cleanliness and hygiene.

> Men should trim the grasses and bushes around their houses, and women sweep their surroundings and regularly clean the houses to prevent insects and pests from breeding and spreading diseases, right? When people are lazy, the village will be dirty and full of mosquitoes and flies… (Community Member, male, 60 years old)

Moreover, *tuu-maa* cannot be achieved if people in the community or family do not know how to properly manage their households. They might not be able to afford items such as soap and insecticides that are needed for maintaining cleanliness and hygiene. I saw several houses that had gutters full of leaves, stones, and algae. Poor guttering means that the water in tanks is dirty and acts as a breeding ground for mosquitoes. This is why families have to boil their water for drinking. The main point here is that no matter how

much we value and believe in cleanliness, it is hard to achieve if we do not have the resources to support cleanliness. As one resident of the capital explained:

> *Matou e nofo loa i tafa o te tai-sala… fonu loa i nappies mo kaiga valevale. E manako la matou o fai se faiga ki kaiga konei, kae se mafai la ne matou me seai la ne omotou sene io me ne mea-faigaluega pelaa me ne gloves, boots, sevolo ne? Tela la, matou e nofo loa penei… taumafai loa a te kaaiga o puipui loa latou mai i masaki kolaa e mafai o pisi ona ko te lailai ne?*

> We live near the swamps… full of dumped nappies and different types of waste. We want to do something about this waste problem, but we can't because we don't have any money or tools such as gloves, boots, shovels, right? So, we just live like this… each family tries to prevent its members from catching diseases from this pollution, right? (Member of a poor community on Funafuti Island, mother, 40+ years old)

It is obvious here that cleanliness must be achieved. We have to work hard in order to obtain it. However, besides working hard, we need financial and technical support to achieve and maintain cleanliness in our environment, villages, and households.

3.3.3 Toka (Readiness)

The word, *toka* (readiness, or being prepared), is one of those words that I was always aware of in the Tuvaluan context. *Toka* is a state and also a process. It is a state of readiness that individuals or people have to work at in order to obtain, and it is therefore also a process. However, I had never considered the linkage of *toka* to the concept of *ola lei* until I had a focus group interview with a group of community women. One woman energetically defined *ola lei*:

> *...a te ola lei, ko mea katoa ke toka i ou tafa. A te fafine e `tau o toka ana kope-fakafafine i tena fale… tena sink, tena toilet, tau ogaumu ke toka… ko au mea-`moe ne? Ke toka tau toilet ke see maumau tou taimi o fano o toilet i te tafaa-tai ne? A mea a te fafine ka toka i ona tafa, kae see mauamau a te taimi o te fafine, me e toka la ana mea i ona tafa, ka ola `lei foki a te kaaiga ona ko mea e toka ne ? Mea nei ne tauloto ne au mai i te toeaina ko Panapa, kae ko oti foki loa ne fakatalitonu ne au me e tonu… muna Panapa ki a au i taim i kolaa ne kaamata o faaiteite ne ia a ogaaumu-sameni maa fafine: 'La, a te ola `lei ko te toka o mea i ou tafa'. Kae e fakatalitonu ne au me se mea e tonu ne ? Me i te isiiga mo te*

tokaaga o aku kope penaa i oku tafa, lagona loa ne au a te `lei o toku olaaga, me ko see fiitaa au ona ko aku mea ko toka i oku tafa. Ko lava foki se taimi mo oku malooloo. Kaati tenaa taku mea e iloa atu ki te muna tenei ko te ola lei.

...the *ola lei*, is having everything available. A woman has to have women-like properties in her home... her sink, her toilet, your oven to be available... your beddings, eh? To have a toilet so your time is not wasted going to the toilet at the beach, eh? When a woman's things are available to her, her time will not be wasted, as she has everything – the family will live well since everything is available eh? This I learnt from the old man Panapa, and I have proved them to be right... Panapa said to me during the time when he made cement-ovens for the community women: 'La, *ola lei* is having things all ready at your side.' And I believed this to be true, right? Since when I have all these things available at my side, I felt that my life is good, as I will not be worn out as I have everything at my side. I also can have enough time to rest. Perhaps that is what I know about this word, *ola lei*. (Community woman, Vaitupu Island)

There are two significant interesting aspects in this woman's response. Firstly, she describes the relationship of *toka* to *ola lei*. The availability of materials and things is a desired state that the community people wish to obtain. It is obvious that *toka* is one of the results of good management of the household, family, and community, and hard work. In women's eyes, *toka* is when a family has the necessities readily available and within reach. Some necessities that women mentioned include: a good toilet, running water, an oven, eating utensils, bedding (such as mats, mattresses, pillows, mosquito nets, and sheets), transportation (particularly motorbikes and push bikes), money, and food. These resources can save women time and energy, while enhancing other practices contributing to *ola lei* such as *ola leva*, *ola malosi faka-te-foitino*, and *fiafia*. The challenge of *toka* is that community people have to plan well ahead and work hard. T*oka* can require money as well as endurance.

Secondly, the interviewee (La) learnt the concept of *toka* (and its linkage to *ola lei*) from someone named Panapa. After the focus group interview – the digital recorder was turned off and women were gossiping about various matters – La waved her hand (to attract my attention) and quickly reminded me:

Tufoua, e tenaa loa a taku mea ne tauloto mai i te toeaina [Panapa… a koe ka toka, ka ola lei koe. Au e talitonu e iloa ne koe a te aogaa o te toka ki te ola lei, ona ko koe ne nofo loa i loto i te toka a te toeaina ne?

Tufoua, that's what I learnt from the old man [Panapa]… if you are ready, you will be *ola lei*. I believe you know the importance of readiness to health [*ola lei*], as you had lived within [or primarily experienced] the old man's readiness, right?

Yes, I vividly remember the old man's productivity, which included:

- a fish pond, which he dug and used to farm milk-fish[16] (Figure 3);
- a concrete cage for keeping live mud crabs[17];
- a plantation of coconut palms;
- vegetable and crop gardens[18];
- poultry and livestock;
- making and carving handicrafts;
- household accessories such as a water cistern, toilet, and concrete ovens.

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[16] This was the first private milk fish pond on the island. The old man dug it by himself.

[17] The old man constructed the first crabs' concrete cage in the community. People continued to use these until recently, when they started to use wire cages to keep live crabs.

[18] In those days (1980s), the old man was one of the very few people on the island who had vegetables and crops gardens. Relatives, friends, and sick people often came to the old man for vegetables, fruits or eggs.

Figure 3.4: The old man's fishpond - feeding time.

The old man worked hard to obtain those things and he was held in high regard as a result. Environmental challenges and heavy work obligations were never a concern for this man's family because they could just scoop out a few big milk fish or crabs for dinner or other functions from the ponds he built and maintained. This is *toka*. Furthermore, in times of droughts, strong winds, and epidemics, the old man's family did not suffer as much as other families. This is because the old man had prepared important necessities, including a water cistern, productive gardens, and fishponds, which are suitable for small places such as Tuvalu. La reminded me to revisit the old man's works, which allowed me to see the importance of all those things he prepared. Now, I knew that *toka* had helped the old man's family live well or enjoy *ola lei*. Though the old man died in 2000 at the age of 84, through reviewing all my fieldwork transcripts I began to see how the old man's *toka* had added to my own and the community's wellbeing. I had direct experience of the value of *toka* because this old man, Panapa, was my father.

Many people have asked me: 'Do you still maintain the old man's *toka*?' 'Why don't you maintain the old man's crab cage and gardens?' 'Gone is the old man, gone the *toka* days too!' This indicates that being ready is a process that can be assessed by others. In Tuvaluan thought is shameful when people do not work in order to have necessities available and ready.

In fact, *toka* is an old concept, which Tuvaluans must put into practice in order to survive in a small place like Tuvalu, which has giant storms and droughts. One popular old saying about readiness which is still commonly in use nowadays is: '*Ke toka tau muli-pusa.*' ('Have your chest/trunk ready.') This means that you have to have resources on hand beyond what you actually need for everyday living in the present. This is a metaphor that does not just refer to the actual chest that clothes are stored in, but also to the need to have various supplies readily available. Being prepared is a concept that predates the arrival of European goods such as trunks in Tuvalu. The whole concept of *toka* has ancient roots.

It seems likely that limited environmental and economic conditions in Tuvalu necessitate that community people support the cultural value of the concept of *toka*. In traditional times people needed to work hard in order to obtain and store valuable necessities such as food, water, sennet cord, fishing gear, and sewing accessories. They should think ahead to ensure that they have reserves of necessary items. In some Tuvalu communities this idea is captured in the proverb: '*Ko tau saale fano mo tau saale foki mai.*' ('It's your walk to and fro.') That is, literally, people have to make use of the time that they spend walking from somewhere to home by bringing something valuable with them, such as firewood. This is an aspect of *toka*. An old interviewee recalled this management practice when he talked about *ola lei*:

> *Te suaa mea e iloa ne au i te ola lei, … ke iloa foki ne koe, a tou auala fano mo tou auala foki mai. Penei mo te fafine… kafai e fanaka mai i te tai, e puke aka ne ana fatu i ona lima mai i te `tai, puke aka se taume… vau te fafine, `pei a fatu ki lalo i te tafito o te mei, kae sulu a te taume ki luga i te tuaafale o te umu. Taeao toe fai penaa… fai ei fai ei, se lagona ne koe a te fakatuuga o fatu ko fuatuu… ka `sili mai a tino, what's that for? I taimi o fakalavelave o kaaiga, ko toka a fatu moo pusa a te umu… a te ola lei e ati ake mai i konaa!*

Another thing I know about *ola lei*… is that you should also know your way in and your way out. Like, a woman… when she comes back from the sea [after bathing or toileting], she brings with her some stones in her hands, picks up a dry coconut palm tree's shoot [*taume*]… when she arrives, throws the stones at the roots of the pandanus tree and wedges the *taume* on between the local kitchen's rafters. The process repeats itself the next day… and on it goes, you won't realise it, but soon you would have a big pile of stones… when people ask, what's that for? Well, during family functions, the stones would be ready for the *umu* (local earth-oven)… *ola lei* is developed from there! (Community elder, Vaitupu Island).

Older women and men of the community stressed *toka* as one way to achieve *ola lei*. Adults are the ones who look after the welfare of family members, so they need to be ready with necessities that may help their families to live well. As children have little authority in the household, and are not responsible for household management and family decisions, it is not surprising that none of them mentioned *toka* when talking about *ola lei*. Young people are expected to depend on the readiness of their elders. This causes them to think less about the concept of *toka*, until their time comes to look after the family.

Toka is an important step to achieve good academic and vocational performance. I suggest that it would be constructive for children to learn this aspect at a young age, as it is important to their *ola lei*, not only in future but also while they are still in school. As an experienced teacher, I believe that having a sense of preparedness boosts a child's morale and develop his or her learning skills. *Toka* is important at any age level.

Toka goes beyond the individual person to benefit the whole community. Let's take the example of women having reserves of bedding such as mats, pillowcases, pillows, and other materials. Of course, this is *toka* of an individual woman, but this *toka's* value extends to the whole community during funerals and gifts for visiting officials. Preparedness is an important practice in Tuvalu, but it is also increasingly seen by development agencies as crucial to resilience (see Gaillard, 2010). For example, during the 2011 drought, Japan donated a desalination plant to Tuvalu; this is a way to prepare Tuvalu for any drought in the future.

3.3.4 Galue malosi (Hard Work)

The Chambers, who did anthropological fieldwork on Nanumea, wrote:

> Nanumea provides a very limited foothold for human life. Belying the stereotype of a lush, tropical paradise, atolls like Nanumea are actually one of earth's more marginally human habitats. Only the most knowledgeable and careful use of resources enables their inhabitants to claim a living from these small islands composed, quite literally, of coral rubble and sand. (Chambers & Chambers, 2001, p.92)

This description is applicable to all the other islands of Tuvalu. The knowledgeable and careful use of resources is an important strategy that has enabled Tuvaluans to live in a nation that is not only economically poor but also has very infertile soil. In order to survive and obtain *ola lei* given their restricted resources, Tuvaluans have to work hard.

In Tuvalu, *galue malosi* literally means working hard physically. It is the durability and endurance that a person has to work hard to produce fruitful and useful products for himself or herself and other people. I still remember a friend of mine who complained about, yet in a sense praised, his father's hard working character:

Au nei e ofo fua i te see fiu mo te see fitaa o tou tagata naa i te fai ana galuega!E isi ne taimi au ko fakatuli oku taliga… i toku fitaa. Tou tagata e ala loa pelaa me ko te 5 i te vaveao `sau loa… ko tele ki vao o fati tena kaiao… fai atu foki loa sena faiva. Ka foki mai, matou koi moe… ko pakekee mai o fagai ana puaka mo ana moa. Te logoaa la! Ka fui ala atu au, ko fano loa a ia o sali ma kaleve… ka mate fai atu la nei ke tuku malie a kaleve ke fai ne au, kae seai la… ka oti ko gana a tena pasikaiti o tele ki vaipulaka. Ka galo galo galo… ko fano au o aasi atu… tenei loa e galuelue mai lalo i tena vai… fanatu au, ko galuelue atu i ona tafa. E foki loa maaua ki te fale me ko losi atu loa ne au ke olo maaua o `kai. Ka olo atu maaua, kai oti ko toe fakaola tena pasikaiti o tele foki ki te suaa vaipulaka… ka galo galo, gaki mai loa i te afiafi… ko tukituki mai a tena saipuaka… io me fai aka ana niisi galuega! E tuku loa ana galuega i te mea ko ita atu matou ke lava me ko poo loa! I niisi taimi ka oti ne kai i te afiafi ko fano o faaika! Tela la au ko tautali atu fua ia ia o fesoasoani ki ana galuega… fakafitaa!

I am only astounded at how unfed up and tireless that man is [his father] in doing his work! Sometimes I pretend not to hear [what's he doing]… due to my tiredness. That man [father] wakes up around at 5am on a cold dawn and… takes off to the bush to gather local leaves for compost… and also does some kind of fishing. When he returns, we would still be asleep… he makes a lot of noise as he feeds his pigs and chickens. Very noisy! If I am still not awake, he will go himself to cut our toddy… even though I constantly tell him to leave toddy-cutting to me, no way for him… after that, we can hear his motorbike on his way to his pulaka plantation. He would be gone for ages… I would then go to check on him… he would be still there working in his plantation… I would go to him and work beside him. We would go back home when I forced him to go back to eat. When we get home, we eat then he will continue on his motorbike to his other pulaka plantation… he will be gone for so long and return at dusk… he will then be heard working on his pigsty… or doing his other chores! He will only leave his work when we get angry at him to stop as it is dark! Sometimes, when he finishes eating dinner he would go fishing! As a result, I just had to follow him to help him with his work… very exhausting! (Community member and friend, male, 25 years old).

This is a typical example of *galue malosi* (hard work). For most adults, every day except Sunday is a working day that requires endurance, energy, and strong will because the scorching sun, mosquitoes, and hard physical labour – such as digging, paddling, and lifting – will easily drain your good spirits. Tuvalu is a small, poor country, not just economically but also in terms of land quality. This is why working hard is essential. *Galue malosi* is one of the key inputs that is required in the production of *ola lei*. No wonder Tuvaluans whom I interviewed talked about the importance of working hard as a way of obtaining *ola lei*. Working hard is not unique to Tuvalu; Tuvalu is like other places where people have to work harder because of their poor conditions. A number of participants identified the importance of *galue malosi* for *ola lei*:

> *...a te ola lei la ki a au, tasi mai ei ko te galue malosi! Ko tou malosi o fai a galuega i loto i tou kaaiga kolaa e mafai ei maua mai ei se `lei moo te kaaiga.... .kafai tatou e moe, e see galue tatou, e seai se ola lei e maua i ei. Ka maua fua ne tatou a maa`saki. Kaia la e ma`saki ei tatou? Ona e likiliki tatou, ko se lava `tou malosi, ona ko te see gaa`lue tatou ke kai `tou kaaiga. E isi se faigaa muna taumua e fai pelaa: 'e moe la koe, e vau a te agelu o tuku mai au meakai?'*

> …*ola lei* to me, one is, working hard! It is being strong and hard-working. You are to do the work in your family that will bring wellbeing to the family… If we sleep but do not work, we do not get *ola lei*, right? We will only catch sicknesses. Why are we being sick? Since we are hungry, we do not have enough strength, because we do not work in order for our family to eat. There used to be an old saying that goes like this: 'How nice is it to be sleeping, but will the angel come and give you some food?' (Community Elder, male, 60+ years old)

> *Ola lei e fakasino tonu loa ki te olaaga o te tagata galue malosi. ...Ola lei ko te uke mo te lava o mea kolaa e tausi kae aogaa ki tou olaaga i aso takitasi, ona ko tou galue malosi.*

> *Ola lei* is used to refer to the life of a hard-working person… *Ola lei* is when we have abundance of materials and things that can help in our daily life, as a result of our hard work. (Senior teacher and community elder, male, 60 years old)

> *Ola lei ko te mafi o galue malosi…ko te galue malosi…tenaa a te ola lei.*

Ola lei is endurance and hard work… That is *ola lei*. (Senior student, male, 17 years old)

The above definitions reveal the importance of *galue malosi* to *ola lei* in the traditional context of Tuvalu. The interviewees clearly linked g*alue malosi* to the family's wellbeing. *Galue malosi* is an important key that unlocks doors that lead to other dimensions of *ola lei*, such as readiness (*toka*), richness (*maumea/maukoloa*), having an abundance of food (*lava a meakai*), and others. It is shameful for people of the community to appear lazy. Anyone who 'sleeps too much' (referring to someone who is lazy and inactive) may realise that the community's saying – 'So you are sleeping… Will an angel come and give you some food?' – is quite true in a sense. The poor soil and subsistence living in Tuvalu requires community members to *galue malosi* in order to get an abundance of food, good shelter, and materials for making local bedding, canoes, and other things.

Not only is *galue malosi* a response to Tuvalu's poor economy, lack of natural resources, and infertile soil, but it is also a strategy for ordinary community people who do not have any traditional skills or knowledge to produce good taro crops, for example. Hard work means that they can produce as much as those families that have traditional knowledge or skills in planting taro. I have heard this idea – that *galue malosi* will raise your level so that you match those people with traditional skills – many times from ordinary community people. During my fieldwork, I talked to an ordinary community man who was known for his big taro crops. I asked him if he had acquired some skills or knowledge from someone with traditional skills in taro growing. His answer was a confirmation of the above strategy to just 'work harder and harder':

> *Tufoua, au e taku tonu atu loa ne au ki ou mata, me ia au nei e seai ne aku logo talo. A te mea nei ko te galue malosi loa o koe. Fati kaiao, fagai au talo kae mau aasi faeloa ki tau vai… e see ko talo fua, kae ko te tausiiga o tou kaaiga ke ola lei, e penaa mo tau research tenaa e fai… e manakogina ke galue malosi koe. Galue malosi koe mana `toki au talo, pulaka, pateta… galue malosi koe mana faaika ke kai tou kaaiga ne? Tela la a tino e fai mai me ia au ko isi ne aku logo talo- seai! Te logo e tasi loa tenei e nofo atu mo au ko te galue malosi mo te mau aasiasi ki tau vai… mea nei ko te auala o oku ke sae au ki vakaaluga [laughs].*

Tufoua, I am telling the truth to your face: I don't have any traditional skills or knowledge in taro planting. This taro planting activity depends entirely on your

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endurance and how hard-working you are. Collecting and making compost, feeding [fertilising] your taro and regularly visiting your taro plantation… this does not apply only to taro planting, but it is also applicable to the concept of looking after your family in order to live well, as you may know from your research… you need to work hard. Work hard when you grow your taro, pulaka, potatoes… work hard when you fish so that your family can eat, right? People are saying that I have possessed some taro planting skills – none! I have only one traditional skill or knowledge [*logo*] that I know of, it is the *galue malosi* [work hard] and regularly visiting my plantation… this is my way of rising up to the level of skilful and knowledgeable people [*laughs*]. (Community member, male, 50 years old)

Galue malosi can transform a family's standard of living to a higher level. When they work hard, ordinary families can become well-known and have high status in the community, like other skillful families. *Galue malosi* is a good key to community or family development as it doesn't require expensive input, only a person's will. It is a way that definitely enhances *ola lei* in Tuvaluan communities.

One well-known saying in Tuvalu is, '*Tou malosi ko tou maumea'*. In English, this Tuvaluan saying means, 'Your hard work is your wealth.' This is a phrase that encourages people to consider 'working hard' as it will make them rich or enable them to possess material items such as food, mats, and other things, which also leads to 'readiness', another key feature of *ola lei*. However, I believe that working hard is not the only characteristic or strategy that can enable one to become rich. Being knowledgeable in traditional skills (which I will discuss later in the chapter) and having a good education can also be helpful.

Of course, *galue malosi* does not only refer to working hard physically on the land and sea in order to obtain things that are useful for living; it can also refer to people who work hard mentally, particularly students who strive to learn and get good academic grades. Surprisingly, no student mentioned studying hard as important for *ola lei*. One interviewee, though, talked about the importance of working hard in the family and linked this to the success of the children in terms of their education, which leads to *ola lei* in the future. As one unemployed father stated when he defined *ola lei*:

> *…[ola lei] ko te galue malosi fakatasi fua o te tau-avaga mo laa tamaliki ke atiake a te malamalama mo te poto o laa fanau ko te mea ke maua ne tamalik a se olaaga `lei i aso mai mua.*

…it [*ola lei*] is just the working hard together of the husband and wife with their children to develop knowledge so that children may have better lives in the future. (Community member, male, 50 years old)

The above definition is a reflection of parents' typical vision for their children: have a good education so that the children will have a good life in the future. *Galue malosi* is, for the unemployed people of the community, the first step to be undertaken in order for their children to obtain *ola lei*: they have to work hard physically in order to gain some money for their children's education.

All adult interviewees who mentioned *galue malosi* when defining *ola lei* were referring to the physical hard work. However, only one student mentioned *galue malosi* in his definition of *ola lei*. This does seem to be an important gap to be addressed at school and at home, as young people's educational success depends on their hard work. In the future, when it is time for these young people to look after their families, they will realise that *galue malosi* is also a vital ingredient for *ola lei* of the whole family.

On the other hand, g*alue malosi* can have a negative impact on a person's health. In Tuvalu, there is a common belief that the people in the olden days died early because they worked too much and too hard. One interviewee said:

A tou tino foki laa e `mate kae maasaki loa i te galue vaalea. Ko fitaa i ei a te foitino kae se lagaaga loa a te papa. A galuega la e se maua o oti, me ko tatou foki loa e olo o faaite… mea taaua loa, ke fakapatele fua i te aso, ia lava mo te aso. Galue mai loa i te taeao ke poo i te umaga… mea na see se galue malosi ke ola `lei a te kaaiga, kae se galue fakavalevale, ne?!

Our people, unfortunately, died or got sick because they were overworked. The body gets tired but she still weaves her mat. Work or chores could not be finished because we don't stop creating work… the important thing is to work smart or just do enough on each day, then that's enough. Working hard from morning until evening at the pulaka or taro pits… that's not working hard to promote *ola lei* in the family – that's crazy work, right?! (Community member, female, 50+ years old)

Would 'work easy' be a better suggestion for Tuvaluans? How much do Tuvaluans get from working easy compared with working hard? Can 'working easy' feed or look after families? Can 'working easy' produce quality crops from the sandy soil of Tuvalu? These

questions allow us to look into the 'work easy' concept and evaluate whether such an approach would allow people to have enough food, good shelter, and other essentials.

3.3.5 Maumea or Maukoloa (Wealth)

In Tuvalu, *maumea* and *maukoloa* can be used interchangeably. *Maumea* tends to mean having lots of things, particularly money, while *maukoloa* usually refers to having lots of valuable things such as houses, food, boats, clothes, computers, and tools. These days the terms are becoming associated more with modern possessions and money, and *maumea* is more commonly used than *maukoloa*. In the traditional context of Tuvalu, *maumea* refers not only to having lots of money but also to the possession of substantial local resources such as land, pulaka and taro plantations, fowl and pigs, and water reservoirs. In short, *maumea* means wealth.

In their views of health, community people saw *maumea* as important for achieving *ola lei*. A family, for example, that has plenty of valuable materials and resources will definitely find happiness (*fiafia*) because they will have access to things that satisfy them or make their lives easier. One interviewee recalled:

> *I aso kolaa, a tino e maumea loa i mea pelaa mo sa puaka, laumanafa, vai-pulaka mo mea `laga pelaa mo sa papa, mekei… ne? Tela la, ka avaga loa se tamaliki ki se tino o te kaaiga maumea tenaa, e tasi loa a te pati a tino: 'ia manuia koe, ko ola `lei koe'! Ka ola `lei la a ia ona la ko te kaaiga tenaa e maumea, ka see ola fakaalofa a ia io me fano o aakai ki tino ne? Nei laa, a te maumea pelaa me ko fakauiga malosi loa ki tino kolaa e uke a olotou sene ne? [kata]. Tela la, ka avaga loa se tino ki se tino galue, e fakaamutia foki loa tatou: 'ia ko ola lei koe, ko gali tou olaaga ne?'*

> In those days, people were rich in terms of pigs, lands, pulaka plantations and woven items such as mats, fine mats… right? So, if someone is married to a member of such a rich family, there was only one phrase that people could say: 'You are blessed, you will have a good life [*ola lei*]!' He or she will have *ola lei* because that family is rich – he or she will not have a poor life or have to ask others for help, right? Now, richness seems to refer mostly to people who have lots of money, aye? [*Laughs*] So, if someone is married to a person who works [has a paid job], we will be full of praise for him or her: 'You will have *ola lei*, your life will be good,' right? (Community member, male, 50+ years old)

Undoubtedly, other Tuvaluans, just like this interviewee see that there are two types of *maumea*: *maumea* in terms of traditional resources such as animals, crops, and mats, and *maumea* in terms of money.

Maumea is valued not just because people possess valuable resources but also because it allows them to play important roles in society. People also recognise that *maumea* is an outcome of *galue malosi* and *toka*, as explained in section 3.3.3. In Tuvalu, working hard usually leads to wealth, particularly in traditional resources such as fowl and crops. Having an abundance of material things allows someone to be generous and to show compassion and caring to fellow community members.

I remember when a member of the community whom I will call Isalaelu, who was known for being rich in terms of pigs, fowl, and crops, stopped me as I rode my motorbike past his place. He sat on a log as he scraped coconut flesh with a knife, into a big wheel-less barrow. His wife was busy cleaning the pigpens. The squeaking noises of the hungry pigs and chickens were so loud that we had to talk loudly. Surrounding Isalaelu were more than 50 pigs and chickens of various sizes that made quick dashes to wherever he threw a scraped chunk of coconut flesh. These were not his only pigs and chickens: inside the pigpens, I saw at least 20 more pigs, including a couple of sows and piglets. Under a nearby line of mangrove trees, I also saw cages filled with roosters and hens. I parked my bike five to six metres away from where Isalaelu was sitting, but I did not get off as I feared that the pigs might knock down my motorbike. We conversed:

Isalaelu: *Vau koi fetaui tonu taaua… ke na `poa atu tau tama-puaka.*
             Come as we meet now in the right time… so that you can take a piglet.

Me: *Fai koe…fakafetai lasi loa.*
             Tell me about it… thank you very much.

Isalaelu: *[Kalaga ki tena avaga ke sala mai se lau-taga mo `fao taku tamaa-puaka].*
             Au ko fitaa i te uke o manu![katakata]
             [Calls his wife to look for a sack to put the piglet in.] I am tired of having
             this many animals! [*Chuckles*]

Me: *Ao! Kilo atu laa ki olotou mumu atu!*
             Yes! Look at how they swarm around you!

Isalaelu: *Tufoua, mea nei se maumea telaa e faka-fitaa foki ne ia a koe mo tou*
             kaaiga. [Kata] Ke malosi loa koe!

Tufoua, this is a type of richness that makes you and your family tired too. [*Laughs*] You have to be strong and hard working.

Me: *Tenaa ne? Tou malosi ko tou maumea ne? [kata] E gali foki me ka seai foki ne mea-kiki i te store, koe ko tapoko fua i tau farm ne?*
You are right, aye? You work hard, you become rich, right? [*Laughs*] It's also good that when meat in the store runs out, you just turn to your farm, aye?

Isalaelu: *E tonu koe. E tigaa e faka-fitaa kae ko au e lagona loa ne au a te aogaa o te maumea tenei ki te olaaga o te motou kaaiga ne? E toka matou i taimi e kalaga a te fenua ki mea-`luki… matou foki nei e kai loa i omotou manu konei. E isi loa se toka o toku manava ona e toka kae mafai loa ne au o fagai toku kaaiga, e tigaa ei e seai ne motou sene uke ne? I te olaaga nei, au e fiafia faeloa ona e toka kae uke aku manu, telaa e se manavasee au i te fagaiiga o toku kaaiga. Tufoua, a te maumea la tenei i mea tau manu mo te umaga, e see vau fua ki a koe ia ia eiloa! E maumea koe manafai e saga koe o tukeli kae galue malosi ne?*
You are right. Even though it is tiring, I feel the usefulness of this type of richness to our family, right? We are ready when the island community asks for [pigs] contributions from families… we also eat these animals. I am not worried because with these animals I can feed my family, though we don't have much money, right? In this life, I'm always happy because we have these [domesticated] animals, so I don't worry as I feel I am capable of feeding my family. Tufoua, this type of richness in terms of animals and pulaka/taro crops doesn't just come to you by itself! You will get it [*maumea*] when you focus and work hard for it, right?

His wife appeared with a sack, and Isalaelu asked me to choose any piglet. I replied that any female piglet will do. He nodded and tried to spot a good-looking female piglet. He threw some coconut flesh close to his feet. The pigs and chickens dashed toward his feet and he swiftly grabbed a female piglet by its tail. The piglet screeched while the other pigs and chickens darted away to the nearby bush. He put it into the sack and handed it over to me.

Isalaelu: *Mea nei ko te fanauuga o taku maatua fai-tama `lei loa. Ka `lei loa tau fagaiiga, se tolu masina naa ko fanafanau, ko kiukiu ei au puaka. E tonu foki a te maumea i sene, kae ka maumea loa koe i manu faka-tatou penei, e*

siliga atu foki loa tou fiafia mo tou see manavasee i te olaaga tenei e ola
ne tatou i te fenua.

This [piglet] is an offspring from a very good sow. If you feed her well, it will only take about three months before she can breed piglets, and you will get very many pigs. Richness in terms of money is good, but it is better when you become rich in terms of these local animals and you will be happier and not worried in this life on this island.

As I rode back home with my piglet, I began to think about the link between *maumea* in terms of pigs, food security, and happiness. There is no doubt that *maumea* will make a family *ola lei*. However, at the back of my mind I wonder how possible it is for me to reach this *maumea* state in terms of local resources like Isalaelu, while I work full-time as a teacher. People are forced to prioritise where they put their energies.

It is also the case that very few Tuvaluans can reach *maumea* in terms of money. The communal culture of Tuvalu and the low level of Tuvaluan salaries make it nearly impossible for a typical civil servant to save money. In Tuvalu, generally no one is outstandingly *maumea* in terms of money. Most families know that having a lot of money will positively enhance *ola lei* within the families and communities. However, Tuvalu's limited resource base and small economy offer limited opportunities for Tuvaluans to invest and produce good money in the communities. Perhaps this is one reason why extreme monetary wealth was not a popular way of achieving *ola lei* in Tuvalu according to the interviewees. Of course, there is a link between health and socioeconomic status, since richer people tend to be healthier (see Macintyre, McKay & Ellaway, 2005; Davidson, Kitzinger & Hunt, 2006). However, Tuvaluans do not see a big gap between community people in terms of money. In fact, inequality in society is bad for everyone's health, even for the wealthy (Wilkinson, 1996). In Tuvalu, a levelling mechanism is institutionalised, particularly in the sense that inequality and wealth are levelled out as those people with abundant food often redistribute them to others in the community. The example about Isalaelu giving me a pig is a classic instance whereby the difference between a wealthy person and a less wealthy person was levelled out.

No interviewees mentioned actual richness in terms of money when defining *ola lei*. The two interviewees who talked about *maumea* when defining *ola lei* referred generally to richness in terms of resources such as pigs, crops, mats, and clothes. These two community people are not employed for wages; this made them turn their attention to the *maumea* in terms of local resources instead. The other interviewees did not use the

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concept of *maumea*, though they used other *maumea*-related concepts such as readiness (see section 3.3.3) and food abundance (see section 3.3.1). This means that being extremely rich is too big a dream for the ordinary community people in Tuvalu. Hence, they only see it as important to ensure that they have enough resources to enable good living.

3.3.6 Poto faka-Tuvalu or Logo (Traditional Skills and Knowledge)

Poto faka-Tuvalu refers to the traditional skills that community people possess or have acquired from their ancestors and from their life experiences. Commonly, these traditional skills are also known locally as *logo*. There are two types of traditional skills:

1. Practical skills that are used in daily life, such as knowledge of weaving, fishing, planting crops, and collecting toddy juice. These skills are used to produce daily necessities and resources.

2. Sacred and restricted traditional skills that are known only to certain families or individuals. These often have a spiritual component linked to traditional religious beliefs. These skills connect to healing and sometimes to productive enterprises, but sometimes have an uneasy relationship with Christian teachings[19].

Community members are expected to learn how to perform basic daily activities such as fishing, planting crops, collecting toddy juice, cooking local food, climbing coconut trees, and husking coconut. Most people in the community need to acquire the skills to do such essential chores or activities. The lifestyle, economy, and environment of Tuvaluan communities cause the people to learn and use skills that fulfill basic needs, thereby contributing to *ola lei*.

> *Te suaa mea e iloa ne au i te ola lei, ko te poto. Ko te fakaaogaa ne koe a poto mo iloga o kaaiga. A poto konaa e aogaa ki te ola lei. A te pulaka e isi sena faiiga, e isi se tokiiga, e isi sena tanuuga…*

> Another thing I know about *ola lei* is the know-how or traditional knowledge. It is about yourself and your traditional family skills. Such skills are very important to *ola lei*. The pulaka has its own special way of being cultivated in terms of both planting and fertilising… (Community member, male, 60+ years old)

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[19] See Kennedy (1931) and Chambers and Chambers (1985) for description of traditional medicine and healing on Vaitupu and Nanumea respectively.

The above interviewee recognised that skills are important to the *ola lei* of family members and others in the community. For example, the know-how of *pulaka* crop cultivation in the poor quality soil of Tuvalu is a way of obtaining the food that is an essential element of *ola lei*.

There are also secret traditional skills (*poto* or *logo*) that belong to certain families; these are known for their effectiveness in producing large-sized crops, catching more or specific kinds of fish, or healing illness. This knowledge is traditionally passed down from generation to generation within a family. One interviewee said that his family's *logo* or *poto* had been passed down to him, and he believed that what had been passed down to him was not just 'skills' only but also the entire '*ola lei* for the family':

> *A poto o te motou kaaiga, konei e isi ia au, penei mo te uaa-niu, te `foo. A mea konei ne poto e `tau o tausi, me ko te ola `lei tenaa o te kaaiga.*

> Our family's traditional knowledge is with me, such as in the traditional knowledge of how to make coconut palm trees bear plentiful and large coconuts or to grow well, and in healing through massage. These are skills that must be kept, as they are the *ola lei* of the family. (Community elder, male, 60+ years old)

The elder was acutely aware that his family's repertoire of traditional skills enabled it to live well: *logo* enhances *ola lei*. Hence, theoretically, the constant passing down of *logo* to the family members seems equivalent to 'health inheritance'.

The interesting part of this system of 'inheritance of wellbeing' is that it is a flexible system. This is because the masters of certain traditional skills, who are mainly the elders of the family, hold the core of what it is that they are expected to pass on and to whom. For example, if the eldest son drinks excessive alcohol, another more suitable candidate will be chosen to maintain the special *logo*. As a traditional healer explained:

> *Au tenei e kilokilo me e tefea a taku tama e tuku ki ei a te poto tenei… e `tau au o filifili se tamaliki telaa e see paiee io me inu kamagii ne? E onoono au ki se tamaliki telaa e malosi kae fiafia o fai a te galuega tenei… me se galuega laa e seai sena peofuuga ne?*

> I am currently observing and deciding which child should receive this *poto* [traditional healing skill]… I shall choose a child who is not lazy or who drinks alcohol to excess, right? I identify a child who is strong and happy to do this job

[healing sicknesses by massage]… as this job is unpaid, huh? (Traditional healer and community member, male, 50+ years old)

It seems that only those families that retain, maintain, and pass on such traditional knowledge and skills possess that specific *ola lei* which is essential to family wellbeing. In Tuvalu, sharing is an important cultural value. However, when it comes to a family's traditional knowledge or skills, knowledge is shared within a much smaller group. However, family members do typically use their skills to benefit the community as a whole. For example, the traditional healer quoted above used his special family lore to heal people outside of his close family circle. Maintaining the secrecy of traditional skills or knowledge within a family attests to its high cultural value. The only time when these traditional skills are shared publically is during a wedding ceremony, funeral, or other important extended family or community function. At a funeral, for example, family members often publicly reveal some of their families' traditional knowledge or skills as a gift or as a show of appreciation for those who have helped out during the funeral. This is a great opportunity for people to learn and to gain some *logo* in growing taro, for instance.

If a family, for example, has a *poto* for growing *taro*, then the benefit in terms of having large crops of taro goes only to that particular family. I believe that the sharing of families' traditional skills with others will benefit the community at large. I always remember my secondary school woodwork teacher's reply to one of my classmates' queries:

Student: Why is Tuvalu not as developed or as rich as Australia or the United States of America?

Teacher: Tuvalu can never become like Australia or the USA because Tuvaluans don't share their traditional skills or knowledge to other fellow Tuvaluans. People with certain traditional skills are selfish and only keep their knowledge to themselves.

Though this particular teacher has passed away, I will forever remember his words; it is the point of view of an educated person who recognised that the secretive nature of the retention of families' skills was, and still is, hindering the economic development and welfare of whole communities or countries. Imagine what would result if all traditional skills and knowledge could be taught and shared among all community members. They

would have food in abundance, for example, because they would have the knowledge of how to fish or grow crops most effectively and efficiently.

Interestingly, no student in this study mentioned 'accessing traditional knowledge' as a feature of *ola lei*. This is, perhaps, because they are too young to fully explain the importance of traditional skills and knowledge that have been learnt by imitation and practice rather than instruction. I observed that some children, in fact, already knew and used several traditional skills such as knowing how to collect mud crabs, collect toddy juice, husk coconuts, and cook local food. However, these children are probably not fully conscious of how useful these skills will be for their future *ola lei*.

The wisdom to live well is as important as traditional knowledge. Family members need to know how to live well in this contemporary world. The 'know how' for budgeting family income, disciplining children, utilising water wisely, and managing family matters are some examples of the skills that contemporary families need to acquire; this knowledge is just as important as the possession of those traditional skills (*poto-faka-Tuvalu* or *logo*) that are essential for obtaining *ola lei*. Not only adults, but also students have to learn practical wisdom, such as knowing how to manage time, to respect others, and to study more effectively in order to gain good academic results and to live harmoniously and happily in both the school and community. This means that accessing traditional skills or knowledge of how to perform daily chores, as well as acquiring new knowledge and skills, are both imperative for community people in order for them to live well in their community and the world at large.

3.3.7 Talitonu & Fakatuanaki ki te Atua (Belief and Faith in God)

I sat in front of Teo, an elderly church leader. He held a large English Bible in his hands and sat on a mattress. Beside his mattress, I saw various types of biblical pamphlets and study guides. On my request for his definition of *ola lei*, he spoke emotionally and confidently:

> *Ola lei* refers to knowing and believing in God. Health cannot be achieved by someone… no one can achieve a peaceful life unless he or she knows God. God came into this world for this purpose only, that is, for the human being to live well. If we read the Psalms, it tells us that Jesus came to forgive our sins and heal our sicknesses. Good living is only found in Christ. Therefore, *ola lei* is only a matter of having faith in Christ.

I looked blankly at Teo, wondering how 'just having faith in God' will make the believer achieve *ola lei*. This is because I have always believed that spirituality and humanity often go hand in hand. Ordinary people, like me, who do not have 'as large a faith as did Abraham', recognise the link between having a healthy physical body and the spiritual aspects of life. Teo appeared to read my mind and asked: 'You don't believe me, do you?' I began to feel embarrassed, and tried to cover myself by answering his question with a question: 'Uhmmm… so, do you believe that by just "having faith in God" is enough for your health?' His eyes began to fill with tears and as he leaned forward he sternly rebuked me, saying:

> Tufoua, you have to believe this! You will waste your time searching for high academic qualifications when you don't believe that you will obtain *ola lei* if you only believe in God, trust Him, have faith in Him… He will give you life! When you are sick, God will heal you… if you believe in Him. In this life, you don't need to have lots and lots of money or wealth… just have God and believe in Him. That's health!

Teo was the only interviewed community person who strongly stressed the importance of believing in God alone as a way of achieving *ola lei*, without the support of having a healthy physical body and mind. To him, and perhaps the others with the same philosophy, having faith in God is the ultimate source of *ola lei*. God will bless you by giving you, in different ways, money, food and good life. Obtaining *ola lei* starts from believing and having faith in God, not the other way around. Not only does belief in God enhance general *ola lei*, but it is also thought to be capable of healing sickness.

However, many other community members and church leaders stressed the link between believing in God and having a healthy physical body. As the leader of the largest church in Tuvalu (Ekalesia Kelisiano Tuvalu, or EKT) put suggested:

> The gospel is not only stressing particularly the spiritual development of a man. The gospel considers the holistic development of the person: the physical and spiritual aspects. We cannot separate these two. This is because the physical body could not exist if there is no spirit in that body. Similarly, the spirit would not exist when there is no physical body… the gospel would not become a gospel without the combination of humanity and spirituality. Every human being consists of those two things [spirit and physical body]… So we need to be fed with normal food so that we live well physically… and on the other hand, we should be filled with

spiritual food so that we can also live well because believing in God is just as important as eating normal food.

This is the stand of Tuvalu's main church and other significant Christian denominations such as the Tuvalu Brethren Church and the Tuvalu Seventh Day Adventist (SDA) Church. Having faith in God is as important as having a healthy body. Faith in God and *ola lei faka-te-foitino* (physical fitness) are inseparable, as it is hard to develop the spirit when the physical body is weak and feeble, and vice versa. All the churches' elders and several older community people whom I interviewed stressed this concept emphatically, though no student mentioned 'belief in God' as a way to obtain *ola lei*. Older people seem to be more attached to the concept than younger people.

Having faith in God is not easy or straightforward to achieve. It needs the heart and soul to totally accept that having faith in God is truly beneficial to daily life. Interviewees who talked about the benefit of 'believing in God' also shared with me the miraculous experiences they had during some hardships. One devoted believer explained:

> …I had a problem with this eye. I could not see clearly. So, I prayed and prayed… just hoping that I would be transferred to Fiji or perhaps an eye team from overseas would come. Then, last week, an eye team from Australia came, and I was very lucky to be on the list because that list had been full. It was a very long list, and there was no chance for me to be included in the list as I was very late when I registered to be operated… I was turned back by the registrar, but as the operation team arrived, I was told that I was included on the list. I believe that it is God's assistance that enabled me to be operated on. I… and now my eye is recovered, and it is very clear… clearer and better than the other eye. Those are the ways, Tufoua, which God gives us when we rely on and believe in him. He gives us life and health. (Church deacon, male, 70+ years old)

Here, we can see that some community members believe that faith in God has helped them achieve health. Believers recognised that God would not necessarily heal sickness directly, but that God could help through other means that we never thought of. It may be possible for faith-based organisations or churches to motivate people to consider the concept of having faith in God as a way of promoting and obtaining health in the community. As one interviewee stated:

Going to church and believing in God are two totally different things. Going to church just for the sake of being present there is very different from believing and having faith in God. It is the 'believing in God' or 'totally trusting Him' that counts! I think it is the church's responsibility to teach the people to be able to emotionally and completely believe and have faith in God… (Community member, male, 60+ years old, Funafuti Island)

In fact, many researchers identified the importance of faith-based organisations (FBO) for development (see Rakodi, 2012; Thornton, Sakai & Hassall, 2012). Promoting health or delivering health information and services in communities is one way that FBOs can assist the health sector. The *Enua Ola* programme in Auckland is one such example (Malua, 2014). In Tuvalu, only a few churches have provided practical help in delivering health education or promoting health to their congregations. The SDA is noteworthy for regularly integrating health education sessions in their church programmes. In Tuvalu, the EKT church assigns several deacons to every Sunday visit older people in their homes and sick people in hospital, and report their situations back to the congregation so they can be included in prayers. The pastor on each island also does a special tour to visit the sick and old people in order to spiritually encourage and pray with them. On Vaitupu Island in 2011, the EKT's pastor went a step further in organising health promotion activities for the community people, who were mostly all members of the EKT church. He admitted that the church's current role is largely to develop and maintain people's spirituality, but he saw the value of a broader health focus. The church also preaches the importance of having 'faith in God' as a powerful way to solve hardships, enhance good living or *ola lei*, heal sicknesses, and comfort ill people in the community.

3.3.8 Lei a te masaki (Recovery from Illness or Diseases)

Lei a te masaki (recovery from illness or disease) was a key feature of *ola lei* that was brought up mostly by the traditional healers. The ordinary people of the community and students did not talk directly about this concept of 'recovery from illness or disease', as they did not deal with healing practices like the traditional healers. However, the community people talked about being not ill and having physical fitness as important for *ola lei.* This means that the ordinary people also recognised that being recovered, or 'far away' from diseases and illnesses, means *ola lei*. In other words, though the community people did not directly mention 'recovering from diseases and illnesses' as a feature of *ola*

lei, they acknowledged the importance of traditional healing practices within the community.

It is interesting that nearly all traditional healers I interviewed talked about 'recovery from illness or disease' when they defined *ola lei*:

> In the language of local healers, *ola lei*, refers to 'recovery', or the sick person survives as a result of the treatment given by the traditional healer. (Traditional healer, male, Funafuti Island)

> *Ola lei*, to me as a traditional healer, refers to the recovery of the patient as a result of my healing. Someone came for help and he was saved by my healing hands... that person is saved and lived. That's *ola lei* to me. (Traditional healer, male, Vaitupu Island)

The role of traditional healers seems to influence their definition of *ola lei*. To heal a sick or ill person is a sworn duty of the traditional healers. This principle was also found by Chambers and Chambers (1985, p.37) when they did their anthropological study in Nanumea Island: 'All the well-known practitioners of traditional medicine assert that they use their skills only to benefit people, never to harm them'. Trying to heal someone's sickness is perhaps the most righteous or moral thing for a traditional healer to do. The most important return that the traditional healers receive is when their patients are recovered or healed. This is probably why all traditional healers whom I interviewed believed in working together with medical personnel to heal patients' sickness, which some traditional healers wanted to formally propose to the Department of Health. Traditional healers also collaborate amongst themselves. If a traditional healer, for example, could not heal someone's sickness, he or she would refer that patient to another traditional healer. This shows the determination of traditional healers to do everything they can to help their patients recover. Recovering from illness or disease is a step toward *ola lei*, according to the traditional healers.

This aspect of recovery also has more general applicability. Recovery is not only associated with illness or disease but is also relevant to other aspects of health or life. Recovery from hardships such as sickness, debt, or arguments with relatives is crucial step toward *ola lei*. In times of unhealthy conditions, people need to know how to plan and work to overcome these problems, not to give up and leave the problem to get worse.

Especially in the areas of mental health and physical impairment, recovery can be complex. As Davidson, Harding, and Spaniol (2005, p.45) have noted:

> [Recovery] does not necessarily imply an improvement or elimination of symptoms and deficit, but rather relates to a learning process that enables people to live with long-term limitations and teaches them how to cope or compensate for them and to participate in community life as actively and satisfactorily as possible.

In regard to other health issues as well, recovery must not only include efforts to eliminate a disease or problem, but must also enable people to reflect on what happened and to learn from it. In other words, this concept encourages health providers, traditional healers, community people, and students to be able to develop strategies that enable them to move beyond a problem to a new stage – this is, to a stage of recovery and *ola lei*.

3.4. *Ola Lei* Conceptual Framework

The *Ola Lei* Conceptual Framework is a synthesis of the practices and concepts described above. As suggested by one of my participants, the octopus provides an effective visual model of the holistic interconnections among the various components of *ola lei*. Figure 3.5 shows the *Ola Lei* Conceptual Framework.
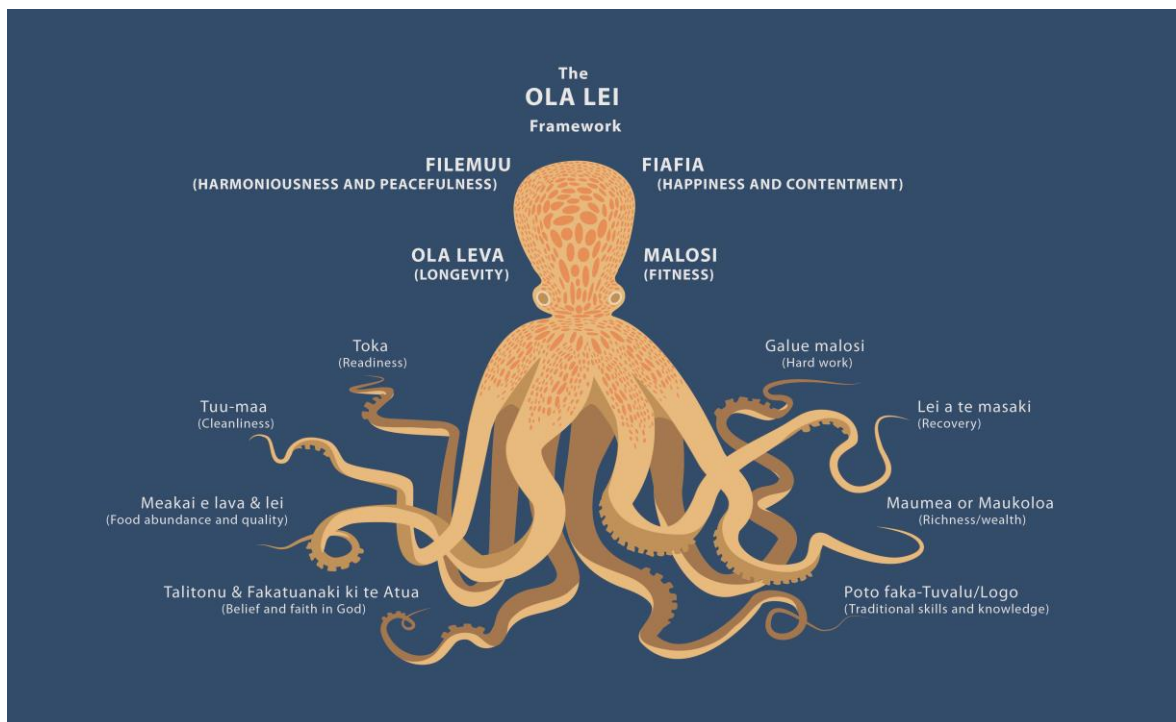
Figure 3.5: The *Ola Lei* Conceptual Framework (Artist: Briar Sefton)

The head of the octopus represents the main four qualities of *ola lei*: peacefulness/harmoniousness, happiness/contentment, physical fitness/lack of illness, and longevity. The tentacles represent the practices through which *ola lei* can be achieved. It is the tentacles that physically move the octopus to safety and to food, thereby continuously sustaining the *ola lei* qualities of the octopus. In Tuvalu, an octopus is known for its intellect, agility, and ability to camouflage itself, making it difficult to catch. The intertwining tentacles can make the octopus form into different shapes, and tentacles can move and interlace in different directions. These features symbolise complexity and interrelatedness, which makes the octopus a good model for *ola lei*.

When I presented this model of the octopus to a collection of Tuvaluans, it resonated well. Tuvaluans, who attended my presentation about the *Ola Lei* Conceptual Framework, felt that the framework is a good way of organising their thinking about health. They made additional comments about the model in relation to culture and health. For example, the octopus lives in the deep water, but puts its head above water occasionally to breathe. This could also be used as a metaphor for Tuvaluans surviving in Tuvalu and other places like New Zealand in the face of climate change. In addition, the suckers on the tentacles could be taken to mean that Tuvaluans are bound by culture, meaning that it is hard to escape some practices not conducive to *ola lei*.

Interestingly, after I had devised the *Ola Lei* Conceptual Framework using an octopus as a model, I found out that I was not the first researcher to use an octopus as a model of health. For example, in the 1980s Rangimarie Rose Pere, an indigenous Māori scholar, also used the octopus to represent Māori health concepts. In her version the tentacles symbolise the different dimensions of health: *wairua* (spirituality), *mana ake* (appreciation of one's absolute uniqueness), *mauri* (life principle), *whānaungatanga* (kinship/relationship), *tinana* (body), *hinengaro* (mind/heart), *whatumanawa* (emotions), and *ha a koro ma a kuia ma* (oneness between present individual and ancestors). The body and head of the octopus represent the whole family unit. The intertwining of the tentacles represents the interconnectedness of the dimensions (Pere, 1988; Love, 2004). Though there are slight differences in our usage of the octopus' features to represent health, we both share the idea that in the eyes of Tuvaluan, Māori, and other people, health is holistic and complex, and involves a network of interrelated dimensions.

3.5. Conclusion

This chapter describes how the people of Tuvalu define and understand the term *ola lei*. It also explains how Tuvaluans expect *ola lei* to be achieved. This overview draws on interviews and my own observations. There are five key points that I would like to emphasise in conclusion.

First, *ola lei* is inherently broad and covers many aspects of Tuvaluan life. As a result, when people are asked about *ola lei* they answered with meanings that went beyond health and spoke more to a sense of wellbeing. *Ola lei* is a commonly used term in Tuvalu. However, when asked about it, participants seemed confused and to think their responses might not be the ones that I expected. The word itself does not appear to be difficult to explain, but because of the range of meanings, people did not know which one meaning to begin with in their answers. Participants defined all possible aspects of *ola lei* including both its literal meaning and the relevant features surrounding the concept. They placed special emphasis on features of *ola lei* that are an integral to Tuvaluan culture, such as peacefulness.

This means that while *ola lei* shares with the WHO definition of health a holistic perspective, it also differs significantly. *Ola lei* does not just concentrate on the physical, mental, and social wellbeing of individuals, but integrates a range of aspects relating to both physical health and the broader environment. Importantly, this Tuvaluan concept of health goes beyond the individual and extends to the family, community, and the nation as a whole. The collective orientation of Tuvalu society encourages group responsibility, which is reflected in and supported by *ola lei.*

Overall, participants' views of *ola lei* were based on cultural beliefs and norms, though social and economic status and experiences also played a role. For example, the educated people who hear the word 'health' in their normal routine automatically think of hospitals and other aspects of biomedicine. However, when they hear the word *ola lei*, they first think of their cultural, social, and economic living conditions. The lack of mention of *filemuu* (peace or harmony) by any primary and secondary school students may relate to their young age: they may have only thought of the common meanings of *ola lei* that they were more familiar from both the school curriculum and their current responsibilities. This contrasts with members of the older generation, who had conceptualised the term more, and therefore articulated more clearly deeper aspects of the term *ola lei* such as *filemuu*, *fiafia*, and *toka.*

Cultural ideals such as happiness, however, sometimes conflict with other aspects of *ola lei.* This is seen in the examples where people would just eat any amount of any food despite warnings from the Department of Health, because they think that as long as the body is full, everything else should be alright.

Even so, *ola lei* is a flexible concept. The research participants identified a lot of ways through which it can be achieved. These ways of achieving *ola lei* derived from cultural, spiritual, biomedical, and western ideas, demonstrating that it is a concept which can accommodate new ideas.

The features of *ola lei* and the practices that support it, which I have described here, provide the conceptual framework which I will use as the basis for my analysis in the following chapters. The next chapter discusses the health initiatives, services, and programmes that the Department of Health and NGOs provide for the community people, and considers how consistent these health initiatives and programmes are with the *Ola Lei* Conceptual Framework.

CHAPTER 4: *TAUSI TE VASIA*: GOVERNMENT, NGO, AND EXTERNAL AGENCIES' RELATIONSHIPS WITH HEALTH

4.1 Introduction

> Everything you do, you must base it on *ola lei*. This is my philosophy and belief. In my family, I decide things around *ola lei*. As a member of the *kaupule*, I also decide things around *ola lei*. Whatever initiatives and programmes I proposed, they have to sit on top of the *ola lei* platform. For example, I recently made a decision and proposal to remove all pigpens near the primary school. Why did I decide this? It is because of *ola lei*. The pigpens near the school are bad for the children because of the smell. I based my decision on top of the *ola lei* foundation. And that's why I said earlier, you know… let us make *ola lei* as the foundation for all decisions, plans and actions we do… (*Kaupule ,* Vaitupu Island)

This elder, a member of the Vaitupu Island Council and a family head, felt strongly that the conceptual framework of *ola lei* provided a secure foundation for making decisions about both personal and collective issues. Since this framework does not foreground personal benefit, it will be interesting to look closely at the way that *ola lei* connects with official efforts to improve Tuvaluan health, since these efforts focus on achieving collective wellbeing.

In this chapter, I focus on policies, initiatives, and services concerning health and education. My main goal is to analyse the government perspective on initiatives in these areas as they are presented to local people in both policy and practice, and further to examine the practices and policies of selected NGOs dedicated to health. This chapter will also explore the extent to which health and education initiatives, policies, and goals are consistent with the *Ola Lei* Conceptual Framework. It will focus specifically on the following two questions:

1) What is the government, through its Departments of Health and Education, saying and doing in the areas of health and education?
2) What services does the Government of Tuvalu provide that might facilitate *ola lei*, and why has the government chosen to undertake these particular health initiatives?

In Chapters 2 and 3 the Samoan phrase *teu le va* and the Polynesian value of maintaining and respecting relationships – or 'the space between' – were introduced. These concepts were applied firstly to research relationships, and secondly to relationships within and between communities in Tuvalu. In Tuvalu, the phrase *'tausi te vasia'* has the same meaning as the Samoan phrase – in English it means, 'Caring for or looking after the space between.' This value and the practices associated with it facilitate the development of qualities like peacefulness and contentment, just as *ola lei* does.

Tausi te vasia is also relevant to one of the major challenges confronting small island nations: the need to accept significant assistance from external agencies, which conflicts with the desire of sovereign nations to determine their own paths into the future. With development aid come external influences and demands. This is inevitable. Few donors donate directly to nations' sovereign wealth funds[20]. Most fund projects that match the donor's own priorities. How then can a nation like Tuvalu achieve its own objectives? I suggest that the answer can be found in *tausi te vasia*, since cultivating effective partnerships between donor and recipient is the key.

Some effective partnerships between Tuvaluan ministries and external agencies already exist. The current partnership between the New Zealand and Tuvalu police forces to address family and other interpersonal violence is a good example. My conversations with members of the team show that lengthy support visits by the same overseas personnel, three times a year over many years, are the key to creating effective collaboration. Within the health area, there are also many examples of partnerships between local (but often externally-funded) NGOs, government departments, and communities. I will describe some of these in detail later in this chapter. There are also examples of effective collaboration within government departments and between them. A good example of the former is joint work on the intersection of TB and diabetes by the separate health officers responsible for each disease. A MOU between the Ministries of Education and Health also provides a helpful framework that can facilitate cooperation. Thus, the Tuvaluan concept of *tausi te vasia* can be used to assess how well relationships at all levels are working, and whether the dignity of all partners is being respected as they work towards the shared goal of the wellbeing of Tuvalu now and in the future.

This chapter begins with a description of some of the key documents that provide the framework for Tuvalu government policy. I then discuss the organisational structure of

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[20] Australia and New Zealand both donate to Tuvalu's sovereign wealth fund.

the government in relation to health, as well as the key services provided by the health sector. My analysis then focusses on several case studies of NGOs that make important contributions to the health and wellbeing of the people of Tuvalu. These NGOs all partner with external donors as well as with the Tuvalu government and local communities. An examination of external donors then follows. Finally, I turn to the education sector, building on the descriptions provided in earlier chapters, to analyse structures, policies, curricula and aid. In the conclusion, I return to the central dilemma of maintaining sovereignty while accepting external aid, guided by the concept of *tausi te vasia*.

4.2. The Government's Health Initiatives

The Department of Health (DoH) is the country's main health provider. It oversees and operates the hospital, clinics, and public health care. There are no private medical centres, pharmacies, or clinics in Tuvalu. However, some non-governmental organisations (NGOs), such as the Tuvalu Family Health Association (TuFHA), assist or work alongside the DoH to deliver and promote some health projects and services. The government's health initiatives typically involve specific plans that aim to maximise people's health by resolving a particular health issue or problem. This section provides an overview of these government health policies and services.

4.2.1. Policies: Theories of the Government

In this section, I analyse the theories of the government regarding health as presented through its policies and strategic plans. The analysis is mostly taken from two major policy documents or frameworks: the National Strategy for Sustainable development (*Te Kakeega* II) 2005-2015, and the Strategic Health Plan 2009-2019.
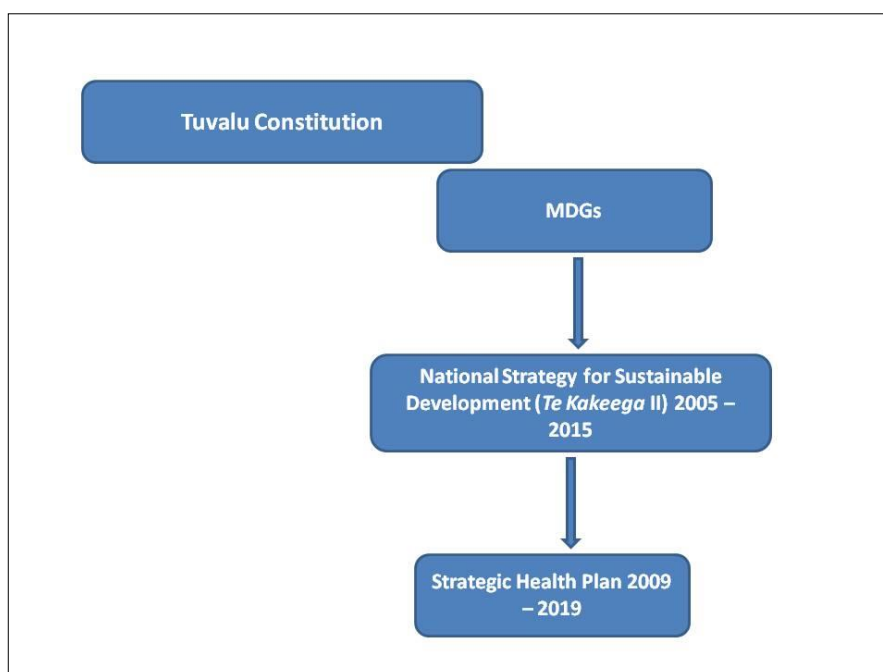
Figure 4.1: Levels of documents.

Taken together with the Constitution of Tuvalu, the MDGs and *Te Kakeega* II are the top-level framework that influences the formation of other national policies and plans such as the National Strategic Plan for HIV and STIs 2009–2013, the Medical Treatment Scheme Policy, the Sustainable and Integrated Water and Sanitation Policy, the Climate Change Policy (*Te Kaniva*), the National Population Policy 2010–2015, and the Strategic Health Plan 2009–2019. Figure 4.1 shows the connection among some of these planning documents.

Te Kakeega II is a particularly important document to analyse because of the insights it provides into government strategies for health. Also known as the *National Strategy for Sustainable Development*, it covers the decade from 2005–2015 and was formulated around the framework of the Millennium Development Goals. Thus, the MDGs provide the umbrella framework for this planning document. The Strategic Health Plan 2009–2019 is a second major policy document. This ten-year plan lays out the Department of Health's strategic plans for improving health in Tuvalu.

Here I will focus only on the health-related objectives in the *Te Kakeega* II documents. My goal is to describe these two major policy frameworks (*Te Kakeega* II and the Strategic Health Plan) and to consider how they are interrelated and how they impact health in Tuvalu. I will also make references to other legislative documents such as the

Tuvalu Constitution, Alcoholic Drink Act 1984, Food Safety Act 2006, and Tobacco Act 2008 where relevant.

Te Kakeega II

Te Kakeega II is the nation's strategic framework, specifying the eight strategic directions the nation should take (Government of Tuvalu, 2005). Tables 4.1 and 4.2 show these eight strategic areas of *Te Kakeega* II and the results that they are expected collectively to create. *Te Kakeega* II was produced by delegates from local communities, government, and NGOs in a national summit on sustainable development at Funafuti Island in 2004. The declaration of *Te Kakeega* II's 'Vision' (known as the *Malefatuga*[21] Declaration) is:

> WE, the representatives at the Tuvalu National Summit on Sustainable Development; comprising all island Head Chiefs and Presidents of Island Councils, Cabinet Ministers and Members of Parliament, representatives of civil society and the private sector, government ministries and departments, development partners and Tuvalu expatriates; RECOGNISE the importance of sustainable development – [that is] development without compromising the ability of future generations to meet their needs – and endorse the Vision of 'By 2015, guided by strong spiritual values enshrined in its motto – 'Tuvalu mo te Atua'[22] – we will have achieved a healthy, educated, peaceful and prosperous Tuvalu. (Government of Tuvalu, 2005, p. 1)

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[21] *Malefatuga* is the name of the place where the national summit for sustainable development was held and thus where *Te Kakeega* II was created.
[22] Tuvalu for God. The Tuvalu national motto recognises the role that religion plays in everyday life.

Strategic Areas	
1	Good governance
2	Macroeconomic growth and stability
3	Social development: health, welfare, youth, housing, and poverty alleviation
4	Outer Island and *Falekaupule* development
5	Employment and private sector development
6	Human resource development
7	Natural resources: agriculture, fisheries, tourism, and environmental management
8	Infrastructure and support services

Table 4.1: The Eight Strategic Areas specified by *Te Kakeega* II

Source: *Te Kakeega* II, p. 4.

Expected Results	
1	More employment opportunities
2	Higher economic growth
3	Better health care
4	Better education
5	Better basic infrastructure
6	Continued social stability

Table 4.2: Expected results of *Te Kakeega* II

Source: *Te Kakeega* II, p. 4

This vision – to achieve a healthier, more educated, peaceful, and prosperous Tuvalu by 2015 – is the foundation of *Te Kakeega* II. Whether this ambitious vision can be achieved by 2015 will be assessed in two or three years when *Te Kakeega* II'*s* life ends. However, some preliminary efforts to assess the progress that has been made towards the goals articulated within it were made during the review of *Te Kakeega* II in October 2011. At this time,

Participants expressed their concern on the targets of TK II [*Te Kakeega* II] which have not been achieved so far and encouraged the Government to ensure that the targets are achieved by 2015…

Participants agreed that all the TKII [*Te Kakeega* II] objectives and the UN Millennium Development Goals (MDGs) can be achieved by 2015 through renewed commitments, effective implementation, intensified collective action, and

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holistic and comprehensive approach by everyone and stakeholders at domestic, regional and international levels. (Government of Tuvalu, 2011d, p.33)

The achievement of the goals envisioned in *Te Kakeega* II (and the MDGs) depends not only on the resources, commitment, and methods used by Tuvaluans but also on effective collaboration with regional and international partners. Hence, it is important to identify whether any barriers exist to the achievement of the Vision's objectives and to consider how they might be overcome. Although the Government of Tuvalu requires that all developmental policies – including health policies, initiatives, and projects – be consistent with the goals of *Te Kakeega* II, these national policies must also conform to the MDGs. This raises the possibility that Tuvalu's sovereignty can be sidelined by global developmental goals. While this possibility might be interpreted as a case of hegemonic influence by the UNDP (Hulme, 2007; Purnomo, 2012), it could also be presented as an example of effective partnership (Futter-Puati et al., 2014), of regionally-consistent development (see SPC Economic Development Division's Strategic Plan), or of globalisation.

Nevertheless, the important point is that all these frameworks (MDGs and *Te Kakeega* II) aim to push development to another level. They all are grounded on the Constitution of Tuvalu, which is the 'supreme law' of Tuvalu. Though it does not contain any specific reference to 'health', the constitution does contain a Bill of Rights that protects the rights of Tuvaluans to a good life and to wellbeing, both of which imply good health. As a result, the focal point of all these documents involves a broad conception of health and wellbeing, and thus they are consistent with the conceptual framework of *ola lei*.

All health-related policies attempt to bring about changes that improve people's lives. The Tobacco Act 2008 and Food Safety Act 2006, for example, aim to prevent tobacco and food-related diseases. Having sound policies is one thing, however, while implementing and enforcing them is another. For example, clause the Tobacco Act prohibits the sale of tobacco products to people under 18 years old, but this law is not strictly observed in Tuvalu. Thus one important issue for policymakers and government to consider is why some Act provisions are not strictly observed, and what might be done to implement them more effectively so they can improve health in the ways intended.

The third strategic area in *Te Kakeega* II is social development, which includes health, youth, housing, gender, sports, and poverty and hardship. These aspects of social development are all interrelated. All of them, with the exception of sports, were also at the

forefront of the MDGs on which *Te Kakeega* II is based. In Tuvalu, youth, housing, gender, and sports are not directly under the Department of Health's portfolio even though they have essential connections to the achievement of health. For example, sports development, which is overseen by the Ministry of Education, aims to increase opportunities for participation in sports in order to promote fitness and health. Thus, it is important that government and community people take a broad perspective regarding how these aspects of social development also influence health in Tuvalu. The national policies and strategies that were proposed in *Te Kakeega* II (for example, the Youth Policy, Building Code, Sports Policy, and the review of laws governing the distribution of land and custodial rights of women) also have important impacts on health. Achieving empowerment in health thus will require cooperation among a range of governmental departments.

Four key policy objectives were spelled out in *Te Kakeega* II (Table 4.3) regarding health in the context of social development. *Te Kakeega* II listed the strategies that the Department of Health (and the government as a whole) should take in order to achieve those key policy objectives (Table 4.4).

1	Provide a higher standard of healthcare nationwide
2	Promote health education and nutrition awareness for healthy lifestyles
3	Improve quality of curative services at PMH [Princess Margaret Hospital]
4	Enhance delivery of health services, especially primary health care

Table 4.3: Key Policy Objectives for the Department of Health

Source: Te Kakeega II

These lists of key policy objectives and priorities all aim to give Tuvaluans a higher standard of health. Who would argue against the importance of such a target? What could be better than trying to achieve a higher standard of health? However, in order for Tuvaluans to attain this 'higher standard of health', the government must have access to adequate resources, allocate them effectively, and collaborate with community people and NGOs in providing services.

The Department of Health has been directed to pay attention to the following four aspects of health in particular: management of health services, health education, equity of access to healthcare services and facilities, and regulations to protect consumers from the

sale of harmful products. However, as Table 4.4 shows, priority emphasis has been given to the operation and management of health services, especially the curative aspects of health. The specific objectives listed under the areas of health education, equity of access to health, and consumer protection were much less detailed. This suggests that these latter aspects were seen as secondary.

An interview with a Tuvaluan senior doctor first drew my attention to the prioritisation of curative services by the Department of Health. 'Why is that?' I asked. The doctor replied: 'Most of the health expenditures go to the curative and treatment services … because currently we are already having a big number of sick people, mainly with non-communicable diseases... but a shortage of doctors and nurses. This is a problem'. It seems possible that since NCDs were identified as posing a serious problem in Tuvalu, health providers felt a great obligation to use available resources to try to resolve this threat. The other three areas may have seemed less urgent in comparison.

Operation and Management of Health Services

- Procurement of adequate and timely supply of drugs and other essential items to the hospital and clinics
- Review the operation and cost-effectiveness of the overseas referral scheme
- The cost-effective and efficient operation of the hospital to provide adequate curative services
- Maintenance of Princess Margaret Hospital and outer island clinics, the latter especially for maternal and child health care
- Provide adequate primary health care services to all islands, especially for those most disadvantaged
- Staffing of clinics and providing health services to key national institutions e.g., TMTI [Tuvalu Maritime Training Institution] and Motufoua [Secondary School]
- Improve coordination and cooperation between Ministry of Health, *Falekaupule*, NGOs and civil society in the delivery of adequate health services to the public
- Review salaries and conditions of doctors and nurses to improve staff motivation and encourage more qualified staff to remain in Tuvalu
- Create a regulatory environment than enables private medical services to be offered to the public, including treatment, pharmacy supplies and other health related services
- Assess the cost effectiveness of the overseas medical treatment scheme compared to the reallocation of these resources to domestic capacity building

Health Education
• Strengthen health education and awareness programmes to promote healthy lifestyles and better nutrition, and to address the threats of HIV/AIDS and NCDs
Equity of Access
• Provide healthcare services to the elderly, disabled and otherwise disadvantaged
• Ensure that people throughout the country have equal access to basic health care services
Consumer Protection
• Introduce regulations to protect consumers from the sale of sub-standard, or date-expired products

Table 4.4: Health Priorities and Strategies 2005–2015.

Source: *Te Kakeega* **II**

The Department of Health does also recognise health education as one of its key policy objectives. Promoting awareness of nutrition for healthy lifestyles is seen as important because of the high incidence of non-communicable diseases such as diabetes and hypertension in Tuvalu. In the Department of Health's records (accessed in February, 2014), there were 430 people on the hypertension and diabetes register for Funafuti Island, nearly all between the ages of 40 and 80. The delegates at the national summit for sustainable development (*Te Kakeega* II) also recognised the contribution that health education could make to NCDs, cardiovascular diseases, and HIV and STIs spreading in Tuvalu. Strengthening health education and awareness programmes was also included as a primary strategy in the National Strategic Health Plan 2009–2019, as will be discussed below.

However, it is important to bear in mind that health education cannot be effective without health promotion. Health promotion, including community mobilisation and enablement, legislation, and taxation, supports the ability of individuals and communities to use knowledge provided through health education and other sources to behave healthily. For example, Cussen and McCool (2011) studied tobacco use by young people in Kiribati where youth smoking rates are very high. They argued that along with health education and other measures, legislation restricting tobacco advertising would be required to curb youth smoking. Their conclusion has been replicated in many international studies and is a robust finding. The Government of Tuvalu thus would be well-advised to prioritise health promotion, rather than simply health education, in both its policy initiatives and practices.

Strategic Health Plan 2009 - 2019

The Tuvalu Strategic Health Plan 2009–2019 has four principal objectives:

1. Ensure legislative and budgetary support for efficient and effective health services for the people of Tuvalu;

2. Provide high-quality and cost-effective management of health services;

3. Improve the quality and cost-effectiveness of secondary health services;

4. Ensure equitable access to appropriate sustainable and quality primary, curative, and preventive health services.

The above objectives of the Strategic Health Plan focus on providing the resources and administrative structure needed to achieve the policy objectives prioritised in *Te Kakeega* II. As Table 4.5 shows, the Department of Health's overall goal is to create the infrastructure that will ensure that all Tuvaluans achieve the highest attainable standard of health.

OUTCOMES	STRATEGIES	PERFORMANCE INDICATORS
1. Ensure legislative and budgetary support for efficient and effective health services for the people of Tuvalu		
Budget Institution 1: Headquarters		
Legislation to support MoH [Ministry of Health] policies to ensure all Tuvaluans achieve the highest attainable standard of health.	Provide policy advice to the GoT [Government of Tuvalu] to ensure health legislation which assists the MoH to meet the health needs of the people of Tuvalu in an equitable and sustainable way, and to ensure that legislation from other Ministries takes into account the impact on health. Task group representing all MoH key functions to prepare draft policies for wider consultation and endorsement by the GoT.	MoH policies in place to guide decision-making

Table 4.5: Strategic Health Plan 2009 – 2019

Source: Strategic Health Plan 2009–2019, Ministry of Health, Tuvalu.

The Ministry of Health thus sees itself as having a dual role. One of these roles is to guide decision-making within the Ministry of Health by providing expert advice about legislation and policy development, particularly regarding aspects of health that are culturally sensitive. Teaching about reproduction or HIV/AIDS and STIs, for example, in primary schools has proven to be a sensitive area that requires legislative support. For example, during my fieldwork I learned that some parents had protested to stop sex-related topics being taught to their children. This example shows that government policies and legislation not only impact people's health but may also affect the ability of health professionals to carry out their health activities.

Secondly, the Department of Health recognises the need to collaborate effectively with other government entities to 'ensure that legislation from other Ministries takes into account the impact on health' (Strategic Health Plan). Health initiatives and legislation must be integrated with other sectors' policies because these policies also influence people's environment, choices, and behaviour (Dahlgren & Whitehead, 1991; Milio, 1981). In Tuvalu, several recent initiatives undertaken by other Ministries overlap with those of the Ministry of Health, making cooperation essential to avoid contradictions and duplications of effort. Below are some examples of policies with important health connections that were initiated by ministries other than Health in Tuvalu:

- Finance and Economic Development: National Population Policy
- Foreign Affairs, Trade, Tourism, Environment and Labour: Climate Change Policy (*Te Kaniva*); National Energy Policy
- Public Utilities: Building Code; Sustainable and Integrated Water and Sanitation Policy
- Education, Youth and Sports: National Sports Policy; National Youth Policy

All these policies support the vision of the Ministry of Health to 'ensure the highest attainable standard of health for all people of Tuvalu'. Like health sector initiatives, these policies were also formulated in coordination with the National Strategy for Sustainable Development Framework (*Te Kakeega* II).

Because health is such a broad and complex endeavour, such overlaps in policy development are inevitable. Fortunately, they also provide opportunities for Ministries to work together to maximise the effectiveness of their programmes. But for these policies to have optimal effects on the health of people in Tuvalu, the challenges of implementation

need to be honestly and openly discussed both within government and with communities. This will allow potential gaps to be identified and effectively addressed. For example, the enhancement of traditional health knowledge and practices is absent from both *Te Kakeega* II and the Strategic Health Plan. Those documents focus on health services, facilities, curative and preventive measures, and staffing, but no key policy objective specifically includes traditional health knowledge and practices. This suggests that at the official level, the Department of Health is not yet ready to integrate traditional health knowledge and practices into its health policies.

However, in everyday practice patients with sprained ankles, dislocated joints, and similar sorts of injuries are regularly sent by nurses to traditional healers. This collaboration is most common in the outer islands and I encountered many examples of it during my research on Vaitupu. Some of this informal referral occurs because adequate biomedical equipment, facilities, and specialised medical personnel are not available in Princess Margaret Hospital on Funafuti, much less in the outer islands' clinics. However, traditional health therapies remain important and people often turn to them as initial treatments or use them as a complementary sources of healing.

Te Kakeega II and the Strategic Health Plan (2009–19) are both focussed on enhancing the health of the people of Tuvalu. Although their emphasis is primarily on curative services within a biomedical framework, reference is also made to preventative health education and occasionally health promotion. The next section examines the national arrangements through which these government objectives and strategies are translated into action.

4.3 Services: Practices of the Government

The above summary of existing health services and programmes provides a basis for my analysis of the methods that the Department of Health uses to put its strategic plan into practice, and of which health promises are achieved and which ones are not. I begin with an overview of the Tuvalu Ministry of Health's organisational structure and workforce. This is important as it determines the health services and programmes that are available to hospitals, clinics, schools, and communities.

Figure 4.2 shows the basic structure of the Tuvalu Ministry of Health and the three main units through which its services are delivered. This structure is quite simple and straightforward. Tuvalu is a small Pacific island nation and its population, economy, and

workforce are all much smaller than even bigger island nations such as Fiji, not to mention larger countries. The organisational structure of the Ministry of Health involves three main categories: curative services, administration, and primary and preventive services.

Figure 4.3 provides more detail about the specific positions within each organisational category. The Director of Health plays a key role in conveying information upwards to officials in the Ministry of Health as well as acting as a director for all the people 'working for health'. These range from highly-trained medical staff (doctors, nurses, dentist, pharmacist, radiologist, health promotion officers, and so on) to workers in areas like the laundry, kitchen, and transport.
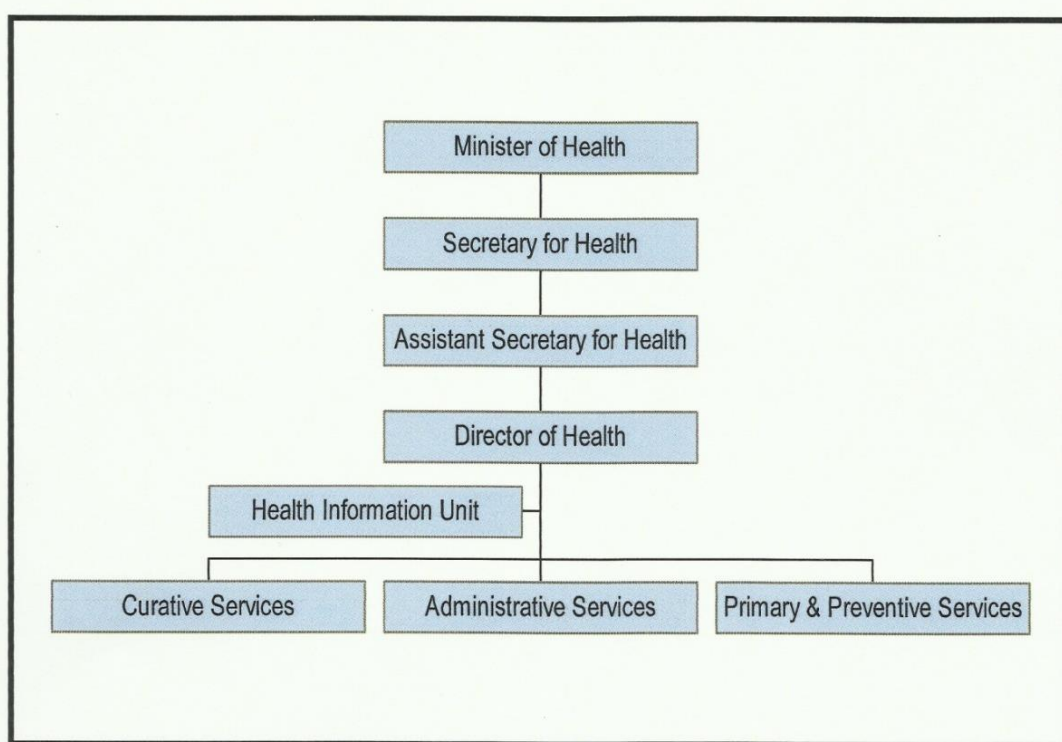
Figure 4.2: Structure of the Tuvalu Ministry of Health.

Source: WHO, 2011, p.442.

The Ministry of Health understands the importance of using human resources effectively in order to achieve its goal of promoting health in Tuvalu. Its concern around adequate staffing and a quality workforce is strongly emphasised in *Te Kakeega* II and the Strategic Health Plan. For example, the aim to train and obtain sufficient staff to meet the health needs of Tuvaluans is clearly emphasised on pages 7 and 8 of the Strategic Health Plan. Hence, the following section will describe and analyse the health services and initiatives that are provided by staff of the Ministry of Health, all of which are absolutely

dependent upon adequacy of staffing.
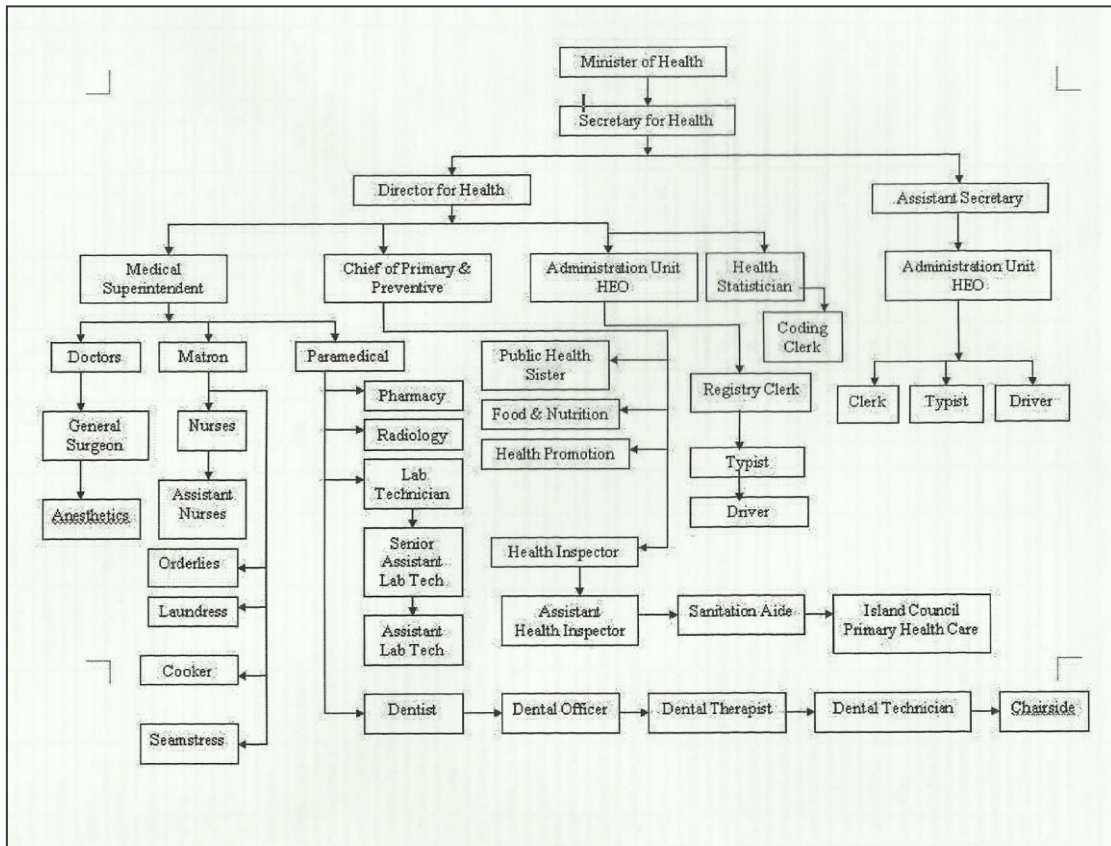
Figure 4.3: Organisation within the Ministry of Health.

Source: WHO, 2009, p. 441.

4.3.1. The Princess Margaret Hospital (PMH)

The PMH is the only hospital in Tuvalu and is located in Funafuti, the capital (Figure 4.4.). The PMH provides the core of medical health services and serves as the centre of the Department of Health in Tuvalu. It is located close to the small town centre but is about 15 minutes' walk, or a few minutes on motor scooter, from the Ministry of Health offices in the government building near the airport.

Figure 4.4: The Princess Margaret Hospital, Funafuti Island.

Most people regard the PMH and the outer islands' health centres as the primary location for care and treatment of biological sicknesses. The hospital in Funafuti also provides administrative services, primary care, and preventive services. As one interviewee explained:

> *A te fakaimasaki ko te koga e maua ne koe a se taumafaiiga ke toe faka`lei a tou masaki. Kafai au e `mae toku nifo, au e fano ki te fakaimasaki ke unu toku nifo, ko gata i ei a te `mae. Kaati e isi ne tino e olo ki te fakaimasaki o fesilisili ki tookitaa ki mea tau selameta io me ne information about oral health ne? Au e talitonu e tokouke a tino… au se tokotasi o tino [kata], telaa e fano fua ki te fakaimasaki o seek treatment ki toku masaki io me se pakiaaga ne? Tela se mea taaua ke iloa ne tino me i te fakaimasaki tenaa e pou-tuu mai se koga telaa e mafai o maua mai i ei a fautuaga ki te ola lei, kae see naa fua ko te curative ne?*

The hospital is the place where you can get an attempt to heal your sickness. If I have a toothache, I go to the hospital to pull out my tooth and then the pain will stop. There might have been people who go to the hospital and ask the doctors

about HIV/AIDS-related matters or for information about oral health, aye? I do believe there are many people… I am one of those people, [*laughs*] who just goes to the hospital to seek treatment for my sickness or wound, aye? Therefore, it is valuable to let people know that the hospital that is sitting there is a place where they can get advice about good health, not just a place for curative purposes only. (Community youth, male, Funafuti Island)

To take this example a little further, it is also rare for people to approach the dental services for regular checkups and preventive care. Rather, they wait till a toothache propels them along.

Curative services operate under the immediate umbrella of the medical superintendent. As general practitioners, the doctors in Tuvalu can examine and diagnose a patient, with help from the laboratory and radiology section. If there is an available anaesthetist, general surgeon, and relevant facilities and pharmaceuticals, some general surgery is done in the PMH. However, there are many heath conditions that cannot be treated at PMH due to the lack of facilities, medicine, and specialist expertise; hence, those patients must be transferred elsewhere for care. If referred patients cannot be treated in Fiji, which is the first choice, they will be referred further to New Zealand or India if they meet the criteria. This service is funded by the NZAID medical scheme and Tuvaluan medical funds (see below).

A dental department also operates within the PMH, offering such oral health services as tooth filling, extraction, cleaning, and making dentures. In 2009, within the PMH compound, the Reproductive Health Clinic was renovated to provide space for associated services and programmes including reproductive health, maternal and child health, HIV and STI, and adolescent health development. A small isolation ward is used for the infectious phase of some diseases such as TB (*maama pala*). Primary health care includes some primary and secondary prevention services as well. For example, well baby clinics are primary prevention, while regular checkups for diabetes to stop the disease progressing are examples of secondary prevention.

I asked health staff about the extent of their satisfaction with the services they provided. Several medical doctors and nurses expressed understandable concern about the economic, political, and technological challenges that prevent them from providing higher standards of curative services to community people. However, it is clear that the Department of Health (through the PMH and outer islands' health centres) tries its best to

provide good medical treatment and primary care to Tuvaluans in accord with the vision and priorities specified in *Te Kakeega* II and the Strategic Health Plan.

4.3.2 Health Centres and the Situation on the Outer Islands

Each island except Funafuti has a small hospital, officially known as a health centre, with one or two nurses, an assistant nurse, and a sanitation officer (Figure 4.5). There, nurses provide medical examinations, prescribe medicines, offer minor dentistry, deliver babies, dress and stitch wounds, perform minor operations such as boys' circumcisions, and other similar services. More complicated cases are transferred to the central hospital on Funafuti. The outer islands' nurses, together with the sanitation officer (who sometimes acts as a community health inspector), are also responsible for checking on the cleanliness and hygiene of the villages. Occasionally, nurses and sanitation officers run health workshops in the community to promote family planning, cleanliness and hygiene, AIDS awareness, and other programmes. These outer island staff are supervised from the main health headquarters at PMH in Funafuti. They obviously play a key role in the Department of Health's outreach efforts.

Figure 4.5: Vaitupu Island Medical Centre.

In late 2000 the Tuvalu government, under the Government of Japan's grant grassroots human security projects, built and upgraded the medical centres on all outer islands. The upgrading of these outer islands' health centres greatly improved local health infrastructure, while at the same time demonstrating the importance placed by government on health care. The upgrading of the outer islands health centres, which included new equipment such as beds, enabled the nurses to provide a higher quality of care and new health services for their communities. These improvements make it more possible for community people to be *malosi*, better protected from illnesses, and thus able to live longer and more satisfying lives. Clearly, the upgrading of the health centres supports and enhances *ola lei*.

4.3.3 Referral Scheme (Tuvalu Medical Treatment Scheme)

The purpose of the Tuvalu Medical Treatment Scheme (TMTS) is to allow:

Tuvalu citizens living in Tuvalu to gain access to hospitals and other medical institutions in Fiji and other countries which are affordable and provide better medical services and treatments that are not available in the Princess Margaret Hospital (PMH), Funafuti; and, Tuvalu citizens living on the outer islands to gain access to better medical services available at the PMH and visiting medical terms from overseas. The cost of such investigations and (or) treatments shall be met under the Scheme. (Tuvalu Ministry of Health, 2011, p.5)

TMTS reflects the fact that PMH, and especially outer island medical centres, can only provide limited medical services for community people. TMTS is an important scheme for patients with illnesses that cannot be treated in Tuvalu. It is a life-saving scheme, and it proves that the government of Tuvalu does not just abandon those patients who cannot be treated in the PMH, leaving them to get worse or die, but instead provides *alofa* and compassion for them. I have personally experienced the benefit of TMTS. In 2008 on Vaitupu, I badly ruptured my Achilles tendon. As neither Vaitupu's health clinic nor the PMH had the facilities, orthopaedic surgeons, and other specialists required to repair this injury, I was referred under the TMTS to Suva, Fiji for treatment. From this experience as well as from what I learned from research participants, I realised that without such a scheme, people would just have to live with untended injuries for the rest of their lives. It would be impossible for most Tuvaluans to pay the cost of such operations or

treatment themselves. Hence, TMTS eases the burden on patients and their families, contributing both to their physical health and life satisfaction.

Unfortunately, this referral scheme comes to a halt when it runs out of funds. When budgeted funds are exhausted, patients who need to go overseas for treatment have to wait until the Department of Health secures a supplementary budget. The TMTS policy clearly specifies this: 'A patient shall only be referred for treatment at the PMH or to hospital or medical institutions overseas if funds under the scheme are available'. This clause is scary to patients because the smooth success of the TMTS largely depends on the availability of funds. Periodic lack of funds, coupled with limited flights between Tuvalu and Fiji[23], create some serious problems for the operation of TMTS. In 2008, for example, the TMTS budget totalled $2 million, which was equivalent to the rest of the whole health budget. This means that a patient with an urgent problem, during a period in which the funds for TMTS are exhausted, will have no choice but to patiently wait for funds and the airplane to arrive. This kind of situation places enormous pressure on the Department of Health, especially on the top officials who must make difficult decisions, and causes great worry for patients and their relatives. The huge logistical challenges also involved in medical evacuation are shown in Figures 4.5 and 4.6.

Figure 4.6: A TMTS-referred patient was transported from PMH to the plane at Funafuti Airport. By 2014, the ambulance had broken.

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[23] There are only two flights to Funafuti Island, the capital and the only placed served by air connection in Tuvalu, per week. Sometimes the plane is fully booked, and patients must be put on a waiting list. Patients often cannot sit upright and thus require more space than a single seat, making it even more difficult to fit them into a full plane. A patient's caretaker must be accommodated as well.

Figure 4.7: Loading a non-ambulatory patient into the plane is very difficult. After lifting this patient out of the ambulance, he then had to be handed up to the men standing on the roof of the black car before he could be passed on up to the other men waiting at the plane door.

Photographer: Julie Park, 2008.

Managing the TMTS scheme also involves difficult decisions about the best use of scarce resources. As one interviewee who had been referred to Fiji under the TMTS argued:

> People who cannot be treated here in Tuvalu must be referred overseas for treatment… what can we do? Leave them here to die? No. We have to refer them somewhere that he or she can be treated. That's the duty of the government because its hospital [PMH] can't treat all those complicated illnesses and injuries… (Government worker, male, 40 + years old, Funafuti Island)

I have also heard some community people and governmental officials talk about how TMTS wastes a lot of money, though these are mostly people who have not benefitted from or needed the TMTS. Yet PMH simply cannot treat all illnesses and accidents, and the Government of Tuvalu has accepted the duty to care for its citizens. Many Tuvaluans support the scheme's necessity as making an essential contribution to the lives and *ola lei* of Tuvaluans.

The TMTS is a particular life-saver for patients with illnesses such as renal failure or heart disease, or those who suffer serious accidents. Depending on the specified terms of agreement with the governments of Fiji, New Zealand, and India, these patients will be referred to more advanced hospitals in much the same way that New Zealand children and adults from all around the country are transferred to Starship Children's Hospital or Auckland City Hospital for specialist care. The TMTS has saved, and will continue to save, many Tuvaluan lives and has helped many people (including myself) to live longer, happier, and less-impaired lives. The TMTS thus facilitates *ola lei* for both individuals and their communities.

While the referral scheme is necessary and valuable, it is also very expensive. This is a problem shared by many developing countries, but when the cost of the scheme is equivalent to an entire health budget – as in the case of Tuvalu – then it is a major issue. The tension between spending health dollars on transport and costly overseas treatment versus spending them locally on primary care and prevention is very real, especially when funds are so limited. However, both components of the health care system are essential given the facilities available in Tuvalu. This makes the effectiveness of preventative approaches especially important to health in Tuvalu.

4.3.4 Health Education and Awareness Programmes

Currently, the Department of Health is trying to increase its emphasis on a preventative approach rather than only relying on a curative approach (Government of Tuvalu, 2011a). Both *Te Kakeega* II and the Strategic Health Plan show the Department of Health's clear commitment to promoting and strengthening health education and awareness programmes. These include initiatives to promote healthy lifestyles and better nutrition, combat HIV/AIDS, prevent non-communicable and communicable diseases, strengthen oral health services, and promote environmental health. However, many of the community people and school students I spoke with complained about a lack of health awareness programmes. This is incongruous with the fact that the government has formally acknowledged the importance of health education and awareness programmes. Nonetheless, community people see existing health programmes as insufficient.

According to officials in the Department of Health, it is hard for less-developed countries such as Tuvalu, given their financial and human resource constraints, to boost

their preventative approach. The senior officials I interviewed from the Department of Health admitted that while they want to provide health awareness programmes and workshops in communities, they do not have adequate money, time, staff, and expertise to do so. This is where they need assistance in the form of professional expertise and technological support from external donors. As I will describe below, agencies such as WHO already assist Tuvalu to provide its health education and workshops.

On the other hand, providing effective health education in communities can be challenging, since local people themselves must value the advice they receive and be willing to try to put it into practice. Some Tuvaluans do not always fully acquiesce to western biomedical practices, and thus they may refuse to modify their diets or take prescribed pills. In order to convince people in communities to understand and practise a healthy lifestyle, education is important. However, it must be education in a form that local people can actually learn from and accept. People must both desire to live more healthily and feel enabled to do so. This takes us back to the fact that health education is ineffective without community health promotion.

Learning how to live well and act responsibly to prevent diseases is definitely connected with *ola lei*. Health in biomedical terms and *ola lei* in a Tuvaluan context both require awareness programmes in order for people in communities and schools to learn relevant information and values and how to put them into practice in daily life. Workshops on *ola lei* require knowledgeable community people to act as leaders, but *ola lei* is also learned through role modelling, imitation, and practice. In these gradual and informal ways, it becomes embodied knowledge: the common-sense, practical, intuitive understanding on which daily choices and decisions are based.

Biomedical health education requires the expertise of medical staff and health promotion professionals to develop and implement health workshops in communities. Thus, the agreement between the governments of Tuvalu and Cuba to train Tuvaluan students as doctors in Cuba has the potential to significantly improve the organisation and delivery of local health education and health promotion programmes, provided that these graduates are employed in Tuvalu when they have graduated.

4.3.5 Training of Medical Doctors in Cuba and Other Countries

The Cuban Medical Programme, which began in 2008, was an effort to remedy the shortage of health professionals in Tuvalu. Currently, 19 students are in Cuba pursuing

medical qualifications to become medical doctors and other community-based health professionals. Two groups of students received pre-service scholarships for this programme in 2009 and 2010 respectively. This six-year initiative is co-funded by Cuba and Tuvalu.

Two Tuvaluan students are also currently pursuing their medical qualifications in Taiwan. These are the first and only students to study medicine under Taiwan (Republic of China) sponsorship. Three more students are currently studying medicine in Fiji as well. Most current Tuvaluan doctors also gained their first degrees for medicine at the Fiji School of Medicine, now part of the National University of Fiji.

In total, Tuvalu has about 24 medical students who will be graduating in the next two to six years. This will solve the problem of a shortage of medical doctors, especially in the outer islands' health centres, although their salaries will place a significant strain on the Tuvaluan government budget. Staffing outer island clinics is one of the Department of Health's aims (see *Te Kakeega* II and the Health Strategic Plan), so providing these students with scholarships to pursue medicine is an effective way to address the local shortage of doctors. As one research participant exclaimed, 'I just can't wait for the time that all these birds [new doctors] come to Tuvalu... Ooh, definitely there will be an improvement in health services and health programmes!'

This is a hopeful scenario, but it assumes that these students will return to work in Tuvalu after they graduate. Research has warned us that there is often a tendency for such graduates to emigrate overseas due to low salaries, overburdened workloads, and political tensions in their home countries (see Brown & Connell, 2004; Henderson & Tulloch, 2008)[24]. The possibility that these graduates-to-be may also migrate overseas to work is also being addressed in the *Te Kakeega* II and Strategic Health Plan through a call to review and improve the salaries and working conditions of doctors and nurses in the hope of encouraging more local health staff to remain in Tuvalu. The Department of Health recognises that the low salaries and difficult working conditions in Tuvalu encourage medical professionals to leave for other countries such as New Zealand. Of course, the shortage of medical doctors will not be completely solved by sending young Tuvaluans to medical schools, since aspects such as salaries, working conditions, housing, continuing medical education, and efficient medical administration must also be considered. However,

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[24] Unfortunately, the Pacific Access Category (PAC) scheme increasingly seems to be contributing to the brain drain in Tuvalu. Requirements to participate are only easily met by people with specialized skills and/or significant financial resources

without these new graduates it would be impossible to expand primary and secondary services, let alone provide the health promotion initiatives needed to confront the rising tide of diabetes.

4.3.6 Fighting Against Diabetes

The high prevalence of diabetes and other NCDs is a community issue (see Chapter 5) as well as a serious concern for the Department of Health. As the Director of Health explained to me,

> Fighting against diabetes in Tuvalu is a big programme. Under the NCD programme, we [Department of Health] have put a lot of emphasis in diabetes alone. We partner up with Diabetes Australia, and with the AusAID's assistance, we develop the National Diabetes Programme. Now there is a health officer who mainly deals with this diabetes programme. We also have firmly established the Tuvalu Diabetes Association, which is trying to link up with Diabetes Australia and to the International Diabetes Association… (Director of Health, 2013)

Establishing the Tuvalu Diabetes Association (TDA) is a recent and useful first step towards contending with the high and increasing prevalence of diabetes in Tuvalu. TDA aims to give support and advice to diabetic patients, in order to empower them to live healthily. By linking up the TDA to Diabetes Australia and the International Diabetes Association, the Department of Health hopes to benefit from new ideas and strategies as well as to access new sources of funding.

One of the benefits of this networking, for example, was the fact that through consultation between the Tuvalu Diabetes Association and Diabetes Australia, the Tuvalu Department of Health redesigned the secondary prevention programme for diabetes to include an Insulin Therapy Programme (ITP). The ITP is intended to complement other treatments. While it does not prevent diabetes or reduce its prevalence, it can reduce complications from the disease. As I was told,

> This secondary prevention (ITP) initiative was found to be an effective way to fight against the prevalence of diabetes, because the injected insulin is the direct chemical that a diabetic patient needs…. I have seen the positive relationship between the ITP and the number of amputations we did now. In the past, I used to cut a lot of legs [of diabetic patients]; but now I am not doing much leg

amputation…. This is an indication of the effectiveness of this Insulin Therapy Programme initiative. (Director of Health, 2013)

While more diabetic patients are now using ITP, some are scared to inject themselves. The Department of Health thus encourages these patients to come to the hospital so that nurses can do the injecting for them. Other successful secondary prevention programmes include regular clinics for patients with diabetes and/or hypertension, which provide both monitoring and access to medication.

The Department of Health also does preventive primary programmes, including community workshops and radio media outreach. For example, it broadcasts a weekly radio programme whose topics range from the prevention of sickness during drought to information about various diseases, including diabetes. Several diabetic patients have been interviewed in order to highlight the first-hand experiences and emotions of a diabetic patient in these radio broadcasts. The emotions and regretful feelings they expressed were so genuine that any listener would understand the pain and danger they experienced. Initiatives such as these support *ola lei* because they may help community members avoid becoming diabetic or manage their illness. Recovery from and minimisation of the effects of an illness, also a feature of *ola lei,* lead to increased physical fitness, which is also a key aspect of *ola lei*. If amputations, loss of eyesight, and renal failure can be avoided, *ola lei* is also enhanced.

Health outreach efforts such as these show the Department of Health's commitment to dealing with the increasing health threat of diabetes. However, as I have already noted, the uncritical use of materials which have not been specifically developed for Tuvalu can lead to some misunderstandings. One example is public health messages that warn categorically against 'eating coconut' without distinguishing among the various coconut products, not all of which are equally problematic.

4.4. The Non-Governmental Organisations (NGOs)

As noted several times above, the government of Tuvalu receives help from various outside agencies in its efforts to safeguard the nation's health. The following sections provide some examples of the assistance these groups offer.

4.4.1. Tuvalu Association of Non-Governmental Organisations (TANGO) and its Members

The Tuvalu Association of Non-Governmental Organisations (TANGO) is the umbrella body for NGOs. In her paper describing the structure of the NGO sector in Tuvalu, Tappin (2000) found that in 2000, 21 member NGOs were registered with TANGO and that this number had increased to 34 in 2003. By 2013, TANGO had 48 registered members. This continued increase in the number of NGOs working in Tuvalu likely parallels their increase worldwide and the increasing tendency to rely on the resources they provide. The increase in the number of groups now under TANGO's umbrella also probably results from the helpful coordinating role that TANGO has been able to offer. In any case, increasing numbers of NGOs probably also results in greater access to the benefits that NGOs can bring to people's lives, as well as to increased support for *ola lei*. The Department of Health is appreciative of the materials, money, and advice or plans provided by these NGOs.

The main function of TANGO is clearly stated in its vision:

> Our vision for TANGO is of an efficient and effective organisation working for the betterment of the NGO's to deliver activities to promote human development and raise awareness of human, social and economic issues facing the people of Tuvalu. TANGO strives for cooperative effort amongst its members and a collaborative relationship with government[25].

TANGO helps its member NGOs to achieve their missions by providing relevant training and information. In relation to health, TANGO has supported and organised a number of health-related projects on its own behalf. For example, in late 2013, two projects managed by TANGO were very much related to health: the Child Centred & Climate Change Adaptation programme, and the Tuvalu Water, Waste, and Sanitation (TWWS) programme. These projects were funded by Plan[26] (an Australian organisation) and the EU, respectively. The Child Centred & Climate Change Adaptation Project organised and carried out activities that built awareness among Tuvaluan children about climate change and how to adapt to these changes. For example, in 2013, TANGO, through the Child Centred &

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[25] Vision of TANGO was given by a member through e-mail; but see also the Pacific Islands Association of Non-Governmental Organizations (PIANGO) website http://www.piango.org/PIANGO/NLU/NLUs/tuvalu.html for TANGO's mission and vision.
[26] Plan in Australia is part of Plan International – a children's development organisation that helps to fund child centred community development or projects.

Climate Change Adaptation project, organised a forum where youth were invited to learn about the signs and effects of climate change, and also how to plant crops and vegetables during droughts. Both these projects directly support the conceptual framework of *ola lei,* and the practices related to *toka* and cleanliness in particular.

Though the name TANGO seems widely inclusive, and its mission is broad, it has only six staff itself. It continually faces challenges in funding both these salaries and its own projects, raising questions regarding its capacity given the high expectations placed on it.

4.4.2. Tuvalu Family Health Association (TuFHA)

As the TuFA officer explained to me,

> TuFHA is the leading NGO that deals with sexual reproductive health (SRH) in Tuvalu. This is because that is its specialised area. Everything from AIDS, STIs, family planning, reproduction, and other sex-related health issues, TuFHA is the champion in those areas. TuFHA focusses on the awareness side of things, mainly about sexual reproductive health. It also has a clinic that people can come to do testing for sexually transmitted infections and for treatments as well. (TuFHA officer, 2011)

Historically, TuFHA was known as the Tuvalu Family Planning Association. In 1989 the name was changed to Tuvalu Family Health Association. In Tuvalu, TuFHA is well-known for its advocacy around family planning and sexual and reproductive health. Not only does it provide awareness programmes but TuFHA also has a clinic open to everyone that provides tests for sexually transmitted infections as well as counselling and treatment. Most of the clients who visit the TuFHA's clinic are young people, as one of TuFHA's targeted age groups is adolescents, the group most likely to become sexually active in the near future. The clinic is staffed by a qualified nurse and directed by a doctor.

As explained above by the officer, TuFHA is primarily focussed on two main areas: Family Planning and Sexual and Reproductive Health (SRH). Its official mission is:

> To improve family health in Tuvalu through the provision of quality information and services, advocacy for quality sexual and reproductive health services and recognition of sexual and reproductive health issues as a human right issue.
> (TuFHA, 2009)

Though its mission is clear, the inclusion of 'Family Health Association' within the name of this NGO does not fully represent its function, since it mainly deals with family planning and SRH rather than broader aspects of 'family health' such as hygiene, family violence, and other family health issues. As a TuFHA officer told me, the organisation recognises this disjuncture:

> TuFHA is now trying to move slowly to other aspects of family life. There were couples who were not able to have a child or more children due to non-communicable diseases implications… you know, for example, obesity can affect the fertility of women, aye? So, what we are trying to do now is to help those women by organising physical activities that may assist obese women to lose weight and therefore likely to get pregnant. We have such projects, funded by SPC. (TuFHA officer, 2011)

Thus TuFHA has started to include other aspects of family health such as fitness and weight loss in its programmes. Since being physically fit is a key quality of *ola lei*, it is good to see NGOs such as TuFHA initiating such projects. Moreover, TuFHA is directly addressing the relationship between obesity and fertility. It provides a positive programme focussed on obesity for interested parents, mainly women, in order to improve fertility and their health in general. TuFHA's offices are located next to TANGO's, across the airstrip from the government buildings. The TuFHA building also houses a recreation centre and there are plans to set up a gym. This lessens embarrassment about going across the airstrip to visit TuFHA, a very visible thing to do, which is exactly the outcome TuFHA hoped for.

However, TuFHA's logo raises some issues of inclusion. As Figure 4.8 shows, the logo depicts a mother (woman) and children (son and daughter) embraced by olive leaves.

Figure 4.8: TuFHA's logo
Source: TuFHA Strategic Plan 2009-2014.

The olive leaves[27] signify a peaceful family or peacefulness. Of course, peacefulness is a key aspect of *ola lei* in Tuvalu. However, the image of a mother and children is not a true picture of a complete family in Tuvalu. The absence of a father, let alone other members of the extended family, means that the logo does not accurately depict the typical family structure. The emblem unintentionally signals that TuFHA is only meant for women and children even though TuFHA's mission is about the whole family, not just about individuals within it (see TuFHA, 2009).

TuFHA collaborates with other NGOs whenever its expertise in family planning and SRH is needed. In 2010, for example, on World AIDS Day, TuFHA partnered with TANGO and Red Cross to provide a one-day programme about AIDS. As one TuFHA participant stated: 'Any opportunity to collaborate with other NGOs, we take it!' Moreover, TuFHA and the Department of Health also work together whenever necessary. For example, the TuFHA clinic can do STI tests but the blood samples have to be taken to PMH. The results of those tests are returned to the TuFHA clinic and people can go there to get their results. If the results are positive, the TuFHA clinical nurse will counsel and treat the patient. If the TuFHA clinic does not have the necessary medicines, it can obtain them from the PMH. This process protects patients from embarrassment. It is clear that TuFHA contributes to the health of community people by providing services and programmes in partnership with the Department of Health. Their work is wholeheartedly appreciated, as these services really support the goals and vision of the Department of Health.

Last but not least, TuFHA's affiliation with the International Planned Parenthood Federation (IPPF) is a worthwhile issue to be discussed. The IPPF inevitably influences TuFHA's mission, values, and strategic plan to some extent. For example, one of TuFHA's stated aims is 'to provide family planning services that are consistent with the IPPF international medical advisory panel statement and IPPF service delivery'. This is a classic example of a donor dominating the recipient organisation's objectives. IPPF is the main funder of TuFHA, and an analysis of TuFHA's Strategic Plan 2009–2014 (TuFHA, 2009) shows that TuFHA is using the IPPF 'Five A's' as its own strategy platform: Adolescents, AIDS, Access, Advocacy and Abortion. The TuFHA officer confirmed that the grants from IPPF are expected to be used alongside or within the IPPF 'Five A' areas. While TuFHA

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[27] The TuFHA officer who described the TuFHA's logo identified the leaves as olive leaves.

contributes in important ways to the health of Tuvaluans, I also hope that its own autonomy regarding strategy can be protected as well.

It is important to note that external organisations often come with well-developed plans, which are easy and convenient for Tuvalu to adopt. Without those ready-made plans, Tuvaluans might have arrived at something a little different and perhaps more closely aligned with Tuvaluan values. Maintaining and growing partnerships may lead, over time, to more discussion and equal partnerships in creating policies.

4.4.3. Tuvalu Red Cross Society (TRCS)

The Tuvalu Red Cross Society (TRCS) is another non-governmental organisation that has close ties with an international group, the International Red Cross, which provides funding assistance and networking resources. Its work of providing relief and assistance in times of any sort of emergency makes a contribution that is deeply appreciated by health officials and community members alike. Section 6 of the Tuvalu Red Cross Society Ordinance 1981, clearly defines the status of Tuvalu Red Cross Society as a 'voluntary aid society auxiliary to the public authorities'. Thus, in accord with the structure adopted by the General Assembly of the United Nations in November, 1946, Tuvalu Red Cross Society is an independent and voluntary organisation.

Tuvalu Red Cross Society is perhaps the most well-known non-governmental organisation in Tuvalu. This is because of its long history of frequent and direct involvement with communities and schools.

> I think the Red Cross is an organisation that we see every time, and it is very popular because of its direct involvement in our communities, aye? I mean, look at major events such as Tuvalu Games… the Red Cross people are there to help athletes. Now, in this drought, we also see Red Cross volunteers putting up awareness banners… and they have this enlisting programme for primary school students to join the Junior Red Cross group… (Primary school teacher, Funafuti Island)

The direct involvement of Red Cross in communities and schools makes it popular and respected by community people and students. For example, during the 2011 drought, volunteers in Red Cross tops were often seen about the islands assisting where necessary. Figures 4.9, 4.10, and 4.11 show several examples of how the Red Cross engages local volunteers to help communities respond to emergencies.

Figure 4.9: TRCS volunteers putting up banners on Funafuti to promote community awareness about ways to preserve health during the 2011 drought.
Source: Courtesy of TRCS.

Figure 4.10: TRCS volunteers on Nukulaelae Island help distribute water during the 2011 drought.
Source: Courtesy of TRSC.

Figure 4.11: On Niutao, a TRCS volunteer demonstrates CPR to outer island community people. Source: Courtesy of TRSC

Red Cross assistance spans a wide spectrum, as these examples illustrate. During my 2011 fieldwork, I saw TRCS volunteers demonstrating to primary school students first aid instructions for cardiopulmonary resuscitation (Figure 4.11). At the Tuvalu Games on Funafuti Island, and on sports days at primary and secondary schools on outer islands, TRCS volunteers are present in case there are accidents. During a typhoid outbreak at Motufoua Secondary School in late 1990s, TRCS volunteers assisted the school nurse to look after the sick students and also ensured that students took their pills at night. This type of direct activity with communities makes TRCS well-known in Tuvalu. Indeed, these activities illustrate an effective sharing of responsibility by TRCS and the Department of Health to provide health services and programmes.

There are no armed conflicts that may put TRCS's volunteers or community members' lives in danger, so the TRCS focusses instead on providing disaster relief and on preventing potential future emergencies. The danger that climate change poses to Tuvaluans has been well-documented (for example see Fisher, 2011; Mortreux & Barnett, 2009; Farbotko & Lazrus, 2012). In response, TRCS carried out a community-based survey and participatory research in 2010 in the Tekavatoetoe[28] community on Funafuti Island to identify the environmental and health issues caused by man-made and natural

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[28] Tekavatoetoe, one of the less afflent communities on Funafuti Island, is located at the southern end of the island.

hazards (TRCS, 2010). When Tuvalu was struck by a drought that peaked in September 2011, the TRCS worked with the Tuvalu government and the Red Cross headquarters in Fiji to obtain a desalination plant to produce drinking water from seawater.

Tuvalu's vulnerability to climate change puts TRCS on alert, as there is a high possibility that climate change-related hazards will affect Tuvalu in the future. Like other NGOs in Tuvalu, the Red Cross has definitely been contributing to *ola lei* in communities and schools. Its expertise in providing relief and ensuring safety for Tuvaluans in times of hazard is unique and thus especially valued. Thus TRCS makes a distinctive and unquestioned contribution to *ola lei* in Tuvalu.

In the next section I draw together some common threads from my discussion of these three health-related NGOs. As noted above, many other health-related NGOs assist Tuvalu but these three were selected as examples because they are particularly involved with health challenges.

4.4.4. Collaboration of NGOs with the Department of Health

Collaborating with the Department of Health is the common objective of the all the NGOs discussed above, and the Department of Health is appreciative of their efforts. As one senior doctor stated:

> We are grateful for the assistance we had from NGOs here on Funafuti Island…
> the NGOs gave us great assistance in some programmes – for instance, TuFHA
> helping in reproductive health-related matters… which included family planning
> and the adolescent project… TANGO helping in things like… advocacy and the
> community, TB, the HIV… TOSU [Tuvalu Overseas Seamen Union] covers
> health-related programmes for seamen, like HIV… and the Red Cross which helps
> us in giving awareness programmes about saving water in droughts… we use the
> Red Cross volunteers for our surveys. (Senior Doctor, PMH)

The Department of Health praised these NGOs for working together with them in providing health-related services and programmes. Almost all the NGO programmes that were implemented in communities were important for the health and wellbeing of community people and students. They make a significant contribution to the Department of Health and to *ola lei*.

But just as for the Department of Health itself, funding and capacity pose huge challenges for the NGOs despite the best efforts of their staff and volunteers. This is particularly the case in relation to health promotion efforts.

Discussions with community people show that many are not aware of the services and assistance that NGOs can provide for them. There is a general mindset among outer islanders especially that the hospital is the main place that provides health services and programmes. Yet NGOs are an important resource for communities that seek better health services and health promotion outreach, so it would be helpful if they were better known.

Securing stable funding is a major challenge for many NGOs. Some lack the funding to meet particular aspects of their projects. Their donors do not always fund the full costs of projects or cover expenditures such as telephone bills and photocopying (Cammack, 2013). Similarly, an NGO officer in Tuvalu mentioned the problem of 'wanting to implement a proposed activity but there is no donor to fund it'. Due to problems such as the lack of funding and inadequate human resources, NGOs continually struggle to fulfil their objectives.

Low and Davenport (2002) argued that it is important for donor organisations to consider human capacity-building (training and support) in Pacific NGOs. Tuvalu was fortunate that international interventions assisted with building the capacity of Tuvalu's NGOs (Tappin, 2000). For example, in 2002–2006, about €450 000 was allocated by the EU to TANGO for capacity-building, which included formal workshops, provision of IT services, provision of overseas development workers, and assistance in legal advice for developing constitutions for the NGOs (Tappin, 2000). I believe that the sustainability and effectiveness of NGOs in Tuvalu depends not only on the availability of funding, but also on the capability of NGOs' staff to implement what the NGOs have promised to do for communities. In other words, the NGOs were established with an important vision, but in reality there are obstacles – such as a lack of funding – along the course; hence, the NGOs are challenged in achieving their health-related objectives and aims. Yet these NGOs have important contributions to make to development of Tuvaluan communities and to the country as a whole. All three are connected with outside agencies, and it is to these I now turn.

4.5. Donors & External Agencies

In this section, I discuss the role of external donors and agencies in providing aid to Tuvalu, particularly in the health sector. I cannot cover every donor's assistance, so I have selected some examples to show more general patterns of funding assistance from development partners, focussing particularly on the area of health. I will also examine how some external agencies influence health initiatives and create opportunities in Tuvalu.

The work and assistance of external donors is unquestionably significant to the development of health in Tuvalu. On the whole, the total amount of aid donated to Tuvalu from 2001 to 2008 was around $139,223,686 (Government of Tuvalu, 2009). This statistic confirms that Tuvalu is heavily dependent on external agencies, including both bilateral and multilateral donors, for assistance with funding, capacity-building, and other areas of need (Gani, 2006; Wrighton & Overton, 2012).
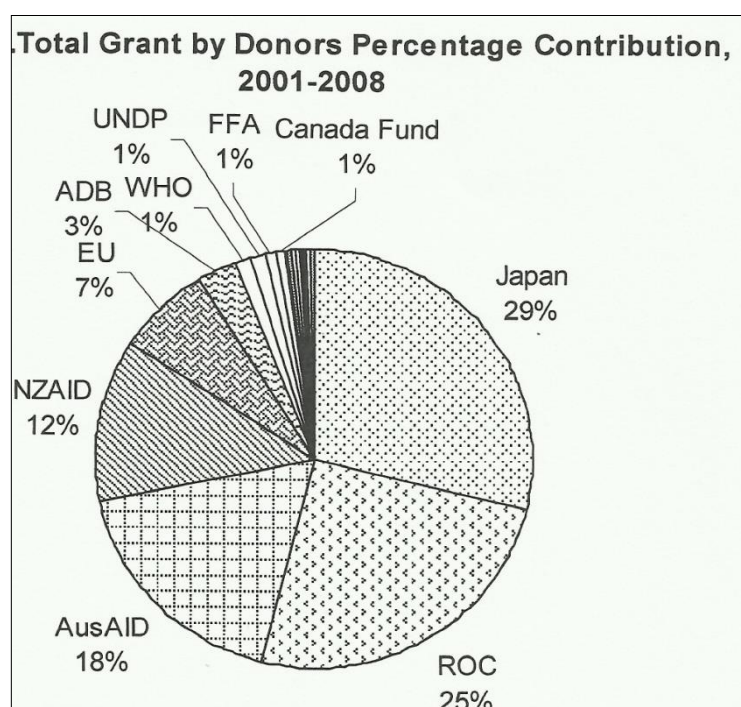
Figure 4.12: Major Donors & their grants contribution (in percentage) to Tuvalu, 2001–2008. Source: Government of Tuvalu, 2009.

The statistical summary report on international aid for Tuvalu from 2001 to 2008 revealed that Japan made the highest contribution to Tuvalu (Figure 4.12). This is closely followed by ROC (i.e.,Taiwan), with AusAID and NZAID also providing considerable assistance. A variety of other donors contribute smaller amounts of assistance as well. For example, the segments shown in Figure 4.12 between Canada Fund and Japan represent donors such as SPC and UNESCO. Japan's aid to Tuvalu often takes the form of

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infrastructure for specific projects such as the Princess Margaret Hospital (2002) and the Funafuti Power House (2007). The Republic of China (ROC) was the largest financial donor from 2001 to 2008, while AusAID made the largest donation in terms of technical assistance. New Zealand, like Australia, also assisted Tuvalu in capacity-building, development projects on outer islands, and financial assistance. These donors' grants support directly or indirectly the *ola lei* of community people. Some aid was granted for direct health projects such as Japan's granting of around $11 million for constructing the Princess Margaret Hospital. This hospital, in return, provided quality health care, which is linked to *ola lei*, for Tuvaluans. Grants for other projects, such as the $9 million Funafuti Power House, also improve the wellbeing of Tuvaluans, though they were not granted directly to the Department of Health.

In terms of grant contribution to sub-sectors from 2001 to 2008, the finance sub-sector received the largest grant. This is because the author(s) of the source did not have time to break up EU and Taiwan's aid into other sub-sectors but just lumped them together under the finance subsector (Government of Tuvalu, 2009, p. 11). The transport subsector was the second largest recipient of grants from 2001 to 2008 due to big capital grants for purchasing a second motor vessel *Manufolau* ($14,343,920), repairing of the country's other motor vessel (*Nivaga* II) in Taiwan, and renewing the reef channel. Without these one-off big grants for the transport subsector, and if Taiwan and EU aid had been divided into categories rather than just lumped into the Finance sector, then the education subsector would be shown to have received the highest grant. The next section provides more detail on donors to health, followed by a discussion of donors to education.

4.5.1. Donors for Health

In the social sector, health is second to the education subsector with a 10.43 percent share of the total grant in the period from 2001 to 2008. As shown in Figure 4.13, Education and Health together received nearly a quarter of all donor contributions (Health about 10 percent and Education about 13 percent). It is important to bear in mind that Figure 4.13 still represents the lumping of funds into the finance subsector. This means that if these funds were distributed accordingly to appropriate sub-sectors that were meant to receive them, then the percentage of donor contributions to health and education subsectors would have been increased. Nevertheless, as it is shown, that nearly a quarter of all donor

contributions were received by health and education signified the importance of these in the eyes of the donors.
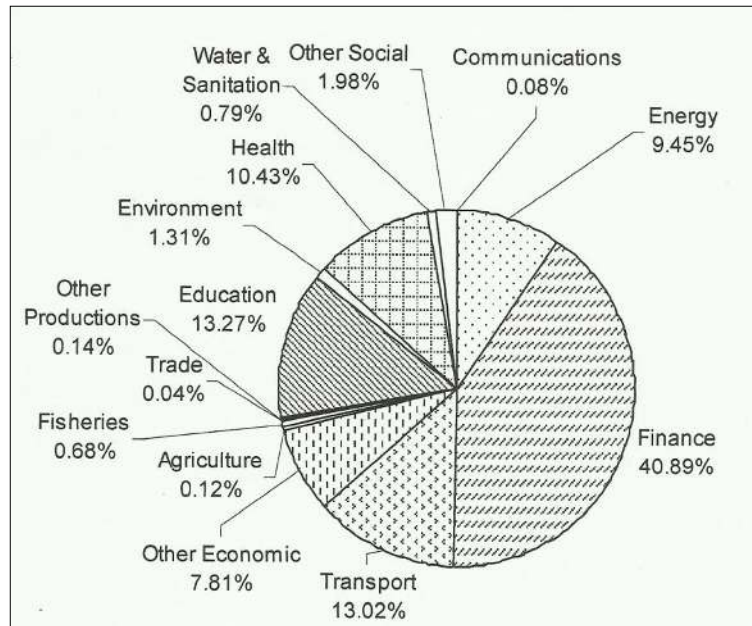
Figure 4.13: Grant Contribution to Sub-Sectors, 2001-2008.
Source: Government of Tuvalu, 2009.

Who were the donors that directly granted capital, financial, and technical assistance to the health sector? Unfortunately, this information was not provided in the statistical summary of the International Aid for Tuvalu Report (Government of Tuvalu, 2009). However, another government report on planned expenditures and resource flow in 2009 to 2014 in the education and health subsectors does specify the donors that provided support (Government of Tuvalu, 2011a).
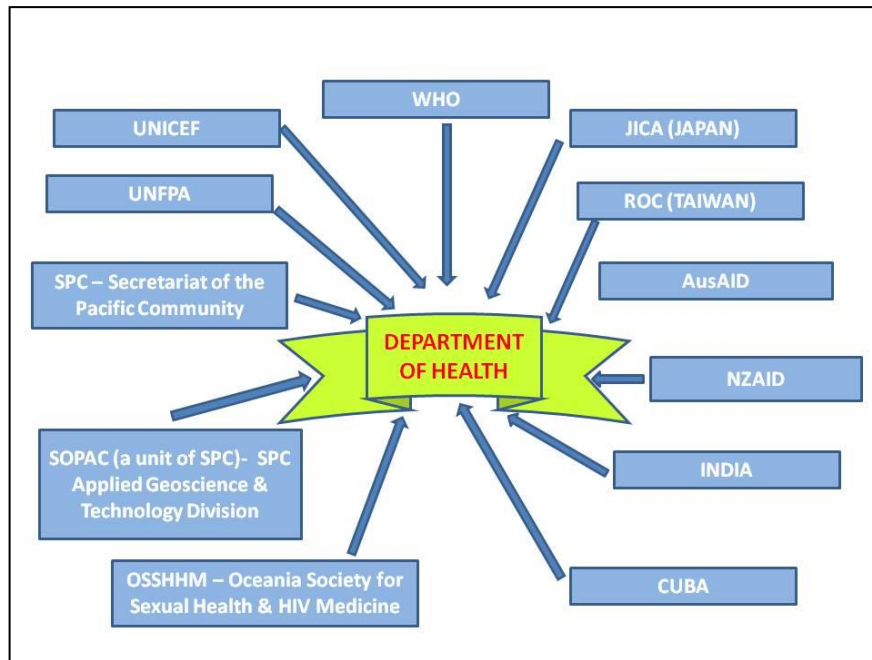
Figure 4.14: Major Donors for Health Sector in Tuvalu

Sources: Medium Term Expenditure Framework & Aid Management Department

Note that other donors (such as IPPF) that help NGOs such as TuFHA directly are not included in Figure 4.14, though this aid directly benefits the health of community people. The Global Fund is also not included, though it is a major donor for TB and HIV projects in the Department of Health. The reason for this is that these funds are channelled through the SPC, which also manages some aid donations from AusAID. Nevertheless, the above list of donors for the health sector clearly shows how heavily the Department of Health depends on external agencies for assistance.

Donor and Projects	Donor and Projects
WHO	**ROC**
Consultants and services	Dialysis unit feasibility study
De Worming Program	Health Training
Stratgy for Excess Medicine	Mobile medical teams
Direct Financial Coop(grant)	PMH upgrade
Equipment	**AusAID**
Food Based Dietary Guidelines	Health sector reform
General operational costs	Visiting Royal Coll Surgeons
H1NI Campaign	**NZAID**
Improving Stock Control	NZ Medical Treatment
Infection Control Wshop	**SPC**
Jr Nurses Refreshing Wkshp	Adolescent health dev't
Lymphatic Filiariasis	Grant NCDs
Measles Rubella Campaign	HIV & STI
Medical supplies	HPL (health planning?)
Nurse Educator	MWP
Assessment Training Mat'ls	PHS CDC
Outer Island Tour	Response Fund HIV
Pandemic Influenza Wkshp	TB
Printing Disseminat'g FBDG	**India**
Printing St'd Trtment Glines	Govt of India support
Supervisor Visit to OI	**UNFPA**
Surveillance and Disease Outbreak Response Wshp	Equipment
Travel	Other operational
Wkshp Data Analysis	Salary
Wkshp for Strategic HealthCommunication	TA Mission costs
Wkshp on NCD Strategy	Training/Workshops
Workshop on IHR (climate chg)	**Cuba**
World Blood Donor Day	Visiting Cuban Doctors
World Tobacco Day	
Youth Involvement in Rational Use of Drugs	
UNICEF	
Undefined HIV program	
JICA	
Ed or health infra/equip	
Filariasis kits	
Health clinic Nanumea	
Health clinic Nanumaga	
Paedeatric ward at PMH	

Table 4.6: Donors and their Aid Projects for Health

Source: Medium Term Expenditure Framework (MTEF) for Education and Health 2009-14.

As is shown in Table 4.6 above, WHO provided a major portion of projects in the health sector. According to data gathered from the Tuvalu Aid Management Department, there were about 17 projects funded by WHO in 2010 compared to four and seven projects in 2009 and 2011 respectively. Table 4.7 below specifies the foci of health projects funded by WHO from 2009 to 2011.

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Year	Project Code	Project Title
2009	2009-08-0051	Nurse Educator
	2009-08-0052	Surveillance & Diseases Outbreak Response Workshop
	2009-08-0054	LF Surveillance Activity
	2009-08-0053	Infection Control Workshop
2010	2010-08-0055	Develop STG to promote & excess Medicines in Tuvalu
	2010-08-0056	National Training Workshop for Strategic Health Communication
	2010-08-0057	Formulation, Printing, Dissemination & Piloting of National FBDG
	2010-08-0058	Improving Stock Control
	2010-08-0059	Printing of Standard Treatment Guidelines in Tuvalu
	2010-08-0060	H1N1 Campaign
	2010-08-0061	Junior Nurses Refreshing Workshop
	2010-08-0062	Infection Control Workshop
	2010-08-0063	Outer Islands Tour
	2010-08-0064	Tuvalu-World Blood Donor Day
	2010-08-0065	Lymphatic Filariasis 2010
	2010-08-0066	Developing National Food Standards
	2010-08-0067	Measles Rubella Campaign (UNICEF)
	2010-08-0068	Shipment of specimens for priority disease
	2010-08-0069	W/shop on IHR: Implement for MoH & other agencies.
	2010-08-0070	Food Safety & Nutrition workshop
	2010-08-0071	Adaptation Pacific Physical Activity to Tuvalu.
2011	2011-08-0072	In-Country training workshop
	2011-08-0073	Biggest Weight Loser
	2011-08-0074	Supervisory visit for Pharmacy staff to the central islands
	2011-08-0075	World No Tobacco Day 2011
	2011-08-0076	EHE's Climate Change & Health Training for Health Workers & Stakeholders
	2011-08-0077	Drug & Therapeutical Committee Training
	2011-08-0078	Global School-Base Health Survey (GSHS)

Table 4.7: WHO Aid Projects for Health 2009-2011.

Source: Tuvalu Aid Management Department.

Most of the WHO aid projects were in the form of workshops, awareness programmes, capacity-building, and vaccination campaigns. With such a large number of health projects funded, there is no doubt that in order to fulfil their objectives many consultations between the WHO and the Department of Health would be needed and multiple reports required. However, as Wrighton & Overton (2012) have pointed out, no matter how beneficial it might be, any aid project involves some cost to recipients: staff must use some of their time to fulfil the specified obligations of the grant and to document the work they do and the way funds have been spent. Meeting these obligations takes away from time that could be used to carry out actual project work as well as to do other tasks that are part of the worker's job. The types and quantity of donor-funded health projects in Tuvalu (including the many workshops and awareness programmes) definitely require significant time and energy from staff. This problem is accentuated by the fact that the Department of Health has quite limited staff. Health officers often struggle to divide their time between their own jobs and the bureaucratic requirements involved in planning, implementation and evaluation of external donor's projects.

Referring to Table 4.6 on donors and their projects, we see that Japan funded the construction and upgrading of outer islands' clinics, a paediatric ward at PMH, and health equipment. These are tangible contributions that create a good image for Japan in the eyes of community people, and many of my research participants praised Japan for actually providing something that is tangible and real. By contrast, research participants, especially ordinary community people, often did not recognise the existence of WHO projects because they do not see them.

Other donors funded projects that included financial assistance, technical assistance, fighting against diseases such as NCDs and HIV, and medical treatment. The ROC provided $700,000 to upgrade the PMH, which was initially built and funded by Japan in early 2000. The New Zealand Medical Treatment project funds the upper level of the Tuvalu Medical Treatment Scheme (TMTS). On the other hand, SPC projects, (sometimes managed on behalf of other donors such as Global Fund and AusAID) focus on diseases such as NCDs, HIV & STIs, and TB.

Although the external agencies' aid projects are limited by certain structural constraints such as the number of local staff to do liaison and other work involved, the projects have the potential to assist the growth of the health sector. In other words, there is a requirement from external agencies for the Department of Health and Tuvaluan NGOs to implement, monitor, and evaluate their aid projects; but on the other hand, the health sector

of Tuvalu gets money and employment and improved health services from those projects. For example, the StopTB programme in Tuvalu is influenced by the Global Fund because fighting against TB, AIDS, and malaria is a major vision of the Global Fund[29]. The Department of Health did not initiate this work, but is incentivised by the Global Fund to deliver certain services and programmes around TB prevention in Tuvalu.

As a result of the Global Fund initiative, there is a TB office within the Department of Health, with two TB officers who were recruited to run the TB project: one at the laboratory (technician) and the other a qualified nurse who coordinates the TB project. The TB office is responsible for examining and recording TB cases in Tuvalu. The TB coordinator deals with TB patients in terms of treating and counselling, doing contact tracing, and active case-finding and screening of known new cases. The coordinator works closely with the senior public health doctor who oversees the TB project. The TB office also runs TB awareness programmes for community people. Occasionally, when the shipping schedule is right, the coordinator visits the outer islands to follow up with TB patients, examines suspected TB patients identified by the outer island nurses, and provides TB advice or education to community people. She also works with the outer island patients who come to PMH for diagnosis, treatment, and follow-up. She is responsible as well for training nurses on the outer islands in TB testing, contact tracing, DOTS (Directly Observed Therapy Short-Course), and delivery of awareness programmes. All these activities are funded by the Global Fund, including the salaries of the officer that looks after the TB project. TB is a disease that can be effectively treated but requires coordinated effort to detect and do long-term follow-up.

As a result of its colonial history and the sheer difficulty of treating TB in Tuvalu with its limited resources and transport challenges, TB is still a public health issue (Resture, 2010). In 2013, for example there were 17 new cases in the population of approximately 10,000, and over the last decade an average of 16.6 new cases a year, making it a high incidence country according to the WHO classification (Department of Health TB Register). Nearly 25 percent of new TB cases in 2013 also had diabetes, an indication that syndemic interactions between these two diseases are occurring (Littleton and Park, 2009). Without this Global Fund programme, and the cooperation between the TB and the diabetes services, TB would certainly continue to pose a threat to *ola lei* in Tuvalu.

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[29] See The Global Fund website, www.theglobalfund.org, for more information.

It is quite rare for external agencies to pay the ongoing salaries of local staff even though health workers' pay is crucial to programme success. As described by McCoy et al. (2008, p.675):

> The pay and income of health workers affect health care and health systems in many ways. Pay and income have been described as hygiene factors that affect motivation, performance, morale, and the ability of employers to attract and retain staff.

McCoy and colleagues remind readers that pay is one important factor that may influence the employee's morale and conduct of work, which is crystal clear to any employer. It is bad, and unhealthy, for health workers to have low incomes as this can lead them to leave the job or to secretly extract extra fees from patients (McCoy et al., 2008).

The position of the Government of Tuvalu is in agreement with the results of McCoy and colleagues' research in sub-Saharan Africa: the pay and working condition of health staff need to be adequate to ensure staff retention. According to the Director of Health (2013) improvement of salaries still has not been achieved. Additionally, for example, the salary of the TB staff given by the Global Fund is not likely to be maintained forever. Aid projects often have a limited life. Thus, the question of who should pay staff is a difficult one. As the Director of Health acknowledged, 'the donors intentionally do leave the responsibility and duty to the government to pay its workers'. However, the Government's health sector priority regarding staff pay has not yet been responded to, due to financial constraints. Like all other governments, the Government of Tuvalu has the challenging task of balancing health with other priorities, yet with no increase in salaries, health workers will be tempted to leave Tuvalu for better opportunities overseas. Donor assistance in funding of health workers' salaries (partially or fully) would thus provide an increased pool of funding for the government to draw on to meet its own goal of salary enhancement. This reform could provide an effective boost to staff morale, leading to greater efficiency and more productive outcomes.

The incentives and benefits provided by these aid projects are unquestionably significant to Tuvalu's economic and social development. Studies elsewhere in the Pacific confirm the positive relationship between aid and economic growth, which is an important part of development (see, for example, Pavlov & Sugden, 2006). But should economic growth itself be seen as the explicit goal for Tuvalu? As Gani (2006, p.291) has explained: 'For micro states like Tuvalu, Niue, Cook Islands and to some extent Kiribati, these

countries will continue to be dependent on aid largely due to drawbacks in their productive structure'. Gani implies that improving the productive structure may help Tuvalu lessen its dependence on foreign aid, but such improvement faces many difficulties. To what extent can Tuvalu be expected to improve its productive structure when it has very limited resources, small land size, a remote location, and other such challenges? It is hard for the Tuvalu Government, including the Department of Health, to provide for its citizens without being dependent on aid. Perhaps the main goal should be to ensure that aid projects meet real local needs rather than to expect that they result in either economic growth or dependency.

4.6. Education

It is not only the Department of Health that depends on aid. The Department of Education also needs assistance from external donors to achieve its strategic plans and objectives. In this section, I discuss the education sector in Tuvalu, focussing on three issues: curriculum, strategies, and policy objectives specified in *Te Kakeega* II and other documents regarding education, curriculum issues and development, and types of assistance provided by agencies and donors. I will also consider how health, particularly the conceptual framework of *ola lei,* is integrated into the curriculum.

4.6.1. Curriculum

The Department of Education decides the curriculum in Tuvalu. In the last decade or so the curriculum, particularly in terms of the syllabus, has been somewhat inconsistent because Tuvalu's primary and secondary schools were adopting or using some foreign prescriptions at different levels (Figure 4.15).

LEVEL	CLASS/FORM/YEAR	NAME/TYPE OF PRESCRIPTION /SYLLABUS USED
Secondary School	Form 6 (Year 12) Form 5 (Year 11)	Pacific Senior Secondary National (Tuvalu)
Junior Secondary School	Form 4 (Year 10) Form 3 (Year 9)	Fiji Junior
Primary School	Class 8 (Form 2) Class 7 (Form 1) Class 6 Class 5 Class 4 Class 3 Class 2 Class 1	National (Tuvalu)
Pre-School	3 – 5 years old children	Teachers and parents made up their own syllabus/prescription.

Figure 4.15: Different prescriptions/syllabus used in several levels during the last 10 to 15 years.

LEVEL	CLASS/FORM/YEAR	NAME/TYPE OF PRESCRIPTION /SYLLABUS USED	
Secondary School	Form 7 (Year 13) Vocational Form 6 (Year 12) Form 5 (Year 11)	South Pacific Form Seven Tuvalu School-base Tuvalu (National) Senior School	L O C A L I Z E D
Junior Secondary School	Form 4 (Year 10) Form 3 (Year 9)	Tuvalu (National) Junior	
Primary School	Vocational - CTC Class 8 (Form 2) Class 7 (Form 1) Class 6 Class 5 Class 4 Class 3 Class 2 Class 1	Tuvalu (National)	
Pre-School	3 – 5 years old children	Tuvalu (National) Pre-school	

Figure 4.16: Changes to the education structure and curriculum.

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Note that there was no separate Junior Secondary School in Tuvalu; that is, the Forms 3 and 4 were accommodated in the secondary school level, in MSS. As mentioned earlier, Fetuvalu High School uses the Cambridge syllabus, thus it does not necessarily follow the pathways shown by these tables.

Three major changes were made to the structure of education in terms of schools and prescriptions (Figure 4.16). Firstly, the names of prescriptions and qualifications at different levels were localised. The Department of Education, since then, has tried to localise the prescribed curriculum for Forms 3, 4, and 6. So, in the early 2010s, while this thesis was still in progress, foreign prescriptions were phased out and replaced with local prescriptions. This change was apparent at Motufoua Secondary School as this is the only public secondary school in the country.

There were mixed feelings toward this localising process. Some of my participants questioned this change as they doubted the reputation and quality of a local prescription in comparison to the external syllabus and certifications that MSS used to follow in the past. This indicated the lack of confidence some Tuvaluans have in our own locally-designed prescriptions. Are they of equal quality to the Fiji or Pacific Senior School syllabuses and certificates? Will they be well recognised in the Pacific region, let alone internationally? These were some of the questions that were raised by participants who preferred the previous system. FHS's supporters argued that it is about time for Tuvalu schools to follow and use an international syllabus such as the Cambridge syllabus because it is a well-recognised.

The second change was the establishment of a vocational stream at primary schools and Motufoua Secondary School. From 2008 to 2009, a Community Training Centre (CTC) was established on each island's primary school for those students who cannot access secondary education, to learn basic trade courses such as mechanics, cooking, and other hands-on jobs. Similarly, students who did not pass the academic stream in Forms 4 and 5 at MSS joined the vocational stream, in which they learned more about practical and basic trade courses such as plumbing. This was another good educational change as it allowed students who were not achieving in academic subjects to continue with their education.

The third change was the establishment of Form 7 (Year 13) in 2010. The registration of Form 7 was done under the name of Motufoua Secondary School, though it

is physically located on Funafuti Island.[30] The Department of Education decided to use the South Pacific Form Seven Certificate (SPFSC)[31] syllabus for Form 7. This means that the prescription and assessment for this Form 7 programme are all externally set, assessed, and evaluated by Secretariat of the Pacific Board for Educational Assessment (SPBEA)[32]. The students who pass the SPFSC will be qualified to directly enter university, which for the case of Tuvalu is mostly the University of the South Pacific (USP).

There is not much diversity in the primary school curriculum. The subjects that are mostly taught, with prescriptions, at the primary level are English, Mathematics, Science, Social Science, and Health Science. For Physical Education, teachers have to design their own activities and implement them when there is available time. Extracurricular activities such as camping, hiking, regular sports competitions, fieldtrips and excursions, entertainment, and health-promoting activities are lacking. Looking at the Classes 1–8 Health Science prescriptions, it appears that basic health education and issues such as physical health, and current health issues such as gender and equity, community and environmental health, and emotional health are strengthened in the primary level. Spork & Ielemia (1998) reported that most teachers in Tuvalu commented positively on the introduction or implementation of health science as a separate subject in primary schools in 1997. However, the report did not cover any feedback or views from students.

In MSS and FHS, there are no separate health subjects taught to students. This is another important aspect to be researched, as my experience with the students suggests that students have little knowledge about 'health'. The awareness level of students about particular diseases such as TB and diabetes is low. This is at least partly because health subjects (such as Health Science, Health and Physical Education, and others) are not included in the schools' curriculum as they were in the primary schools. Teachers are more focussed on core subjects such as English, Mathematics, Social Science, and Science. This is an issue that will be discussed further in Chapter 5.

4.6.2. Education in Te Kakeega II and Other Documents

Figure 4.17 shows some of the Department of Education's planning documents that were formed out of the National Strategy for Sustainable Development (NSSD) 2005–2015. These documents provide a foundation for the topics discussed in the following sections.

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[30] MSS is located on Vaitupu Island, Tuvalu.
[31] SPFSC is a (Pacific) regional Form 7 (Year 13) qualification that is administered by the SPBEA.
[32] The SPBEA is now a division in the SPC. It is based in Suva, Fiji.
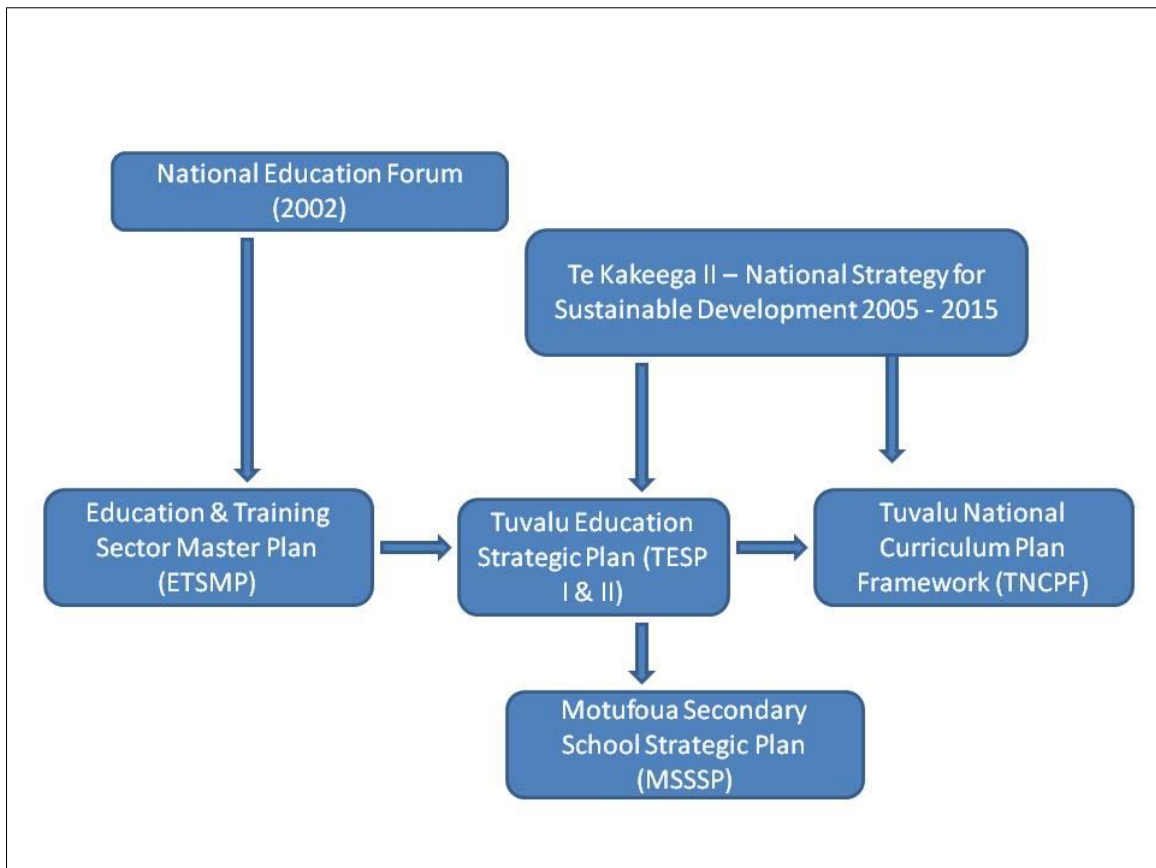
Figure 4.17: Some key planning documents formulated by the Department of Education developed out of the National Education Forum and *Te Kakeega*.

In 2002, a National Education Forum (NEF) was held on Funafuti Island, Tuvalu, in which a variety of stakeholders discussed the main issues confronting the education sector. This was followed in 2004 by the National Strategy for Sustainable Development (NSSD) Summit which resulted in *Te Kakeega* II. Participants in the NSSD forum were thus undoubtedly aware of the low standard of education in Tuvalu[33].

The key policy objectives for the education sector that were spelled out in the *Te Kakeega* II were sweeping and would clearly require a major investment of resources from government as well as commitment from local educators. Specified objectives included:

- Improve overall education standards;
- Develop more highly-trained and motivated primary, secondary, and post-secondary teachers;
- Adequately maintain schools and provide better, more appropriate facilities;

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[33] A major factor that contributed to the organising of the 2002 National Education Forum (NEF) was the remarkably high failure rate in 2000 in examinations throughout Tuvalu, but most significantly at Moutufoua Secondary school.

- Provide more classroom materials to improve the teaching and learning environment;

- Install sound, consistent, more appropriate curricula that better target the needs of students and the economy;

- Expand and improve technical and vocational training opportunities;

- Make math and science subjects, and technical and vocational training, central parts of school curricula;

- Expand services and facilities for special needs students, including pre-schoolers and the disabled;

- Maintain a higher retention in-country of returned overseas scholarship students;

- Develop a comprehensive Human Resource Development Policy and Institutional Framework.

The tone and wording of these key policy objectives indicate the government's awareness of the challenges that were then facing education in Tuvalu: low standards, deteriorating facilities, lack of materials, and inappropriate curricula. Teachers' skills also needed updating and their morale was low. Strategies to address these issues had been developed by the Department of Education through its Education and Training Sector Master Plan (ETSMP) and these strategies were integrated into *Te Kakeega* II. The key policy objectives included in the Education and Training Sector Master Plan (ETSMP) are listed in Figure 4.8.

	Priorities	Strategies
1	Teaching and learning	• increase teacher training and skill upgrading; and • provide adequate classroom equipment and materials to support the curriculum, including libraries and text books.
2	Environment for teaching and learning	• upgrade and maintain school facilities (including dormitories, kitchens, staff houses, etc.) to a standard conducive to teaching and learning in a healthy environment; and • review career and salary structures of the education service to reflect the priority and importance placed on education.
3	School curriculum	• review and redevelop school curricula to better meet the needs of students (and the economy); • expand vocational and technical education; • expand and improve instruction in mathematics, computer, and science subjects; • add courses in local customs, culture and traditions skills; and • offer student counselling to guide career and personal development.
4	Education services for special need students	• provide government support to worthy private schools; and • provide special needs education for pre-schoolers, disabled and handicapped, with NGO support.
5	Management of the education system	• increase the number and improve the quality of school inspections; • certify that inspection recommendations are complied with; • Department of Education to regulate and manage pre-schools; • establish junior secondary school system; • consult with the private sector so labour market needs are better met; • TMTI [Tuvalu Maritime Training Institution] is on and stays on the IMO White List; • amend bonding policy to retain a higher number graduates in-country; • provide more information on the labour market; and • formulate and implement a Human Resource Development Policy and Institutional Framework.

Table 4.8: Education and Human Resources: Priorities and Strategies 2005–2015

Source: Te Kakeega II, p. 36.

The ETSMP specifically aimed to address the problems that had lowered the standard of education in Tuvalu. Its primary focus was on schooling and thus it focussed its attention on issues such as teachers' capacities and salaries, teaching and learning

resources, facilities, and curriculum, rather than on other aspects such as the department's administration.

Outcomes	Brief description of the outcomes
To provide all children in Tuvalu access to a quality, flexible, relevant and modern curriculum and assessment system that promotes life-long learning and good citizenship	This will provide a more targeted approach to the development of learning resources to meet the ever increasing demand for wider learning opportunities enhanced by a more meaningful and transparent certification and assessment system with the primary aim to increase educational attainment
All children especially kindergarten, children living under difficult circumstances and those with special needs will have equal access to an expanding, inclusive, safe quality education and care system	This will provide more learning opportunities in the formal and informal learning environment coupled with the inclusion of those with special learning needs enhanced by removing barriers that hinder access.
Improved quality and efficiency of management through accountability, transparency and good governance processes.	The Department of Education must demonstrate a key role in the management of the education system. Efficient management with accountability measures put in place will ensure the little resources available will benefit many; enhanced data management will increase information capability to provide information for more informed decisions making.
A well-qualified, competent, committed and highly motivated workforce that can deliver education services of high quality with integrity and transparency	Teachers play a vital role in the education system therefore must be equipped well to meet the new challenges of the teaching profession. This will be achieved by the provision of supporting mechanisms both inside and outside the classroom to bring out the potential in teachers
Communities, stakeholders and donors are responsive to the education and development needs of students and maintain a culture of working together in genuine partnerships.	This will meet the need to address societal and international expectations and foremost to enhance co-operation between those engaged in the delivery of education and the wider stakeholder society

Table 4.9: Key Outcomes of TESP II.

Source: Tuvalu Education Strategic Plan II, pp. 4-5.

The Tuvalu Education Strategic Plans provide the education-focussed policy direction needed for planning within the Department of Education. Both the TESP I (2006–2010) then subsequently the TESP II (2011–2015) were formulated out of *Te Kakeega* II. TESP II specifically stated the goal of providing quality education for all Tuvaluans, and

serves as a living roadmap for the education sector as a whole. Commitment to quality, inclusivity, efficiency, competency, and responsiveness are evident in this document, which specified five strategic outcomes as guiding Education Department programmes. These are listed in Table 4.9.

These five strategic outcomes were carefully aligned with the key policy objectives of *Te Kakeega* II and the priorities specified in the ETSMP. But in order to achieve these visionary outcomes, the Department of Education needs support and assistance from external donors and local stakeholders alike. Let us look at Outcome 2 of TESP II, for example, which states that all children with special needs will have equal access to quality education. This inclusive educational goal is still far from being achieved in Tuvalu, however, and may never actually be logistically possible given local conditions. It is not just a matter of establishing a special school for children with special needs. Children begin their preschool and primary education in their home communities, mostly on outer islands. Training all village teachers to teach children with special needs will require a massive programme of skill upgrading as well as additional curricular and technical resources. This challenge is just one of the many that the education sector must consider in order to achieve an inclusive education initiative.

4.6.3. Donors for Education

The Department of Education is also dependent on external donors and agencies for financial, technical, infrastructural, and capacity-building assistance. As Figure 4.13 showed, within the social sector from 2001 to 2008, the education subsector received the largest grant of donors' assistance. *Te Kakeega* II also had identified the education sector as a key strategic area that could contribute to development in significant ways. In fact, the relationship between education and development has been well established in many countries (Ginsburg & Pigozzi, 2010; Glaeser, Ponzetto & Shleifer, 2007; Mula & Tilbury, 2009), thus encouraging donor support for the education sector. Figure 4.18 below shows the major external donors for education inTuvalu:
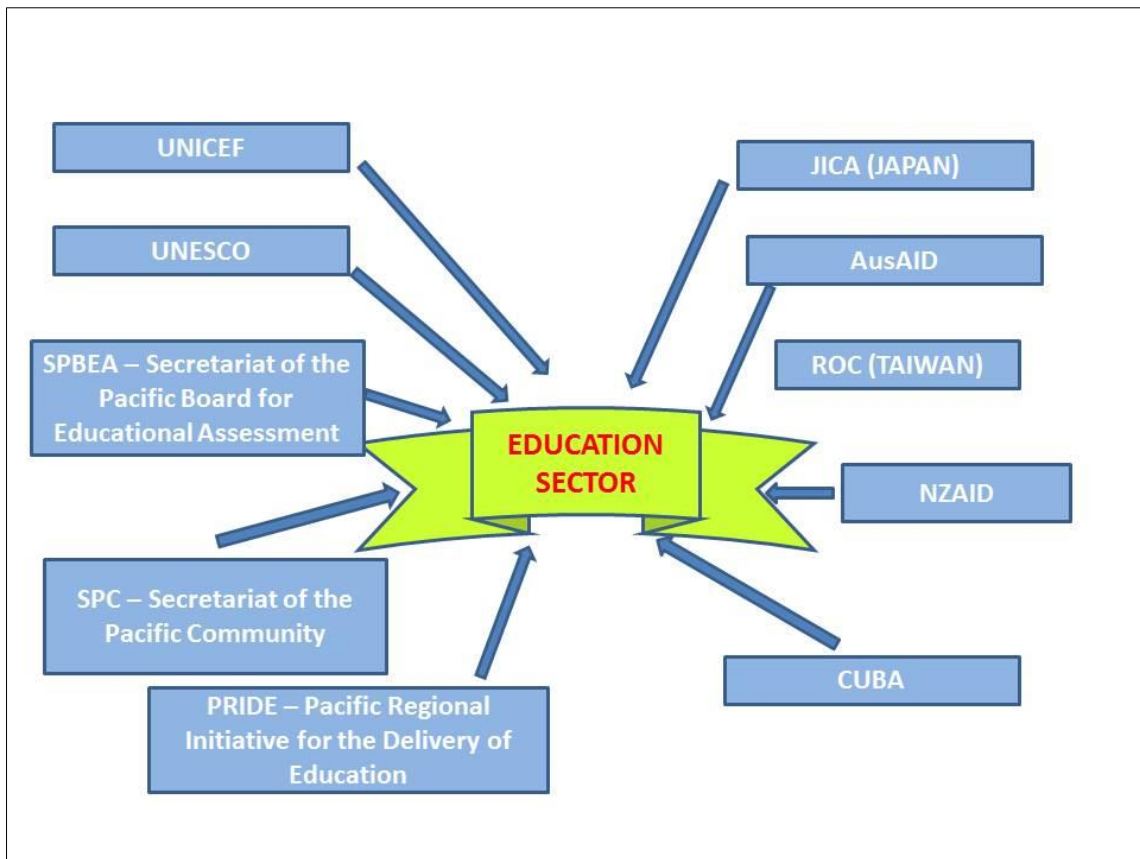
Figure 4.18: Major Donors for Education Sector in Tuvalu– 2009 to 2014.
Sources: Medium Term Expenditure Framework & Aid Management Department.

Just as in the health sector, aid projects for the education sector come from both bilateral and multilateral donors. It is also important to note that SPBEA, SPC, and PRIDE are major regional Pacific agencies that have long assisted Tuvalu's Department of Education. These regional agencies themselves are funded by international donors as well. For example, PRIDE receives its major source of funds from the EU and NZAID. This means that the EU is also a donor through PRIDE to Tuvalu's education sector in Tuvalu though it does not show up in Figure 4.18.

Table 4.10 provides a summary of each donor's aid projects to the education sector in Tuvalu from 2009 to 2014:

Donor/Agency	Projects	Grand Total in AUD
UNICEF	General education programmes Workshop in Funafuti, Tuvalu Workshop in Suva, Fiji	$1 314 255
JICA	Education or health infrastructures Motufoua Secondary School (MSS) upgrade Tractor for MSS	$13 942 966
ROC	Scholarships	$2 215 840
AusAID	Consultant/TVET (Technical and Vocational Education and Training) Design education projects Scholarships pre-service Teacher training primary TVET advisor travel TVET materials/equipment for Form 5 pilot TVET support TVET support undefined Water tanks/school mats	$3 692 980
NZAID	ECCE training resources Scholarships (pre-service)	$1 430 093
SPC	Business training, travel CETC (Community Education Training Centre)/ Vocational training award	$47 092
SPBEA	Operational costs SPBEA professional services Travel and expenses Trainings/Workshops/Meetings	$91 865
UNESCO	Capacity building Children's conference Tuvalu dictionary	$106 648
PRIDE	Purchase of computer Range of activities TA (Technical Advisor)	$34 095
CUBA	Pre service Medical School	-

Table 4.10: Education-focussed Donor projects to Tuvalu, 2009 – 2014.

Source: Medium Term Expenditure Framework (MTEF) for Education and Health 2009-14

Table 4.10 shows that most aid projects have focussed on workshops, training, and scholarships. By contrast, there was little attention given to enhancing teaching and learning resources for students such as textbooks, library books, posters, maps and other essential classroom resources.

The upgrading of MSS's infrastructure, including classrooms and dormitories, and the donation of a tractor (see Figure 4.19) made JICA the top donor in terms of aid value in Australian dollars (AUD). In fact, about AUD$13 million was allocated in 2013 in a one-time project for the upgrading of MSS. Other donors such as AusAID and NZAID, however, provided more regular levels of assistance each year, in terms both of the frequency and money-value of their aid projects.

Figure 4.19: The MSS tractor donated by Japan (JICA) – 2013.
Source: Courtesy of Reverend Kautoa Molotii.

AusAID and NZAID are the next top donors for the education sector. AusAID assistance is focussed mostly on TVET (Technical and Vocational Education Training), while NZAID assists particularly with early childhood education. These donors both also assist in funding pre-service and in-service scholarships for Tuvaluan students. A variety of additional donors and agencies fund other educational activities and programmes, ranging from the development of strategic plans to travelling expenses.

Figure 4.10 demonstrates that external donors make vital contributions to the education system and curriculum in Tuvalu. It would be hard or impossible for the education sector to carry out most of its programmes, or to meet its policy goals, without

financial and technical assistance from these external agencies and donors. Fortunately, external donors' aid projects align quite closely with the objectives and targets in the *Te Kakeega* II and TESP II. For example, AusAID's assistance made possible the establishment of the TVET curriculum, which was a specified objective in the TSEP II.

4.7. Conclusion

In this chapter, I analysed the government's health and educational initiatives and institutions. In regard to health, I discussed the policy and planning framework provided by *Te Kakeega* II and the Health Strategic Plan 2009–2019 in particular. Health services provided by the Department of Health were also examined as well as contributions made to health by selected NGOs and external donors. I also considered the relationship between stated policies and the various qualities that are seen as important in the *Ola Lei* Conceptual Framework. A similar analysis of policy framework, government programmes, and donor assistance was provided for the education sector.

It is clear that the government sees improved health and education as essential development priorities and thus emphasises them in policy frameworks and service initiatives. Having healthy citizens is a core target of the government, and a range of health-focussed objectives are included in the National Strategy for Sustainable Development (*Te Kakeega* II) 2005–2015. The Department of Health, in particular, has tried to find effective ways to achieve the goal of improving health specified by both *Te Kakeega* II and the Health Strategic Plan 2009–2019. But while the Department of Health has created new initiatives and services to improve community health, these projects face challenges from financial, technical and political shortfalls and constraints. NGOs such as TANGO and TuFHA face similar financial and technical limitations as well. The positive impact that government departments and NGOs manage to make to local health is especially impressive given the constant limitations they face in human resources, expertise and money. It is also important to remember that while health is set apart as a distinctive category, and responsibility for it ostensibly rests with the Department of Health, the work and policies of other departments also contribute to it in important ways. All of the above is equally relevant to policies and services in the education sector.

In order to sustain and maintain the health and education services and programmes needed by communities, the Departments of Health and Education, as well as the NGOs that assist their work, must continue to rely on a wide range of external donors and

agencies. This has the potential to create a dilemma for Tuvalu. How much should donors influence Tuvalu's projects in the areas of health and education, and thus how much should Tuvalu rely on external funding for these key sectors? While aid does provide crucial resources, managing multiple sources of assistance can be a burden for staff. Dependency on external sources of funding also can make it difficult to develop coherent strategies for preventing staff burn-out and attrition. Thus, specific attention to the retention and morale of education and health providers is essential if the visionary goals exemplified by all levels of government strategic planning are to be achieved.

The existing education and health initiatives of the Departments of Health and Education, as well as those of various NGOs, are generally consistent with the *Ola Lei* Conceptual Framework. However, it is apparent that Tuvalu cannot achieve these initiatives by itself since it lacks adequate resources, infrastructure, and expertise. Therefore, Tuvalu must rely on aid in the form of money, advice, and materials, and this is likely to continue on in the future. While heavy reliance on aid raises the possibility that Tuvalu may not be able to develop and follow its own plans and priorities, this does not appear to be a major problem at present. Even health initiatives that are more medically structured (for example, the hospital, training of medical doctors, the referral scheme, health education, and other initiatives) all directly and indirectly contribute to the physical fitness, happiness, longevity, and peacefulness of community members. In the area of education, the Department of Education has recently localised curricular prescriptions from the preschool level up to Year 12 at the secondary level. This change will allow the Department of Education to prescribe what is to be taught and examined in their own schools, and provide a foundation for obtaining more community input regarding education. The community people will be able to convey their views, through public forums, on topics they think should be included in the curriculum.

Initiatives promoting collaboration between traditional healers and the official health sector are lacking. The same could be said of traditional, informal educational processes that are embedded in family life and community or religious institutions. Likewise, initiatives specifically aimed at supporting key aspects of the *Ola Lei* Conceptual Framework, such as peacefulness, readiness, and other emotional qualities, are not yet being considered when formal health or education sector objectives are developed. While peace-related programmes to reduce the incidence of domestic violence are being developed by the Tuvalu Police Force, incorporating the holistic perspective of *ola lei* more widely into government planning would help ensure that education and health

initiatives address the issues that community members themselves see as important. A grassroots orientation will help to offset the issues regarding control that seem an inevitable aspect of external funding assistance.

This chapter has also demonstrated the real contribution that existing government programmes make to achieving Tuvalu's national vision of 'a healthy, educated, peaceful and prosperous Tuvalu' (Government of Tuvalu, 2005, p.1). The elder whose words introduced this chapter certainly would have agreed with this vision and with the strategies contained in *Te Kakeega* II. This is because this national vision is based on a holistic framework of wellbeing that embraces all aspects of life, just as does *ola lei*. Thus, the government's orientation implicitly appears to be consistent with the *Ola Lei* Conceptual Framework in many ways. This consistency could allow *ola lei* to serve as the explicit basis for both policy development and for assessment of health and education services.

The next chapter turns from governmental services to the community level. More detailed information about the health services and programmes offered by the government and NGOs to community people is provided, as well information about what local people themselves think they really need and desire.

CHAPTER 5: COMMUNITY PERSPECTIVES AND NEEDS

5.1. Introduction

In Chapter 4, I established that the government of Tuvalu and NGOs prioritised the health of the people in the nation's development framework (*Te Kakeega* II) and in other health-related legislation policies and strategic plans. The Tuvalu Departments of Health and Education, with help from external agencies and donors, worked to provide services and programmes, in the context of limited resources, to assist Tuvaluans in attaining good health and a sound education. My analysis of policies, strategic plans, and government structures shed light on government and NGO activity in health and how these interventions and policies have intersected with education. A key focus of Chapter 4 was my discussion of how the *Ola Lei* Conceptual Framework is embedded and represented in the government's health initiatives or policies.

My overarching analytical framework in Chapter 4, *tausi te vasia*, was used to examine the relationship between government, NGOs, and external agencies in relation to health and education, in order to consider the dilemma posed to small nations by development aid: the issue of sovereignty. In Chapter 5 my focus shifts to what people think and say about the health services and educational programmes that are provided by the government and NGOs, and what community people think they really need. I first describe some key local issues that community members see as impacting their health and wellbeing. I then discuss some of the most important issues affecting students' health and health education at MSS. In both these sections people's comments were often emotional and sometimes critical. I have been careful to analyse these voices of concern in a positive and thoughtful way that expands our understanding about people's concerns and desires. The final section of the chapter discusses what community people and students need and desire in terms of health services and education programmes. The major question that this chapter focuses on is: What issues do community members see as important in relation to health and education? Chapter 5 complements the previous one in that it provides the possibility of examining the relationship between government, NGO, and external agency policies, discussed in Chapter 4, and the needs and desires of the community on the other, discussed in this chapter. The analysis of this key relationship between government policies and community needs is the subject of Chapter 6.

5.2. Local Views on Issues Impacting Health and Wellbeing

In the process of interviewing community people and students about their conceptions of health and their experiences with the health services, I found that they also talked about economic, political, social, and environmental issues they are currently facing, which of course are related to health. These issues are immediate for Tuvaluans. They were uppermost in research participants' minds and were raised spontaneously by them[34]. Community members have heartfelt and genuine concerns. Because of this and because of the broad framework provided by *ola lei,* I include these issues as an essential part of my discussion of health and wellbeing. Indeed they are part of *ola lei* and of a health promotion framework, as within health promotion they are regarded as key determinants of health (Ewles & Simnett, 2003). I suggest that consideration of these issues in health and education will strengthen policy formulation and improve people's lives and health.

It was interesting to hear people from different communities talk about health, and shift their attention and discussion to issues that they felt are connected to it. As I transcribed, coded, and analysed my recorded interviews, I began to realise that there were several issues that were commonly voiced by research participants. After each day's interviews, as I listened again to some of my recordings and reflected on them, I noted that a man, for example, would talk about the environment or politics, although I asked him about health and how he views health services, or a group of women might talk about bingo and communal obligations in response to the same question in a focus group. In their discussions a more holistic Tuvaluan concept of health was emerging.

Below are the community issues that I have identified, based on the words and practices of the research participants. My analysis is presented in order of the frequency with which the topics were mentioned in my interviews and community discussions.

5.2.1 Drought

It was midday in the month of September. I was going to interview Mr Mau at 12.30 pm at his house. The sun was so hot that I wished I had not picked this time of the year to do my research fieldwork. It was the 2011 drought in Tuvalu. I pushed my dusty motorbike under a coconut tree's shadow. I looked up to check

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[34] Ethnographic interviewing is careful organise to elicit participants own perspectives rather than those external authorities or the researcher. Use of open-ended questions, rather than pre-structured questionnaires, allows people to present the issues that they themselves see as important and to explain meanings and connections that might not otherwise be apparent to the researcher. Though I am a Tuvaluan, I took pains to keep my own views separate from those of the people with whom I spoke.

that there were no brown coconuts that were ready to fall down onto my motorbike, and all I saw was just a coconut palm tree with pale, dry fronds. No coconuts, no sprouting flowers. As I looked down and toward Mr Mau's house, I saw him looking at me. He was laughing out loud. He chuckled, 'You worry too much about your bike's safety, but there is no coconut up there... only the sun.' Believe it or not, prior to the actual interview I had come to do, we spent more than two hours talking about the current and past droughts, scientific and traditional explanations of the causes of a drought, types of water tanks, ways of overcoming the difficulties posed by a drought, and impacts of the droughts on his family, neighbours, animals, vegetation, and his coconut palm tree. (Field notes, 2011, Funafuti Island)

Drought, or the shortage of water, is the most common issue that was mentioned by the research participants. The young, middle-aged, and older participants of both genders all mentioned drought, indicating water's significance to people's health and *ola lei*. During my major research fieldwork in the second half of 2011, a drought hit Tuvalu, particularly Funafuti, Nukulaelae, and Nanumaga Islands. By late September 2011, the government declared a state of emergency in Tuvalu as a whole. All the interviewees and community people with whom I informally conversed claimed that the 2011 drought was the most severe drought they had experienced in their lives. The impact of the drought on people's health, environment, and animals was apparent, and it was fresh in the participants' minds. People were drawn to talk about aspects of the drought, even if I did not ask. I believe that the situation that participants were experiencing was the driving factor that led them to talk about the shortage of water.

Nevertheless, I believe that Tuvaluans always bear in mind the fact that Tuvalu's main source of water is rainfall. They have to be cautious about water use as they are aware that rainfall is not guaranteed. Many times per year there is no rain for a week or weeks, causing people to worry about the quick decline in water levels in their water tanks or cisterns. Lack of water is an ever-present potential problem, as reflected in the inclusion in *Te Kakeega* II of strategies to enhance water storage (see Government of Tuvalu, 2005, pp.10, 23). Water shortage is also a constant concern for households. Hence, I believe that if I had done this research some other time, not during the drought, community people would have still mentioned water shortage as a potential challenge.

It was also interesting to see that most participants did not talk about 'climate change' (*mafulifuliiga o tau o aso*) as an important cause of, or in association with,

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droughts. Only the more educated people mentioned this, but the ordinary community people just spoke about the severity of the current drought and how it impacted on their lives and environment. The participants from less affluent settlements talked about their need for help from the government, specifically for a better water rationing system and more water storage tanks. There was an obvious desperation in the community to upgrade and build more water storage facilities, and to have readily available desalination plants to provide water.

Talking about water and the desire to have water storage facilities and access to clean water is consistent with the *Ola Lei* Conceptual Framework. Water is an important ingredient of personal hygiene and general cleanliness, as it is needed for cleaning and washing things, such as eating utensils, clothes, the household's interior, washing hands before meals and after using the toilet, and rinsing off salt water from roof gutters and other items. To have enough clean water is associated with cleanliness, readiness, food abundance, working hard, contentment, longevity, being fit and not ill, and being wealthy. It is deeply embedded in the *Ola Lei* Conceptual Framework. Water, like food, is essential to life and to achieving these many dimensions of *ola lei*.

In order to have water during a drought, one has to work hard, fetching water at a water ration spot or at wells every morning and afternoon. A wealthy family is possibly more able than a poorer family to afford to build or buy water tanks[35], buy water bottles from shops, and purchase water from the Public Works Department. Clearly, the issue of water shortage due to drought makes it difficult to achieve *ola lei.*

5.2.2 Lifestyle Changes

E lavea ne koe a te kese o te olaaga i aso nei mo te olaaga i aso mua? E iloa ne koe? `Kese `mao! `Kese a mea e fai i aso takitasi, `kese a meakai. Ko oko i te fakaaogaa ne tino a meakai palagi. Laisi, suka, kaapa-pulumakau...se ata-galo loa a te vaka pelaa, ko muimui valevale `tou tino me ko seai ne meakai i te sitoa mo canteens. Ei! Kae ko ika mo mei mo pulaka e masei? Kaleve? Te olaaga ne? Matou i aso kolaa, a te tamataene e faaika kae kake i aso katoa mo `kai a te kaaiga, sali kaleve kae too ki te umaga. A mea katoa e fai ki mafi...sasale, e kake, e fakapalu, e aalo...tela la a foitino e malielie loa. Kae nei, a tino ko fakaaogaa loa a pooti [kata]. E fitaa mana sasale ki te canteen, e fai loa ke isi se pasika-iti...

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[35] Every family (household) has a water-tank. The Government, through international aid, distributes water tanks (10,000 litres) to each household in Tuvalu. Families who can afford to build a bigger concrete water-cistern will do so.

Do you see the difference in lifestyle in the olden days compared to these days? Do you know? Big difference! Different things are done each day, different food. People mainly consume European food. Rice, sugar, corned beef... once a ship takes ages to arrive, our people complain about having no food in the store and canteens. What? How about fish, breadfruit and *pulaka* [local root crop], are they bad? Toddy? Life, eh? We, in those days, the young man fished and climbed every day to feed the family, cut and collected toddy and visited the plantation. Everything was done with manpower... walking, climbing, digging, paddling... therefore the people in the olden days had physically fit bodies. However, nowadays, people are mostly using boats [*laughs*]. They are even lazy to walk to the canteen – they need a motorbike. (Community Elder, male, Vaitupu Island)

The old man who gave this account was very emotional. He was anxious when describing the changes in lifestyle, particularly in terms of food and activities. This is mostly an issue for the older participants. The older people of the communities mentioned this 'lifestyle changing' issue, probably because they personally experienced the changes. They missed the food and physical activities that they had had in their younger days, while the younger generations' lifestyles are changing in front of their eyes.

Some of the older and young participants (including medical officers) acknowledged that some diseases such as diabetes are associated with this changing lifestyle. This piece of health information, i.e. that non-communicable diseases are associated with changing lifestyles, was mostly received by participants through health education, workshops, and programmes, and also through their own observations. Depending too much on imported food – such as fatty, salty, corned beef and 'fast food' such as steam rice, bread, crackers and sugar sweetened drinks – could worsen diabetes and other cardiovascular diseases (Coyne, 2000). One senior medical doctor stated:

...to me, the lifestyle of the Tuvalu people has a very big effect on their health… lifestyle factors such as diet... as well as not having enough exercise – physical activities – obesity… Diabetes and hypertension are very high here in Tuvalu, and I do believe that it is because of the lifestyle of our people, aye? (Senior Medical Doctor, PMH, Funafuti Island)

The senior doctor knew, through experience, that the increasing consumption of imported foods had contributed to the prevalence of non-communicable diseases in Tuvalu. Although Tuvaluans had known foreign processed food from traders and Tuvaluans who

worked in Banaba and Nauru islands,[36] they did not depend on that food until after independence in 1978 (Tisdell & Fairburn, 1983). This long-term and increasing dependence on imported food since the 1980s is likely to be a key contributor to the large number of people affected by diet-related diseases such as diabetes.

Moreover, motor vehicles and motorboats make movement and work easier and quicker, but depending on and using them too much will only cause other health problems such as obesity. Perhaps it is possible to collectively encourage community people to walk, use push bikes or paddle sometimes, instead of always using motorised transport, saving money and the environment at the same time as keeping fit. An element of fun and competition between groups might be helpful.

Lifestyle change in terms of preferring imported food to local food and depending on motorboats and vehicles gives 'happiness' (a key quality of *ola lei*) only to those people who consume imported food and use these vehicles. The current younger generation did not experience the lifestyle of the old generation firsthand so they are happy with the life they have now. As one youth stated:

> I could not imagine myself walking or paddling a canoe every day as a means of transportation. Well, it must be fun and tiring [*laughs*]... but I am also happy with the way we live now, you know... just kick your motorbike's crank and off you go to the shop... or cruising to get fresh air. (Youth, female teenager, Funafuti Island)

The youth testified that it is hard to turn back to the olden days' way of life. She highlights the point that 'happiness' is a superficial individual quality that has resulted from this lifestyle change. On Funafuti Island, riding motorbikes around the island is now a common activity, especially among younger people (Mellor, 2005). Both day and night, many young people cruise around the capital on their motorbikes; it is a way of entertaining themselves. Figure 5.1 shows some young people riding their motorbikes on the road on Funafuti Island.

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[36] Tuvaluans were recruited to work at the phosphate mines in Banaba and Nauru Islands. While they were away, they sent boxes of canned foods, particularly tubs of corned-beefto their relatives in Tuvalu when they could. They also brought stock piled supplies home when their contracts ended.

Figure 5.1: Youngsters enjoy riding their motorbikes, Funafuti Island, 2013.

Source: Courtesy of Melii Pelosi.

This common activity of riding motorbikes around the island – in pairs, groups, or as an individual – is a new and negative way of life in the eyes of older people. Laughing and enjoying the fresh cool air while riding on motorbikes are characteristics of happiness and fun for the young. The road is now a new place for younger generations to socialise and meet others.

5.2.3 Lifestyle Change and Health: a Focus on Diabetes

Every Tuesday afternoon, diabetic and hypertension patients are checked at Princess Margaret Hospital. About 20 to 24 of the 230 total documented diabetic and hypertension patients on Funafuti Island are selected to be checked each week. As well as checking and treating the current patients, clinic staff also provide health talks to those patients before they come individually to the consultation room for checks on their blood pressure, blood sugar, weight and cholesterol level. After the health talk one Tuesday, I slipped into the consultation room to be with

the medical staff members who would check and interview the patients. One by one, diabetic and hypertension patients were called in, to take their blood pressure, measure their body weight, check their cholesterol level, and do some consultation about blood sugar and paperwork. Most of the patients were elderly people, between the ages of 50–80+ years old. However, the nurse told me that according to their records, diabetes and hypertension are now hitting the younger people as well. (Field notes, 2011, Funafuti Island)

Zimmet and colleagues found that Type 2 diabetes was rare in Tuvalu prior to 1960 (Zimmet & Whitehouse, 1981; Zimmet, et. al., 1977). One senior medical doctor described the significant rise of non-communicable diseases in the last decade, particularly in the period between 1999 and 2011.The doctors and nurses whom I interviewed mentioned that non-communicable diseases (NCDs), including diabetes, hypertension, and cardiovascular diseases are now the most common diseases in Tuvalu. All the participants who talked about NCDs, particularly diabetes, spoke about the danger of this disease, and how they knew that diabetes is spreading.

Our team's analysis of diabetes deaths for all of Tuvalu strongly supports these perceptions and statements. In the decade between 2004 and 2013, diabetes was among the top causes of death in Tuvalu along with cardiovascular diseases and liver disease: there were 37 deaths in which diabetes was recorded as one of the causes. In the previous decade, 1994 to 2013, diabetes was noted as a cause of death in 15 cases (Tuvalu Department of Health statistics, raw data, 2014). That is, diabetes as a recorded contributing cause of death has doubled over the last two decades, which is greatly disproportionate to the increase in the population. While some of this may be due to record-keeping changes and more accurate diagnosis, it is likely that there has been a steep increase in deaths from diabetes.

Students in primary schools voiced their concern about this new disease. As one student stated:

My grandfather and grandmother were all diabetic. I am also aware of some neighbours and relatives who got diabetes. Also, I often see that man with an amputated leg... I forgot his name. Uhmm, it is a dangerous disease, so I just don't want to get that kind of disease... (Year 8 Student, female, Nauti Primary School)

Because the Tuvaluan communities are small, diagnosed diabetic patients are often known to the members of the community; hence, the students and community people noted

the increasing number of diabetic patients in communities. They had heard radio programmes about diabetes, and listened to people talking about how it had affected their lives. This familiarity made it one of the issues most commonly mentioned by the community people, especially by diabetic and hypertension patients, on Vaitupu and Funafuti Islands.

All diabetic patients whom I interviewed strongly stressed that the prevalence of diabetes is a dangerous and serious threat that everyone in Tuvalu must be cautious of. They are worried and in pain; thus, they warn relatives against getting the disease themselves. Usually, however, their warnings focus on the painful symptoms they experience rather than on lifestyle and dietary changes that would protect others from the disease.

Diabetes is common in many parts of the developing world and in indigenous and poor populations in well-off nations such as Canada, Australia, and New Zealand. Disruption of family life is often cited as one of the contributing causes as in the ethnographic fieldwork conducted in an Aboriginal community in Melbourne, where Thompson and Gifford (2000, p.1463) found that the Aborigines see diabetes as the result of living a life out of balance.

> The increasing isolation and disconnection from the family occurring in the younger generations of Melbourne Aborigines is symbolized by their greater intake of fast-food and the absence of the young during the family gatherings for home-cooked meals. This is yet another explanation offered by Aborigines for the apparent increase in diabetes in the younger generations.

This explanation applies also to Tuvalu, in the sense that time-honoured ways of procuring and preparing the family's meals have been disrupted and younger generations prefer imported food to local food. The imported food seems to be tastier and easier to get than local food, which requires hard work and time to prepare. This means that Tuvaluans tend to live a more sedentary lifestyle and consume imported foods, such as corned beef, biscuits and other processed food. Dependence on imported foodstuffs means that Tuvaluans are disconnected from their land and traditional way of living; hence, this is living a life out of balance according to older Tuvaluan values. Family and community systems in Tuvalu are, however, relatively resilient, and youth usually do partake of family meals.

Diabetes directly affects the health of the patients and their families. Diabetes and other NCDs undermines key qualities of *ola lei*, such as being physically fit and not ill, longevity, and happiness. These NCDs affect individuals, families, and the whole community, and threaten the capacity of health services to cope.

5.2.4 Inequality in Access to Resources

Au e talitonu me i te tino ka isi loa ne ana sene... e see mativa i mea tau-sene, kaati a te tino tenaa e `lei loa a tena olaaga ne? Me i te maumea ko te ola `lei tenaa ne? Kae mativa la koe... penei mo matou nei ko toku avaga loa e galue i avanoaga konei fua fakatuutuu-fale. Se taitai loa o lava a sene mo tausi a te olaaga, ia ko togi foki o pili konei o te iti... a manakooga konei e mafai o faka`lei atu i ei a te olaaga e faka`naa katoa ki te mea pukupuku ne? E maua la maifea a sene? E maua manafai e isi sau galuega ne? Kilokilo atu foki la nei, ko paeaki loa a Funafuti nei i tino e seai ne galuega...fakaalofa `ki tatou me fia galue la a tino ke maua ne olotou sene, kae seai la ne avanoaaga...

I believe that when a person does have money... they are not poor in terms of money; perhaps that person has a good life, aye? Hence, richness is good health, aye? But when you are poor... like us, only my husband works, only in work opportunities in building projects, there is not even enough money in order to live life, also these electricity bills... these requirements that can improve life also dependent on the 'circular thing', aye? And how can money be earned? It can be achieved if there is a job, aye? It is also now seen, Funafuti is overcrowded with unemployed people ... poor us, because people want to work in order to get money but there are no opportunities... (Mother, from an outer-island, who resides at a poorer settlement. Funafuti Island, 2011)

The third *Sentinel Site Monitoring Report* for Tuvalu (Government of Tuvalu, UNICEF & UNDP, 2012, p.8) which is part of a project to track the effects of the Global Economic Crisis on developing nations, acknowledged that 'the incidence of extreme poverty is non-existent in Tuvalu', but suggested that it was widely accepted that the concept of poverty could be applied where people are disadvantaged and experienced hardships. The authors of the report calculated that in 2004, in the lowest quintile by income, 16.5 percent of households were living under the nationally-established Tuvalu poverty line, and that this percentage had increased to 19.7 percent in 2010. The concepts

of disadvantage and hardship seem useful ways to approach the issue of wealth and inequality Tuvalu.

The interrelation between monetary wealth, employment, and *ola lei* was seen by participants as an important issue. Being less well-off, particularly in terms of money, was considered an issue mainly by poorer participants. Money is needed to settle bills and buy food, such as sugar and rice, from stores as there is an increasing dependency on imported foods, particularly on Funafuti Island. On Funafuti Island, most residents are not landowners, and thus have little access to local food. It is hard to cultivate vegetable gardens due to a lack of space in the crowded capital. Beyond the village area, the ground is full of gravel and compacted rocky areas. Population growth in Funafuti Island has led people to build houses in areas susceptible to flooding by seawater, especially during high tide. Furthermore, 'borrow pits' excavated during World War II are scattered throughout what are now residential areas, further reducing people's ability to grow a household garden in the capital. To grow a garden on Funafuti Island, one also has to have money to buy compost and fertilisers, put up a fence, or perhaps make a raised garden to avoid seawater during high tides[37].

According to a survey by Singh & Hemstock (2013) on Tumaseu village[38] on Vaitupu Island, about 50 percent of Tumaseu respondents have an annual household income of less than US$1025. The main sources of income include: paid employment as government or private workers; sale of products such as *sului* (local cigarettes), alcohol, and fish; land lease; businesses such as shops and canteens; and remittances. The remittances come from family members who work overseas as seafarers, fruit pickers in New Zealand and Australia, and also from families who live and work in New Zealand and other countries. Some people in outer islands receive money from family members who work in the government and private sector on Funafuti Island. Remittances from seafarers are now declining due to the reduction of recruits of Tuvaluan seafarers. A family in Tuvalu may receive AUD$100–AUD$300 per month from a family member who works on overseas liners. However, this income ends when the seafarer's contract finishes after one year or two years.

Figure 5.2 indicates that people in the rural outer islands are poor in cash terms. The richest 10 percent of community members have ten to twenty times as much

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[37] For most houses on Funafuti Island, particularly those around the lower swampy areas, seawater often flooded them during high tides.
[38] This is one community that I also covered in my fieldwork.

household income as the majority of the households. But on the outer islands, families still practice subsistence farming and fishing and therefore need less cash. From time to time, depending on the availability of money, they buy foods from stores, and they need money for other items too. But it is the landless people on Funafuti Island who are most dependent on money.
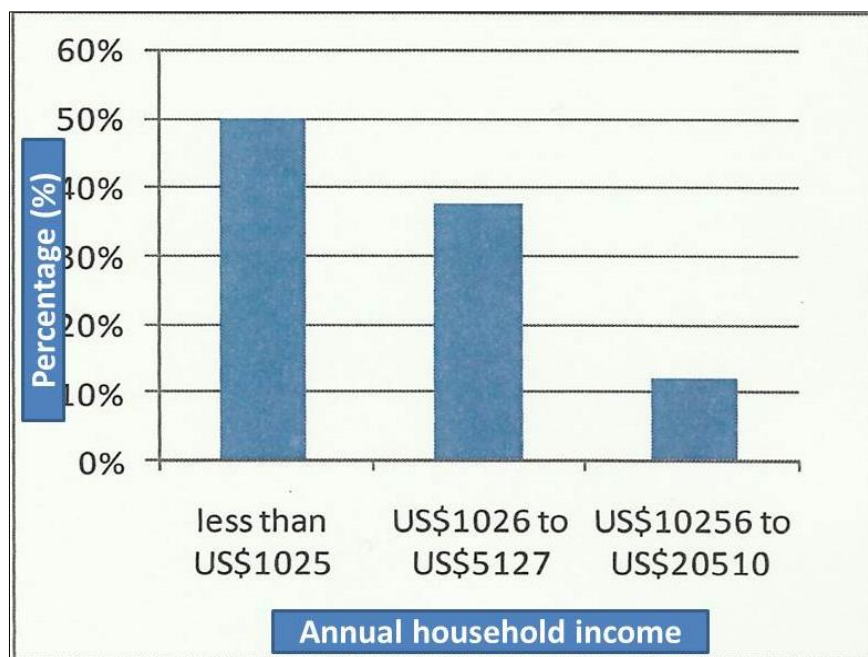
Figure 5.2: Annual household income for Tumaseu village, Vaitupu Island, Tuvalu in year 2012.

Source: Singh & Hemstock, 2013, p. 5.

It is important to note that it was not only poorer unemployed participants who mentioned the issue of being cash-poor. There were also employed government officers who talked about not having enough money to sufficiently support their families. Most working people in the government[39] are in the lower half of the salary structure of the government, i.e. between levels 6 and 10. Table 5.1 shows the general salary structure of the Tuvalu government.

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[39] The government is the main provider of employment in Tuvalu.

Level	Approximate Annual Salary (AUD$)	Post/ Job Title – Random Example
1	$23 379 - $25 747	Secretaries of Ministries, Attorney General, Auditor General, Commissioner of Police
2	$22 335 - $23 004	Senior Assistant Secretary, Some Directors
3	$20 904 - $22 042	Some Directors, Some Medical Doctors, MSS Principal
4	$17 017 - $19 933	Assistant Secretaries of Ministries, MSS Head of Departments
5	$13 841 - $17 562	Senior Auditors, Economic Adviser, Architect, Nutritionist, Police Inspector
6	$12 072 - $15 390	Foreign Affairs Officer, Shipping/Port Officer, Sergeant (Police),
7	$10 559 - $13 314	Personal Assistant to Ministers, MSS Librarian, Handyman,
8	$9 172 - $11 737	Electrician, Higher Executive Officers (HEO),
9	$6 619 - $10 145	Clerks, Clerical Typists
10	$5 138 - $7 244	Driver, Labourers, Night Watchmen

Table 5.1: Approximate salaries and random examples of jobs in each level of the Tuvalu Government Salary Structure.

Source: Data from Tuvalu Government 2014 Establishment Register, cited in Government of Tuvalu, 2013.

According to the job register of the government (see Government of Tuvalu, 2013), there are about 988 established workers in the government, and about 80 percent of the total employees are between levels 6 and 10, i.e., between AUD$5138 and AUD$15390 per year. The incomes of these workers are low; thus, it is hard for them, especially those on Funafuti Island, to save money. Most, if not all, government employees are financially struggling because of the low income, which cannot meet their many community and family obligations and the need to purchase expensive foods in stores. Ironically, people in any government job are seen as economically advantaged, and there are many unemployed people who envy even this limited income.

The impact of being economically poor is so great that it made one participant emotionally share, 'I sleep worried and wake up worried.' There is an association between being economically poor and stress. Members of families, particularly the family heads, are stressed as they worry about how they can obtain food from stores, pay their bills, or fulfil their community obligations. We can see clearly here that being economically poor directly disturbs the family's *ola lei*. We need money to buy essential needs such as food, especially in an environment like Funafuti Island, where we cannot rely on subsistence farming for sustainable living. On the outer islands, money is also still needed because not all of people's economic needs are satisfied by subsistent farming and fishing.

Another important issue that goes hand-in-hand with being cash-poor is unemployment and a lack of job opportunities in Tuvalu. This issue was raised by unemployed youths and some concerned parents on Funafuti and Vaitupu Islands. According to a social data report prepared by Esela (2005) on behalf of the Ministry of Home Affairs and Rural Development, Tuvalu has a high rate of unemployment with more than ten percent of the economically active unemployed in 2002. According to the Sentinel Site Monitoring (SSM) Report[40] (Government of Tuvalu, UNICEF & UNDP, 2012), for every person in paid employment from the sample of the poorest households, 15 others are dependent on him or her. Furthermore, only about 24 percent in the working age group are in paid employment, and only 41 percent of households have a member in paid employment. The high number of unemployed youths and young people on the outer islands and in the capital was seen as a contributing factor to the economic poverty of some families.

5.2.5 Burden of Contributions

Giving money or other materials such as mats, crops, and pigs to church or communities is a common practice in the Pacific Islands, such as Samoa (see Thornton, Kerslake & Binns, 2010; Macpherson & Macpherson, 2009), and Tuvalu. However, many community people see this traditional practice of giving as a burden. Before western contact, these obligations to contribute to communal endeavors and to share resources with relatives constituted the local economy. As Chambers and Chambers (2001) described, westernisation has eroded the sharing base economy, and 'development' efforts in the last 40 years have provided Tuvaluans with an alternative economic system prioritising entrepreneurship by individual and nuclear families. From this new economic perspective, the need to give 'contributions' can only serve to inhibit small business development. I will discuss this disjuncture in more detail in the next chapter.

During my fieldwork, I discovered several participants' views on contributions to communities or church. One particularly disappointed woman found our interviewing session to be a chance to share her views on community obligations:

> *...Koe e iloa ne koe, ko too uke a mea-fai i te fenua nei! Ko mea a fafine, ko mea a*
> *ituuala, ko mea a lotu. I niisi taimi ko mea a fakapotopotooga. Ikaai mea nei ko*

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[40] Note that the SSM report is about a sample from the bottom quintile, the lowest 20 percent in terms of income, not the whole population.

oku manatu loa mo taku kilokilooga ne? E ola `lei la pefea a kaaiga ona ko te uke o tauliaga e fai? Matou penei kolaa e seai ne galuega, ko te `saga loa o galue i omotou malosi ke ola a te kaaiga, kae poi atu nei ko fai mai me e isi ne tautino-sene taki lua-sefulu talaa i te fafine. Toese atu loa a muu sene ne fakatuputupu atu ne? Nei a te fono lasi a te Ekalesia e fai i konei i te fenua, tapa! A fafine mo kaaiga katoa ko se `nofo loa i te fakatokatokaaga ki te tauliaaga lasi tenei. Ko `lukiiga sene mo papa mo mekei... uke! Uke a mea e `tau o fai ne? Kae ko te mea e faka`kata i ei e Tufoua me tatou la e ita fua penei, kae se mafai laa me ia tatou e fai loa a `tou tauliaga ona ko tuu mo aganuu... te alofa mo te loto ki te fenua ne? Telaa la ko lafo loa me ne pefea a te fitaa mo te mativa, e kausaki loa ke isi sau mea-`luki ne? Aiiiii a ko te vaa`lea foki o tatou! [kata].

...You know what, there are far too many communal activities on this island! Communal activities and contributions for women... for the village... for the church... and sometimes for the organisations. No, well, this is just my own perception and view, aye? How then can families live well with these many commitments? People like us who do not have jobs, just have to work using our energy in order for the family to survive, and all of a sudden they'll say that $20 contribution per woman is required. The only money saved will be lost aye? Now, the Ekalesia [Tuvalu Church] conference is coming up on the island too. Oh! Women and all families are in full preparation for this commitment. Money collection and mats... heaps! Heaps of things should be done, huh? But the funny thing, Tufoua, is that even though we are tired of all this, we still do our responsibilities due to customs and traditions... it is love and loyalty towards the island, aye? Therefore, we still give despite being tired and poor; we have to struggle in order to have a contribution, aye? Ohhhhh and how just stupid are we! [*laughs*] (Mother in her late 50s, Vaitupu Island)

This is a common view from participants, particularly the women and male heads of households (*matai-kaaiga*). The women are expected to support communities' functions and activities, which is an extra burden on top of their expected roles in their families. The *matai-kaaiga* also mentioned this issue as they are the very people who have the sole responsibility to have money or other materials ready if demanded for communal functions. The shame of not contributing will always be great on the heads of families and women. In many cases, families have to work harder to ensure that when they give money – for example, to the church – there is still enough money left to buy food and children's

necessities. Of course, when the people contribute to build a community hall, for example, they know that the hall is a useful asset for them and their children in the future. Nonetheless, this responsibility weighs heavily on women and *matai-kaaiga*.

The research participants who talked about this issue sensed the negative financial impact of such contributions on their lives. In the meantime, the Vaitupu people are raising funds – a target of AUD$1 million – for the 2016 general meeting of the *Ekalesia Kelisiano o Tuvalu* that will be hosted by Vaitupu Island. These biennial church convocations bring an influx of several hundred Tuvaluans from the capital, other outer islands, and from overseas to the island hosting the event. In addition to raising money, they are expected to have materials ready– a key quality of *ola lei* – such as crops, pigs, mats, and other items. Vaitupuans living overseas and in the capital are expected to contribute as well. This is a big event; hence, community people have to be prepared and work hard.

Too much demand on families for contributions to church and community takes away wealth (in terms of money and local materials) from families. But these community obligations encourage members of those families to work harder (a feature of *ola lei*) in order to get money, mats, crops, and other items to contribute. Moreover, a person who does not fulfil his or her community obligation will not have a harmonious relationship with others, because he or she is labelled as someone that does not 'have a heart for the island/community'. Giving to the community enhances the linkage of those givers to the community. I believe that this issue was strongly stressed by the participants, especially on Vaitupu Island, due to the fact that the participants were in the process of raising funds and preparing local materials. Making contributions to the community and wider family is not new. So, if this research was done at another time, I believe the 'burden of contributions' issue would still be mentioned by the participants. This also applies to people who reside on Funafuti, since they too have island and church communies and therefore community obligations.

An interesting thing is that most community people talked negatively about it, but ended up saying that they could not do much about it as 'that is our culture and life'. Some women did not show negative views about contributions to communities. They fully supported these contributions, not because they can afford it, but because of their loyalty and love for the island and community.

5.2.6 Urbanisation

Urbanisation is also an issue that was voiced mainly by research participants on Funafuti Island. Funafuti has seen an influx of migrants from the outer islands (Mortreux & Barnett, 2009) and now almost half the population of Tuvalu is concentrated on this one island. According to Connell (1999, p.12), 'No country in the Pacific region has experienced more recent or more rapid internal migration and urbanisation than Tuvalu.'

Two main groups of people talked about this urbanisation process and how they see it as an issue: the local Funafuti Islanders and some government workers.

In one of the summits that I attended during my fieldwork, one of the elders from Funafuti Island brought up his concern about too many people from the outer islands coming to Funafuti for no reason. In his opinion, such people should go back to live on their home islands. As I listened to this statement of concern from this local Funafuti elder and leader, I realised that the Funafuti people must have witnessed some very negative effects of urbanisation on their vulnerable land and limited resources. A couple of ordinary people from the Funafuti Island community also shared their concerns about the impacts that urbanisation has on the island's marine resources and land.

It was not just the Funafuti people who mentioned the issue of the increasing number of people on Funafuti. People from the outer islands who work on Funafuti Island are also concerned about the large number of people on Funafuti, especially the concentration of young people. One outer island community leader on Funafuti said: 'Some young men just came here and became dependants... a burden to families here'. One of his solutions to this issue was to negotiate with his island's leaders to return these boys to their island to work on their families' lands. However, people are also drawn to the capital for medical care, further education, and to travel to other outer islands and overseas.

This community leader saw that the large number of people moving from the outer islands to Funafuti Island caused more pressure on the household breadwinners and overcrowded houses. However, to accommodate family members from the outer islands in one's home on Funafuti Island was the honourable and expected thing to do. Providing hospitality to even distant relatives is a key responsibility, and heads of even very crowded households in the capital find it impossible not to make room one or two more new arrivals if needed. *Ola lei* is not about individualism; it is almost impossible to talk about *ola lei* without considering the family and community. Harmonious relationships between family members or community people are essential to the *Ola Lei* Conceptual Framework. Hence,

this aspect of *ola lei* is a contributing factor to the practice whereby working people on Funafuti Island accommodate and look after family members who move from the outer islands to Funafuti Island.

5.2.8 Sea Level Rise

The rising sea level in Tuvalu is associated with climate change, and this has been the subject of several studies (see Connell, 2003; Hunter, 2004; Farbotko, 2010; Farbotko & Lazrus, 2012). Some studies (for example Becker et al., 2012) found that the sea level on Funafuti Island is increasing. In their anthropological study in Nanumea Island, northern Tuvalu, Chambers & Chambers (2001) also wrote that one of the challenges of the twenty-first century in Tuvalu is the rising sea levels.Other studies, on the other hand, argued that the rate of sea level rise in the Tuvalu region is not accelerating, as imagined by the community (Eschenbach, 2004; Aung, Singh, & Prasad, 2009).

However, during my fieldwork, I came across only a couple of participants who actually mentioned sea level rise as an issue. One participant on Funafuti Island was proudly talking about her small vegetable garden outside her house, when she suddenly snapped, 'Tufoua, is the sea level really rising?' I replied that some studies said so, and I queried why she had asked that. She said:

> I am really worried if it is true. Some people said that we may evacuate to some other foreign lands. Well, it will be a chance to put our feet on new lands, aye? [*Laughs*] I think that's why my cabbages are not growing well... Do you think I should grow my cabbages on a raised platform? (Mother in a poorer settlement, Funafuti Island)

The participant learnt about sea level rise from climate change awareness programmes on the radio. She took that knowledge and presumed that her garden was not growing well due to soil salinity, which results from sea level rise. I saw that this participant and others who talked about sea level rise were worried about the prediction that Tuvalu will be submerged under the water's surface. I wonder if it is necessary to alarm community people that they or future generations will be evacuated because Tuvalu will be no longer be habitable?

Issues such as sea level rise were originally revealed by international studies. It has become a remarkable issue for Tuvalu because of the numerous studies, and awareness programmes given to community people through radio programmes, workshops, and

schools. The issue of sea level rise is not an element of the *Ola Lei* Conceptual Framework, but working hard to prepare to address the effects of sea level rise or soil salinity, for example by making a raised garden, is a feature of *ola lei*. Displacing of Tuvaluans to other countries, if the sea level rises above Tuvalu, is a psychological issue that worries some participants, if not for themselves but for the sake of future generations and the maintenance of their cultural and political identities.

5.2.9. Pigpens

In terms of food, the pig is the main animal that is associated with Tuvaluan culture. In Tuvalu, nearly every family has a pig farm. Pigs are mainly raised for important events such as weddings, funerals, and community festivities. The 'most common type of subsistence activity [in Tuvalu] is looking after livestock' such as pigs and fowl (Esela, 2005, p.46). According to several participants, there has been an obvious increase in the number of pigs on Funafuti Island in the last 10 to 20 years. This is possibly caused by the increasing number of people there due to population growth and urbanisation. Currently, most families raise pigs to be sold to the increased number of Chinese restaurants in the capital. And, of course, pigs are farmed in preparation – a feature of the *Ola Lei* Conceptual Framework – for cultural activities such as weddings, funerals, and community contributions.

However, the increasing number of pigs means that people have to build more pigpens. Figure 5.3 shows the line of pigpens on the other side of the airstrip, on Funafuti Island, and Figure 5.4 shows some pigpens that are right next to some residences.

Figure 5.3: Line of pigpens on Funafuti Island, on the other side of the airstrip.

Figure 5.4: Some pigpens are too close to residences, Funafuti Island.

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These pigpens attract many flies, creating a threat to the general hygiene of the nearby residences. Occasionally, the Department of Agriculture tries to battle against the increasing number of rats around these areas. In some instances, as in Figure 5.4, pigpens are just too close to residences for good hygiene and a pleasant environment. The issue of pigpens – i.e. too close to residents, and possibly causing diseases – makes it difficult for residents and the community to achieve *ola lei*. This is the main issue that the Funafuti Island Council (*Falekaupule*) tried to address.

The elected councillor (*kaupule*) who looked after health issues on Funafuti Island energetically told me that he was going to spearhead a campaign to clear away all those pigpens that are located along the main road and near residences. This proposed plan was opposed and questioned by many people, especially the pigpens' owners. They said, 'Where can we move our pigpens to?' and 'Will the *kaupule* compensate the money that I have spent on building concrete pigpens?' This councillor was also questioned by some people about whether this cleaning campaign was only implemented because of the royal (William and Kate's) tour to Tuvalu.

> You know, sometimes people just pose questions that would challenge your ideas... but I know that I don't intend to remove the pigpens as a preparation for the royal visit. No! I am doing this because I know it is bad for the health of the people. Who wants to live beside muddy and smelly pigpens? I think it is my responsibility as a *kaupule* to remove these pigpens, no matter what they think. (Kaupule, Health Portfolio, Funafuti Island Council)

Removing pigpens is a way to achieve cleanliness, which in return achieves *ola lei* as well. The question of where to move the pigpens is another dilemma. This is because pigs are important in terms of culture in Tuvalu, so it will be an issue if the pigpens are completely cleared without any other land assigned to re-allocate them to. Of course, there is more to this: the disposal of effluent and materials such as corrugated tins, timbers, metal fences, and other items that were used to construct those pigpens is another problem when removing the pigpens.

On Vaitupu Island, all pigpens are located out of the main village; hence, this is not a major issue. There is a by-law that restricts all people from keeping fowl and pigs in the main village. However, one of my participants on Vaitupu Island, who is a *Kaupule*, said that he had ordered the removal of some pigpens, which were located 200 to 300 metres

from the primary school[41]. This is because the students could smell an unpleasant scent from the pigpens when the wind blew from that direction.

5.2.10. Alcohol Misuse

Today, as usual, I was at a game of local cricket. I was sitting beside an old man under the breadfruit tree – a spot where our team usually gathered and was stationed during the cricket games. It was a good opportunity for me to ask the old man about the game of cricket in the olden days. I loved listening to the old man's great stories about his days' best bowlers, batsmen, catches, the united teams' spirit, and some stories about the use of black magic during the cricket games. Our conversation was interrupted by a loud bang that came from a house behind us. We quickly turned around to check what was happening, and there we saw two young men fighting, while four to five other young men were trying to stop the fight. They were all drunk.

As some men from our team tried to calm the fight down and told the drunken men to go away, the old man shook his head with disbelief. He was fuming, 'I just could not believe this! These young men just drink alcohol behind us without joining this cricket game. They should join this cricket game because they are men from this island, aye?! This is shameful! You know, in those days we also drink alcohol, but not like that! We drink at the bush, far away from the village without coming closer to the field when the men played cricket because it is shameful!' He looked at me, and I saw in his eyes that he was seriously unhappy. 'You know, Tufoua, in those days, drinking alcohol was something that was done in the right times, but these young men just drink alcohol at times that are not right. Some even drink alcohol on Sundays! They drink every time, then just sleep all the time because they have these hangovers... a young man must fish, provide food for the family... come to participate in community activities but not drinking until they can't control themselves and end up fighting, and make noises that disturb the village! Big change!' The old man talked for a very long time on this alcohol abuse issue. It stopped when I was called to bat. (Field notes, Vaitupu Island, November 2011)

There were three negative outcomes of this alcohol abuse issue that the old man talked about. Firstly, drinking alcohol and not attending communal activities such as the

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[41] The island's primary school is located beyond the main village's border.

game of cricket or construction of a community building. I remember one time, during a young men's game of cricket, when two drunken male youths crossed the playing field, on their way to find more alcohol. The men stared at them with anger. Then one of the men crossed the field to meet the drunkards, and angrily ordered them to return to their homes. The two youths resisted; then, suddenly, the man slapped and punched the youths. They backed off, and walked back to their homes. Many other men who were watching the drama smiled and sighed, '*kaitoa*', which literally means, 'they deserved the punches'.

The main point here is that in the eyes of community people, 'consuming alcohol and not attending communal activities' is alcohol abuse. People in the community get very angry with those who do not attend communal activities simply because they are drinking alcohol. It is better if people consume alcohol and attend the communal activity, as long as they control themselves. This does not mean that attending community functions drunk is alright; on the contrary, it is quite unacceptable. It is important to note that it is rare to see women drunk on outer islands. This is because in the past it was shameful for a woman to drink, and that cultural value is still strong in outer islands. However, women now commonly drink alcohol on Funafuti. This is probably due to the existence of bars and the exposure to western culture, with Funafuti being the gateway to modernisation as the capital of Tuvalu. However, despite this, women are still careful not to be seen drunk in public on Funafuti.

The second negative outcome includes consuming alcohol and not fulfilling family roles. For the old man, alcohol is misused when a person consumes alcohol and fails to fulfil his or her roles in the family, such as fishing, feeding the pigs, cutting toddy (Figure 5.5), and other chores.

Figure 5.5: Cutting toddy, a chore that a man does in the mornings and afternoons. The toddy juice (*kaleve*) is for drinking and also an ingredient for some local dishes. It can be fermented to produce alcohol (*kamagi* or *kao*).

It is common to hear family elders of both genders scold their younger relatives for failing to perform their chores due to a hangover. Being absent from family evening devotion or collective works at a *pulaka* plantation due to drinking alcohol is also labelled as alcohol misuse and a bad practice.

Last but not least, consuming alcohol and causing noise or fights that disturb the peacefulness of the community and family is also considered alcohol abuse. Of course, peacefulness (*filemuu*) is a key quality of *ola lei*; thus, maintaining that peacefulness is an important aspect in communities. On Vaitupu Island, for example, it is not permitted to make unnecessary noise after 10 pm within the village. Drunkards who shout and fight in the village after this time will be arrested. Peacefulness and harmoniousness – both key qualities of *ola lei* – of the community are often disturbed by drunken people, and thus it becomes an issue for community elders. Moreover, Vaitupu Island imposed a rule that no one is to drink alcohol on Sundays. The island's policemen/guards[42] patrolled the island on each Sunday to check if there are men drinking. Those who were caught drinking on

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[42] The island's chiefs selected two tough local men to become the island's policemen. They worked under and were paid by the local government (*kaupule*). In fact, the island has four other actual policemen: 2 police constables and 2 appointed assistant police constables.

Sundays were brought into the meeting hall (*falekaupule*) to be rebuked directly by chiefs and elders – a very shameful measure. This indicated that the elders realise that alcohol abuse is becoming an issue, as they are the ones who decided on island matters.

As I discussed in Chapter 3, control of oneself is an important aspect of Tuvaluan values. One of the effects of drinking too much is the loss of this control and a loss of judgement about how to act correctly according to the intricate network of respectful relationships intrinsic to Tuvaluan kinship relations. Alcohol therefore has culturally specific negative effects in Tuvalu.

On Vaitupu Island, there are no liquor outlets. The main form of alcohol is *kamagi* or *kao*, a local alcohol that is made out of fermented toddy. Home-brewed alcohol is not allowed according to the law, but there are boys secretly brew their own alcohol using ingredients such as sugar, yeast and toddy. In addition, on many occasions, young men got their bottles of alcohol, such as whisky or wine, from their relatives and friends on Funafuti Island. Even if they themselves do not drink, travelers returning from overseas usually feel obligated to buy a bottle of duty-free alcohol to give as a gift to relatives or friends.

Negative consequences of alcohol misuse occur on Funafuti Island. In fact, it seems that alcohol abuse is worse on Funafuti Island because there are more people residing there, as well as several (eight in February 2014, according to Funafuti Island *kaupule*) licensed liquor outlets and individuals who sell fermented toddy. One woman whom I interviewed on Funafuti Island also saw alcohol as an issue and voiced her concern:

> ...especially on the weekends, you can see men and sometimes women drinking alcohol in the bars or sometimes along the road under some trees. I fear for my safety and my children's safety because there are so many drunken people on the weekends and we never know they can punch us or hit us with their motorbikes. You know, it is now not safe to sleep on the airstrip[43] because sometimes drunkards may ride their bikes on top of you. In those days, Funafuti was safe but now one has to be careful when going out at night times during weekends because there are so many drunkards. (Elderly woman, Funafuti Island)

It seems that there is fear, especially among women, that they may become victims of the reckless drunkards' actions. The peacefulness (a key quality of *ola lei*) that many

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[43] Because planes come only twice a week, in the afternoons, it is safe to sleep on the airstrip which normally has a pleasant, cooling breeze.

Tuvaluans hold as their country's trademark is now beginning to fade due to alcohol abuse. According to the 2005 Social Data Report (Esela, 2005), most offences are alcohol-related. Of course, there are other factors, such as urbanisation, that interrupt the peacefulness of communities, but according to many elderly participants alcohol misuse is a major issue that is associated with violence and accidents in the communities.

The repercussions of alcohol abuse, such as causing conflicts and fights, injuring innocent people, and interrupting peacefulness, affect the *ola lei* of community people. Overuse of alcohol is also a factor in hypertension and cardiovascular diseases in general, in diabetes, liver disease, tuberculosis, injuries, and other health-related problems. To maintain peacefulness, harmony, health, and safety within the community, the issue of alcohol abuse should be considered seriously.

5.2.11. Bingo

There were seven bingo businesses[44] on Vaitupu Island in 2013 and four on Funafuti Island. All these bingo businesses are owned privately by families. In order to operate a bingo business, the owner has to register and license his or her business at the *kaupule* (local council). Table 5.2 displays data on bingo businesses on Funafuti and Vaitupu.

	Vaitupu Island	Funafuti Island
Number of bingo businesses	7	4
License fee per year	AUD$100	AUD$150
Approximate expenditure per bingo game	AUD$800–AUD$1000	AUD$1000–AUD$3000
Approximate money spent by player	AUD$10–AUD$20	AUD$20–AUD$50

Table 5.2: Some data in relation to bingo businesses on Vaitupu Island and Funafuti Island – 2012/2013.

Source: Vaitupu and Funafuti Islands *Kaupule* (local government) and Field notes, 2014.

The number of bingo businesses indicates how common and well-liked this gambling activity is in Tuvalu. Normally, on Vaitupu Island, the bingo games operate on Monday, Tuesday, and Wednesday nights from 9–11pm. There are also bingo games on Thursday and Friday afternoons (from 3–5pm) and evenings (9–11pm). There is a timetable that schedules which bingo business runs on which day and time so that there is

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[44] Vaitupu Island has the highest number of bingo businesses in Tuvalu. On Funafuti Island, the capital, there are four bingo businesses. Nui Island is to the best of my knowledge the only island in Tuvalu which still bans bingo businesses on its shores.

only one game on at any one time[45]. Every week day there is a bingo game. According to one participant who is a bingo-goer and also an assistant usher in one of the bingo businesses on Vaitupu Island, normally around 70 to 100 people attended bingo games, and a player needed to have $10 to $20 for each bingo game. The bingo business can make a profit of around AUD$100 to AUD$300 per bingo game, depending on the number of attendees. On Funafuti Island, the costs – for example, for the jackpot – of the bingo are higher; hence, a player requires $20 or more per night of bingo. There are more bingo-goers on Funafuti Island than Vaitupu Island, despite the lower number of bingo halls, as there are more people on the capital.

Bingo becomes an issue when players are addicted to the game, and waste their time and money. One participant stated:

> *Taku mea loa e matea i Vaitupu nei telaa e lasi `ki loa a tena pokotia ki te ola `lei o faafine ko te bingo mo te `suu. Au loa ka kilokilo, e kese atu foki loa a loto `lasi o fafine Vaitupu i aso kolaa seki ai ne tafaoga-tupe penei mo te bingo mo te `suu. I aso kolaa, e fai atu a tusaga-fai kae tali mai mo te fiafia. Kae nei, seai... e fai atu a tusaga-fai kae fakafiti mai. Faigataa faigataa. Kae ko te fakalavelave e lavea ne au i fafine konei e fiafia o bingo, se lavea ne latou a te luusi o te tafaoga tenei e fai ki sene a te fafine tootino ne? Niisi taimi ka se lucky koe, e mafai loa o luusi tau $20. Luusi `ki! Au ka kilokilo loa, tenei a te tafaoga e fakaalofa `ki a fafine Vaitupu. Kae aatea a te tokoukeega o fafine e seai ne galuega, telaa la e fakaalofa me luusi ki loa a olotou sene ki tafaoga penei mo te bingo. Ko oko loa i te kai-sene a te bingo tenei e fai nei.*

What I can see on Vaitupu now which has a great impact to the health of the women is bingo and *suu* [a local gambling card game]. My personal judgment is that, prior to the introduction of bingo and *suu* to the island, women had 'bigger-hearts' and were more courageous. In those days, women appreciated community obligations and had the will to work hard in response to requests from the community..., unlike now, no more... Contributions are not welcomed. It's hard, it's hard. But the problem that I see in these women who like playing bingo and *suu* is that they do not realise the loss that these gambling games do to their personal finances, eh? Sometimes, if you do not receive any luck, you can lose

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[45] On Vaitupu Island, only one bingo game is allowed per time slot each day. On Funafuti Island, three of the four bingo businesses agreed to take turns each day (Monday to Saturday), while the fourth one have bingo games every day (except Sunday).

your $20. Big loss! To my personal observation, this is a game that victimises the women of Vaitupu. (Woman, Vaitupu Island)

In this participant's eyes, bingo is an issue because it leads women (and men) to waste a portion of the family income. A bingo-addicted woman or man who goes to every bingo game from Monday to Friday (a total of about seven games) will possibly spend $70 to $140 per week. The participant noted the change in the women's response to requests from the community. It seems now that bingo is the most important thing to the bingo-going women's minds and hearts; consequently, this has changed the attitude of bingo-goers to communal activities. For example, they would be frustrated and angry if the bingo games were cancelled due to other island functions such as funerals that people of the community are expected to attend.

I did not come across a participant on Funafuti Island who mentioned bingo as an issue. However, I heard several radio programmes that talked about the negative effects of bingo on families, particularly children. In these radio programmes, the announcer brought up the fact that some parents left their children at home while they went to play bingo. So this is also an issue on Funafuti Island, though my participants there did not mention it. The claim that parents often leave their children at home while they go to play bingo was not mentioned or discussed by children whom I interviewed. It could be that the parents of the children I interviewed do not play bingo, or maybe those children did not yet recognise the seriousness of bingo's financial effect on the community.

Bingo and other forms of gambling games have financial and social effects for people, both players and families. Hence, in this sense, bingo is a barrier to *ola lei* as it has an impact on a family's wealth and the harmoniousness of relationships. On the other hand, despite the negative impacts of bingo, such as losing money and spending less time with children, I gathered from the bingo-goers that they found this game relaxing and a good time, providing a desired break from their work. One woman told me, 'Bingo makes me happy and relaxed [which is] good for my health.' In this sense bingo is an activity that could contribute to *ola lei*.

5.3. Health issues related to schools

I am separating the issues that were mentioned by schools (students, teachers and support staff) from those that were discussed by the community people. This is because

schools have a formal relationship with the Departments of Health and Education and a different setting to communities. I present the issues in terms of their frequency of mention.

5.3.1 Water Problems

Nearly every student talked about the water issue, and how it impacts the cleanliness and hygienic state of their toilets and kitchens.

> *...motou toilets e lei loa. Kae tenaa laa i te ukeegaa o taimi, e seai ne vai ona la ko `masa a tane, io me ko masei a paamu… tena ko se `sali a vai ki toilets. Ka olo atu nei o toilet, kae ko `pono mai a mataloa mo fakapulaaga e tusi mai ke see fakaaogaa a toilet.*

> …our toilets are functioning. But many times, there is no water because our water tanks got empty, or a water pump is not working... so no water is running to the toilets. When we come to the toilet, the doors are closed with a written notice that informs us not to use the toilets. (Female student, Fetuvalu High School, Funafuti Island)

This is the same story with the primary school students whom I interviewed on Funafuti and Vaitupu Islands. The primary schools have good new toilets, but running water is not always available because of water shortages. According to participants at Fetuvalu High School, some students use the neighbours' toilets, and sometimes they just use the school's toilet without any water. According to some students at Tolise Primary School on Vaitupu Island, sometimes students, mainly boys, use the nearby bush for toilets. Students are forced to do these unhygienic practices due to water shortages.

Motufoua Secondary School (MSS)[46], on the other hand, did not see water shortage as an issue because it has a good underground water system (see Figures 5.6 and 5.7). There is sufficient water for their toilets, showers, and laundries. A desalination plant was on stand-by if water cisterns dried up before it rained. However, there were some water problems such as mechanical faults in water pumps, no fuel for the generator, or blocked toilets not flushing. This often made the students late for other school programmes such as breakfast and school assemblies in the mornings.

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[46] MSS is different from Fetuvalu High School and primary schools because it is a boarding school.

Figure 5.6: Underground water system at MSS – electric pump that pumps water from well up to over-head tanks.

Source: Ulisese Kainano

Figure 5.7: Underground water is pumped into the overhead tanks, which distribute water to students' bathrooms and toilets.

Source: Ulisese Kainano.

In 1999, during a drought, when there was no underground water system and desalination plant at MSS, the school was closed down for a few weeks until rain arrived.

Currently, fortunately, the underground water system and desalination plant really help in supplying water for the boarding school's toilets, bathrooms, and kitchen.

Water shortage in schools is definitely an issue that has health and social implications. Students saw the importance of water in their school life because they experienced the impacts of water shortage in very basic ways such as being unable to follow general hygiene. Moreover, the drought also influenced the students to see water as an essential need and led them to talk about water shortage as an issue.

5.3.2. Quality of Food

Poor handling and the quality of food is another common and major issue that students talked about. On Funafuti Island, most of the students of Nauti Primary School and Fetuvalu High School whom I interviewed talked about the types of foods that are sold in the schools.

> *E isi ne meakai konei e togi i te akoga pelaa me ne snacks fua. Uke meakai sinusinu… mo ice-blocks… ma`galo gali fua [kata]. E isi foki loa ne mekai pela mo laisi mo moa… gali. Kae e isi ne taimi a meakai pelaa me ko tai masei… pelaa me se fresh.*

> The foods that are sold here in the school are just like snacks. Lots of oily foods... and iceblocks... they are nice and sweet [*laughs*]. There are foods like rice and chicken... nice. But sometimes, some foods are little bit stale... not fresh. (Female Student, Nauti Primary School, Funafuti Island)

One of the most vital features of *ola lei* for the students is food: sufficient quality food. Student participants were concerned about the foods that are sold in school. During recess and lunch times some women sell their food at one end of the waiting shed. Figure 5.8 shows the women, who sat on buckets and chairs at the right end of the shed, selling their foods to students. The left end of the shed is occupied by parents who come to feed their children. Parents bring various foods depending on what is available in their homes, ranging from rice, chicken, and fish to cakes and bread. I observed that only a few parents brought some vegetables and fruits.

Figure 5.8: Waiting and food shed at Nauti Primary School, a busy spot during recess and lunch times as it is a place where parents feed their children and different types of food are sold.

According to many students, they trusted the food that their parents brought for them because they knew for sure that the food would be prepared and handled well. However, sometimes they were tempted to buy food from the food stalls as this was more tasty and sweet. Teachers whom I interviewed also noticed this food issue. The teacher participants were also very concerned about the nutritious quality of the food sold and the possibility that it had not been prepared under sanitary condition.

> We encourage students to bring their own home-made food because they are better
> in terms of how they are handled and cooked, eh? I think the Department of Health
> and the Funafuti *Kaupule* [Town Council] should come and check the foods that
> those people sell at that shed. We don't want stale and expired food to be sold to
> the students... (Senior Teacher, Nauti Primary School, Funafuti Island)

In general, at MSS the food is poor nutritionally. For breakfast, each student is given seven or eight biscuit crackers with tea, while lunch and dinner consists mainly of rice and a stew of corned beef or fish. If the school's food ration runs out due to unreliable shipping, students will have rice mixed with cocoa or just plain noodles. In several cases, the Vaitupu Island community brought food (crops) for the students. According to several students, they also eat these kinds of foods in their homes, but not all the time. At their

homes, foods vary, and may include rice, corned beef, fish, breadfruit, *lau-luu* (an edible leaf), taro, toddy, cakes, biscuits, and others.

At MSS, it is rare for students to have vegetables and fruits because the school does not have a garden, and to regularly order and purchase vegetables and fruits from Fiji, New Zealand or Australia is just too expensive and takes a long time. According to the General Manager of the Tuvalu Cooperative Stores (TCS), it took three weeks and one week for vegetables and fruits to arrive on Funafuti Island from Australia and New Zealand, respectively. The freshness of the vegetables and fruits deteriorated by the time they reach Tuvalu. In terms of cost, the TCS sells New Zealand apples for about six dollars per kilogram. This is a dilemma because it is recommended that people have five or more servings of fruits and vegetables per day, and there is an association of low fruit and vegetable intake with poor health (Hung et. al., 2004; Bellavia et. al., 2013). In 2010, research conducted by the Tuvalu Trust Fund Advisory Committee found that foods provided for MSS students were 'underfunded to meet the dietary needs of students' (see UNICEF, 2011, p.13). Hence, the food situation in MSS and other schools is an issue.

The MSS students whom I interviewed also noted that their food was poorly handled and cooked. The school's cooks agreed but they strongly emphasised the fact that they were trying to prepare food in the context of limited equipment and less food variety:

> *E mafai pefea ne matou o kuuka ne meakai gali kae paleni manfai a meakai i te bulk store ne laisi fua mo pulumakau? E faigataa a te maua o fuaga-lakau mo veesiapolo i te fenua… a motou meakai e kuuka foki loa i tua i te taegaa-afi i tua i te umu ona ko te seai ne keesi kae togi mafa foki a keesi…*

> How can we cook and provide a good balanced meal when we have only rice and corned beef in our bulk store? It is hard and expensive to get fruits and vegetables on the island... and our food is cooked at the open fire outside there at the local kitchen because we don't have gas as it is expensive to use gas... (Senior Cook, Motufoua Secondary School)

It is obvious that there is not enough money allocated for MSS to regularly maintain the kitchen and dining hall. In 2012 and 2013, the allocated budget for MSS General Maintenance was about AUD$25000 to AUD$35000. This allocation was for all maintenance in the school, such as replacing damaged water taps, leaking roofs, and all other repairs. This means that there was not enough money to maintain all buildings in the

school to a good standard. The MSS kitchen, for example, was in need of maintenance (see Figure 5.9) but there was no budget for it at that time.

Figure 5.9: The deteriorated MSS kitchen - it needs total renovation and upgrading – 2011.

Source: Steen Niuatui.

Obtaining nutritious food is expensive for many ordinary families and even for a government school; thus, it is hard to prepare or obtain nutritious meals for the children. The freedom for children to select their meals is hindered by obvious factors such as being cash-poor and unable to choose for themselves. And if the students or children were given the freedom to prepare and consume foods of their choice, would they prepare and eat nutritious food or would they be easily tempted to go for salty or sweet snacks and oily foods? This is a challenge for the schools, families, and the Departments of Health and Education, not just to teach the children about the value of nutritious food, or to demonstrate that it can be delicious, but to empower and support them towards more healthy meals by seeking ways to introduce more quality and variety into food available at school.

5.3.3. Overcrowding in Dormitories at MSS

> ...I am concerned about the overcrowded dormitories, especially the girls' dorms. I felt sorry for the girls as they are having limited space in their dorms. At night times when we [matrons] do our head count checks, we have to step over some girls' bodies to count the number of girls to ensure that no one is missing. Sometimes I just stumbled on top of some girls as I tried to count them... (Senior Matron, MSS, Vaitupu Island)

This is an issue that was raised by MSS staff. More than 400 students live at the school for three to five academic years. Girls often outnumber boys, which means that girls in each dorm have a smaller living space than boys. I visited one of the girls' dormitories to witness for myself the overcrowding issue that the senior matron told me about. About 50 girls lived in a dormitory; so a smaller dormitory such as the one shown in Figure 5.10 would be extremely overcrowded. I informally talked with some girls and they shared that this was an ongoing issue that generally became a norm to them.

Figure 5.10: One of the girls' dormitories at MSS. Note that at night some girls slept on the floor as there was not enough space for more bunks. This dorm has been used by girls since 2005.

As a teacher, I knew about this issue, but did not take it seriously before I began my research. The students did not talk about it, so we teachers assumed that there was no problem, until I came back as a researcher and had time to listen and learn from other staff

and students. The girls shared their experience of living in limited space only because I interviewed them.

Living within limited space, in dorms is an *ola lei* issue because it can be associated with infections and skin diseases. Being not ill and physically fit is one of the key qualities of *ola lei*. It is the responsibility of the Government, through the school, to provide good living conditions for students. Students have no choice in the matter. Fortunately, in early 2013, two new dormitories were built by Japan (Figure 5.11).

Figure 5.11: Construction of new MSS dormitories and classrooms by Japan, 2013.

Source: Courtesy of Reverend Kautoa Molotii.

The construction of the two new dorms is expected to finish in March 2014. Obviously, this Japanese aid project is a solution to overcrowding; it is definitely consistent with the *Ola Lei* Conceptual Framework, as students will be happier with more space.

5.3.4. Lack of Organised Physical Activities and Sports Facilities

The lack of organised sports or physical activities was an issue for the primary and secondary school students whom I interviewed. Nearly all the students talked about their

desire for more sports in their schools. There is no official curriculum for Physical Education (PE) in Tuvalu; hence, teachers schedule, formulate, and implement their own sessions. Lack of physical education is not confined to developing countries such as Tuvalu, but occurs also in some developed countries. Studies in some Canadian schools, for example, found that many schools do not meet the established requirements of allotted time for physical education (Hardman & Marshall, 2000; Cameron, Craig & Cragg, 2003). In Tuvalu, this absence of PE from the formal curriculum teaches the students that PE is not important. It also means that students have insufficient time and opportunity to be physically active, and may not develop an understanding of the benefits of sports and physical activities. During one of my fieldwork visits to Nauti Primary School on Funafuti, I observed a PE session for senior students. I noted how happy and excited the students were during their games of volleyball and soccer. One girl told me that she often 'looks forward to this time, whereby her classmates and teachers played ball games because it is fun and healthy'. There is no doubt that the students would benefit from more allocated times for physical activities outside the classroom.

Another issue that is associated with the lack of organised sports in Tuvalu's schools is the lack of sports facilities. No primary or secondary school has a proper gym, playing field, or adequate range of sports equipment. MSS has the biggest field but it has an uneven surface. The Fetuvalu High School's (FHS's) playground also has an uneven and hard surface. At Nauti Primary School, I noted that the playground was very small. The teachers made the girls play volleyball on one half of the ground, while the boys used the other half to play soccer (Figures 5.12–5.13). As there was limited time for the PE session, inadequate sports equipment, and large numbers of students, the volleyball teams consisted of more than 10 girls. The boys just divided themselves into two teams to play soccer.

Figure 5.12: Girls playing volleyball. There were more than 10 girls per team. Other girls waited in the shed for their turn.

Figure 5.13: Boys playing soccer on the other half of the play ground. Some parts of the ground are hard and uneven. There were no goal posts.

Of course, physical activities include activities such as dancing, climbing trees, weeding, washing clothes and other chores, not just sports. According to the WHO guidelines for physical activity, Children aged 5–17 years:

1) should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily;

2) should undertake physical activity for periods greater than 60 minutes to provide additional health benefits;

3) should primarily undertake aerobic physical activity; and

4) should undertake vigorous-intensity activities, including those that strengthen muscle and bone[47], at least three times per week.

In primary schools, dancing, for example, is not offered as a subject. Only when there is a special event or social programme at the school, such as a government visit or cultural performance, do students dance. Occasionally, the schools do some cleaning up around the campus. This means that physical activities at primary schools are often less than the amount suggested by WHO.

At MSS, there are more physical activities than at most other schools. Every Tuesday and Saturday, work parties are organised for all students for one to two hours (Figure 5.14). Work might involve weeding or cutting grass, cutting firewood, scrubbing floors, cleaning windows, collecting rubbish, or feeding pigs.

Figure 5.14: MSS students weeding grasses during work party – a one to two hour(s) physical activity that is done two or three times a week – 2013.

Source: Courtesy of Leotasi Kautuu Filipi.

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[47] For this age group, bone-loading activities can be performed as part of playing games, running, turning, or jumping (see WHO website: http://www.who.int/dietphysicalactivity/factsheet_young_people/en/).

On Friday or Saturday nights for two to three hours students have a social programme, which could be *fatele* (local dancing), *tuisi* (twist dance), or indoor or outdoor games (Figures 5.15–5.16). However, in terms of the WHO recommended levels of physical activity for children aged 5–17 years, MSS students still need more physical chores and planned exercise in order to maintain and improve their fitness and physical health.

Figure 5.15: *Tuisi* (dancing) at MSS, 2012 – a weekend's social programme that is often enjoyed by MSS students. A good physical activity.

Source: Sinita Felemiti.

Figure 5.16: MSS students doing *fatele* (local singing and dancing) - 2012.

Source: Reverend Kautoa Molotii.

There is a direct link between a physically active lifestyle and the improved long-term health status of children (Allensworth et al., 1997). This means that a lack of organised physical activities and sports facilities impacts on students' physical fitness, happiness, and longevity, which are key qualities of *ola lei*. Giving greater priority to sport and physical activity in their strategic plans, budgets and curricula is a way for schools and the Departments of Education and Health to work towards *ola lei.*

5.3.5. Smoking

The issue of smoking in schools was brought up by non-smoking and smoking students and staff, mainly from Motufoua Secondary School. There has been no formal survey to reveal the number of students and staff who smoke at MSS but those whom I interviewed estimated that more than 50 percent of MSS male students smoked. In a focus group interview with MSS boys, I managed to create an atmosphere that led the boys to talk to me openly about smoking. The focus group consisted of smokers and non-smokers, which facilitated a discussion on smoking.

Student 1:   ...I think there is a very big number of boys [students] who smoke. I mean many! Over there at the boys' side, I see lots and lots of boys smoking...
Boys nodded...

Me: Uhmm… I am curious… are ablution blocks still the common smoking spots for smokers?
Pause....

Student 2:   Yep…

Student 1:   Bush…

Student 3:   Dorms…

Me: What?!

Student 3:   Yes, some students are even smoking in their own dorms…

Me: Uhmmmm… I am wondering… I'm curious… are these students really addicted to smoking? Or do they just smoke lightly… you know… just mucking around, just wanting to experience smoke… or are they like those adult smokers who are just genuinely dying for a smoke, and they feel weaker when they don't smoke?
Boys laughed...

Student 4:   I want to share something about that issue… last year, at one time, when there was no tobacco on the island, some students used Lipton tea as tobacco.

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Me:	WHAT?!
	Boys laughed….
	That's serious, huh? This is not a low level smoking, huh?
Student 2:	That's true… this is serious smoking.

A community survey done by Tuvalu Tobacco Control Coalition (TTCC)[48] found that a 'growing number of young people (15–25 years) are smoking' (Director of Health, personal communication, 2013). In MSS, smoking at the girls' side is not as prevalent as smoking at the boys' side. From informal conversations with several MSS girls, I gathered that about less than ten girls smoked. However, my focus group discussion with boys revealed that smoking seems to have become a boys' cultural norm, which they pursued with passion. The use of Lipton tea as tobacco substitute reflects boys' addiction to smoking. It is a serious issue.

From the focus group interview, I gathered that the boys did not understand in any detail the negative effects smoking has on the body. The only effects of smoking that the boys talked about were damage to the lungs, tooth decay, and coughing. They did not discuss that smoking could aggravate diseases such as tuberculosis (Chan-Yeung et al., 2006) and diabetes (Mehan, Surabhi & Solanki, 2006; Shahid & Mahboob, 2007), or the effects of smoking on the brain (Swan & Lessov-Schlaggar, 2007) and other organs of the body. The smokers did, however, reveal the negative effect of smoking on their studies. For example, sometimes they got in trouble as they skipped classes in order to sneak out of the campus to purchase cigarettes or tobacco. Smoking impacts on the students' physical fitness and their harmonious life within the school, both aspects of *ola lei*.

It is important to note that many MSS staff members smoked, and their behaviour influenced the students to smoke. Some interviewees said that they had witnessed students scavenging for cigarette butts where staff usually smoked. More seriously, the interviewees also witnessed some staff giving cigarettes to students. The Tuvalu Tobacco Act's Section 23 clearly states: 'smoking in public places and workplaces [is] prohibited'. However, the enforcement of this clause is weak because school administration and staff often turn a blind eye.

At the primary schools, smoking is not a common practice for the students. However, some parents, who come at recess and lunch times to feed their children, and staff smoke on the school grounds. At one primary school, I saw a written notice in

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[48] TTCC consists of representatives from the Ministry of Health and other NGOs such as TANGO, TuFHA, Community Youths and other organisations. TTCC enforces the Tobacco Act and creates public awareness about smoking and its impacts.

Tuvaluan that asked smokers to go off campus when smoking (Figure 5.17). However, the notice was torn in half, perhaps as a sign of disagreement.
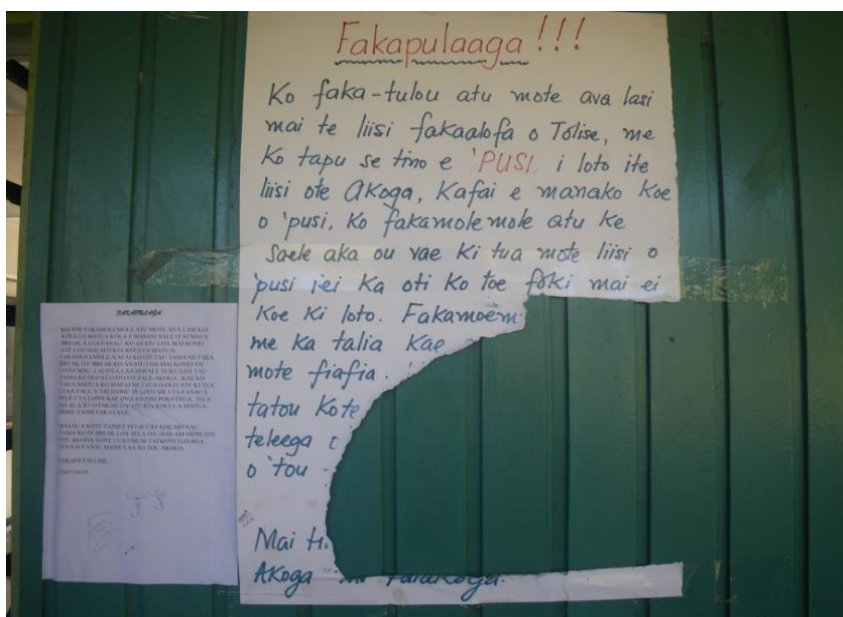
Figure 5.17: A notice to warn smokers that smoking in the school campus is not permitted; hence, all smokers have to off campus to smoke. The written notice was torn, perhaps as a sign of disagreement.

At Fetuvalu High School students and staff whom I interviewed did not identify smoking as an issue. Some participants pointed out that while there probably were students who smoked, they hardly ever saw students smoking at school. Unlike at MSS, students at this day school can smoke secretly at the beach or in their homes.

5.3.6. Gatu Kelese

Gatu kelese is mainly a boys' issue at MSS. *Gatu* means clothes, while *kelese* literally means carelessness. *Kelese* is not an original Tuvaluan word, but a made-up term derived from the English word 'careless' or 'carelessness'. *Kelese* is a word coined at MSS by students to describe someone who did not care about their clothes:

> One of the biggest ongoing issues that this school has was the *kelese*. During the beginning of the year, the parents sent their children, mainly the boys, with lots of new clothes. The suitcases were full of t-shirts, *sulus*, trousers....and when they return to their parents at the end of the year... all they carry back to their parents were an empty suitcase... I think you know what I was talking about, don't you? To me personally, this is an issue! The carelessness attitude is a problem, aye? Now we do have a jargon for that carelessness attitude... *kelese*? [*Laughs*]. Far too

many *gatu kelese*, and this led students to share clothes, which causes skin diseases, aye? (Senior Female Teacher, MSS)

This is an ongoing issue and perhaps has become a norm for the boys at MSS. Sometimes, although it is serious, *kelese* becomes a joke that makes parents, teachers, and students laugh. I have come across parents who told their children before they travelled to MSS, '*Fagai atu la a te fakasuufaga o Motufoua ki ou gatu,*' meaning, 'Just feed Motufoua's rubbish dump with your clothes.' This means that due to laziness and carelessness, clothes will end up dumped in the school's rubbish. I remember when two junior students were scolded by one of the teachers for skipping classes. When the teacher asked the students why they skipped classes, the students replied that their school uniforms were stolen. The teacher raised his voice: 'I know who stole your uniforms'. The students quickly asked, 'Who?' The teacher replied, 'It was *Kelese.*' The teacher, students, and bystanders (including myself) just burst out laughing.

If *kelese* becomes widespread and a joke to the school and the public, it will be very hard to address. *Gatu kelese* had negative impacts on the students' health and studies. According to the school's nurse, skin diseases, such as ringworm and scabies, are common at MSS. In Tuvalu, there has been an increase in the number of children with scabies, which is associated with factors such as overcrowding, decreased hygiene, and limited treatment options available in Tuvalu (Harmen, 2009). On top of those factors, I believe that ringworm and scabies, at least in MSS, are also exacerbated specifically by the fact that students do not have well-cleaned clothes due to the issue of carelessness. Unsurprisingly, many boys tend to skip classes because their school uniforms had been stolen by others or were too dirty.

The teachers have tried several practical solutions to minimise this issue but due to inconsistency, lack of housekeeping skills, and lack of funding the interventions often fail. Some boys gave their dirty clothes to their sisters or cousins to be washed, as Tuvaluan girls in general have better housekeeping skills than boys.

> *Kelese* is an issue at the boys' side. I tried my best to get my brother's dirty clothes and wash them because if I don't, those clothes will be dumped somewhere. I see the many clothes that the boys left under their clothes lines... and they will be there at the ground until they rot or some boys wear them. A bit disgusting, aye? I felt that there is a need for staff to monitor the boys more closely and enforce them to

wash their clothes, dry them, and fold them... otherwise this *kelese* issue will live

forever... (Senior Female Student, MSS)

This issue reflects gender relations in Tuvalu, where girls and women are responsible for the laundry. Such a gender-based division of labour, with its unequal demands on girls, can be hard to address (Sen, 2007). So, entering MSS in their early teens, the boys are not prepared to accept responsibility to keep their clothes clean and looked-after. This transition phase from being dependent to independent is a challenge for the students, particularly the boys, who are often too disorganised to look after their clothes. This disorganisation and disinclination to wash and look after their things caused many boys to lose not just clothes but other items such as stationery.

The *Ola Lei* Conceptual Framework does not restrict boys from washing and looking after their clothes because it is a 'girl's job'. Indeed, the *ola lei* worldview values cleanliness, readiness, and hard work. If boys are familiar with and have the skills to accomplish these *ola lei* features they will be able to care more for themselves and their possessions. To wipe out the *gatu kelese* issue will definitely make the boys, and their sisters and parents, happier and able to live more harmoniously in the boarding school.

5.3.7. Bullying

In August, 2013 a junior boy of MSS died in hospital. It is important to note that this is still under police investigation; hence, the main cause of the boy's death has yet to be confirmed. What it is known to the community people, through stories that came from the school, is that the boy was physically bullied by another senior boy. Many community people believed that the physical assault of this junior boy made him ill and died. The nation was shocked, although they know that bullying, especially among boys, is a common practice at MSS. So, during a short trip to Tuvalu in early February 2014 I heard many people talking about bullying, not only in the community level but also in the government level.

Interestingly, during my participant observations, focus group interviews, and individual interviews in 2011, no one raised the issue of bullying. Perhaps that was because there were no serious cases of bullying in that period. However, I knew that bullying is endemic, and it was the subject of my Master's thesis. It is also important to note that there is no universal definition for bullying. Rigby (2007, p.15) defines bullying as 'repeated oppression, psychological or physical, of a less powerful person by a more powerful

person or group of persons'. In other words, bullying can be physical or verbal (Rigby, 2007; Sullivan, Cleary & Sullivan, 2004). This means that bullying is destructive behaviour that repeatedly harms other students mentally and physically. However, it seems that physical bullying is now the top concern of the nation since the recent death of the junior boy.

Physical bullying, in MSS, is a common aggressive behaviour, which has been going on since the establishment of the school in 1905. From my personal experience as a senior teacher in the school I recall having to deal with many disciplinary cases involving bullying. Many students, mainly boys, have been suspended or expelled from school as a result of bullying other boys, especially those younger than themselves. Every year since 1998, when I worked at MSS, about four to ten reported bullying cases were investigated by the school administration. In fact, there are more unreported cases of indirect and physical bullying in the boys' dormitories and places where teachers are not present. Physical bullying has become a school norm, especially in the boys'[49] dormitories. The most common forms of physical bullying carried out by older students on the younger ones are: kicking the victim's legs hard[50]; caning the victim's buttocks or hands; slapping, hitting, or punching the head; and sending victims to find food or do physical chores such as cutting grass, sweeping, and climbing coconut trees to get green coconuts for drinking.

For many generations Tuvaluan students have been teasing and physically bullying each other. To many students this has almost become an acceptable practice within the school community of MSS. There is a belief held by some community people, teachers, and students that physical bullying will toughen up the boys. However, more recently parents have become concerned about their children's safety at school. In addition, the public is becoming more critical of MSS's administration team and teaching staff for failing to completely stop older boys from bullying the younger ones. In some cases, parents have withdrawn their children from school as a result. The parent's fears and concerns for the safety and o*la lei* of their children are completely justified and understandable.

Of course, bullying has negative impacts on students, including the bullies themselves as well as the victims and bystanders. Sullivan, Cleary & Sullivan (2004, p.20) noted the effects of bullying which include lower levels of self-esteem, depression,

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[49] The school administrators and staff and community people are not concerned about girls in relation to physical bullying. There is little or no physical bullying at the girls' side at MSS.

[50] In MSS, the kicking of the bullied student's legs is code-named 'scrum'.

exhibiting extreme introversion, and dropping out of classes or school. Bullying may result in physical or psychological injuries to the victims. For example, in 2003 a student from MSS was referred to Fiji for a mental disorder caused by bullying. Definitely, the bullying issue undermines the *Ola Lei* Conceptual Framework as it is very much against the maintenance of harmonious relationships among students. Bullying is undoubtedly negatively affecting the *ola lei* of the students; hence, it is a serious health issue.

5.3.8. Health Science in the Curriculum

One place to address these issues of smoking, *gatu kelese,* cleanliness, bullying, and health and wellbeing more generally is in the curriculum. However, there are some barriers to this. In their research in Samoa, Soti & Mutch (2011, p.97) found out that the Food and Textiles Technology (FTT) subject in secondary schools in Samoa is not as highly valued as other core subjects such as English, Science, Social Science, Samoan, and Mathematics. The researchers concluded that:

> In general, teachers of FTT and principals where this subject is taught have a positive attitude towards the subject and its place in the overall curriculum. It has even been seen as a useful preparation for students who undertake examinations for higher learning post-secondary schooling. Unfortunately, it does not always figure highly in the curriculum hierarchy. It suffers from being seen as a non-academic subject, often as a place to put less able or less-motivated students. Subsequently, it is not well funded, staffed or resourced. It does not often receive favourable consideration when decisions are being made about professional development for teachers, maintenance or upgrading of facilities and resources, or placement on the timetable. This leaves the subject in a difficult position. These are the very things that need to be given higher priority in order for the subject to live up its promises and possibilities.

This is similar to the situation in MSS. The school and parents see the value of teaching and learning such subjects such as FTT, Home Economics, Arts and Crafts, and Health Science, as students will learn more about home, family life, housekeeping, traditional foods, traditional arts, health, and other positive concepts or values. However, these subjects are not core subjects for all students, but rather are optional. Furthermore, at MSS only girls can study Home Economics or FTT, while only boys can study woodwork. One weakness of Soti & Mutch's (2011) research was that they did not find out how the

students felt about the inequality of attention given to such vocational and life-enhancing subjects such as FTT. In my field work, I found that teachers and parents in Tuvalu's schools realised the importance of teaching health-related subjects such as PE and Health Science to students, just like other core subjects such as English and Mathematics. They were concerned about Health Science being categorised as a secondary non-core subject. The students also revealed their concern about the secondary importance accorded to Health Science and PE. One primary school student stated:

> I think we have more time learning English, maths, science and social science because our entrance examination to Motufoua [Secondary School] is based on those four subjects. So the Health Science subject is only taught a few times in a week. But I like Health Science... PE... they are fun and also important to our lives... because we learn how to live healthier... (Year 7 Student, female, Funafuti Island)

In Tuvalu, Health Science is a subject that is offered at the primary school level. Basic health education such as first aid, hygiene, nutrition, fitness, and other topics are included in prescriptions for Years 1 to 8. Spork & Ielemia (1998) reported that most teachers in Tuvalu praised the implementation of health science in primary schools in the late 1990s. However, the report did not cover any feedback or views from students. Thus, the question to be asked here is: How much do students learn from Health Science? From my interviews with students, I found that most of their knowledge about health was influenced by what they learned from health science. For instance, the common features of *ola lei* that the students mentioned when they talked about it were mostly cleanliness, diet and food quality, and not being ill. These features and other health-related issues such as diabetes and first aid were all spelled out in the Health Science prescriptions. I conclude therefore that this subject has been effective in giving some, but not all, of the students a good grounding in some basic health concepts. But whether they 'walk the talk' in their homes and communities is less clear, and some hints of gaps between what is said and what is done are discussed in my next chapter.

At MSS and FHS, Health Science is not taught as a subject. A couple of secondary school teachers at MSS and FHS suggested that since many health concepts are taught in other subjects such as Science and Home Economics, there is no need to introduce Health Science as a subject. However, a Home Economics teacher responded:

> I think for the sake of the students, we should offer a Health Science subject... because it will definitely teach students some good ways to live healthy. There are so many health concepts that are not covered by other subjects such as Science or Home Economics. If we have a separate Health Science subject, students will learn more facts about health... health is just too big to be integrated in Science or Home Economics, eh? (Female Home Economics Teacher, MSS)

A pilot study by Khan et al. (2006, p.97) – which aimed to gather information about knowledge of and attitudes towards a range of health and dietary issues, particularly obesity, in secondary schools in Fiji – found that:

> ...gaps existed in the curriculum – particularly regarding the importance of engaging in PE for health, the role of obesity in increasing the risks of NCDs and the meanings of terms such as 'health' and 'balanced meals'.

In my interviews with primary school children I found that despite the instruction in Health Science, some did not have an understanding of the word 'health', let alone the linkages between diet, obesity, and diabetes.

Every academic or vocational subject – not just English, Mathematics, and other core subjects – has a contribution to make to the country's development, as suggested by Leituaso-Mafoa and Mutch (2011, p.114), who said of business studies in Samoa: 'teachers, teacher educators, schools and the Ministry of Education, Sports and Culture need to value the opportunities that Business Studies provides for young people to contribute to Samoa's development'. Similarly, Health Science and PE subject provide valuable information to students, which in return contribute to the health and general development of Tuvalu. At present, the increasing incidence of obesity and diabetes threatens the viability of health services around the world, and Tuvalu is no exception.

Health Science has its place in the *Ola Lei* Conceptual Framework because it provides important information about various aspects of health and wellbeing, such as maintaining respectful relationships, preventing diseases, eating a balanced diet, being hygienic, maintaining peace and safety, and maintaining a healthy environment[51]. If consistently delivered and taught, Health Science will definitely broaden the students' knowledge about health, and positively contribute to their *ola lei* in return.

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[51] All these various aspects of health and wellbeing are prescribed in the primary school's health science syllabus for Years 1 to 8.

The concerns of the school children, their teachers, and some parents and community members included many aspects of *ola lei*. The environments provided by the schools have the potential to enhance or diminish *ola lei*. For example, an overcrowded girls' dormitory at MSS being replaced by newly built, more spacious structures will enhance the girls' health and wellbeing, as long as the new buildings are well-maintained and cleaned regularly. Other aspects of the students' environment – such as the food provided, ready access to cigarettes, and having little time or space for physical activities – create problems in achieving *ola lei*. The tradition of bullying, the carelessness of some boys about their clothing, and their expectation that sisters will do their domestic chores, as well as the absence of education in health for high school students also work against the achievement of wellbeing. But schools are not the only sites where participants pointed to areas for improvement. The wider community also had many concerns and recommendations about health programmes in general.

5.4. Community Assessments of Government Health Services

In this section, I discuss the issues voiced by the communities, including schools, about the health services and programmes provided by the Department of Health. Alongside these issues, I also include what the community people desired in relation to those issues. This makes me a mediator between community people and the government, especially the Department of Health. My intention is not to criticise the Department of Health, but rather to promote *ola lei* by pointing out what the community people see as undesirable in the Department of Health's services and programmes. I also include examples or events that I noted during participation observation. I discuss these community opinions in the order of the most to the least frequently expressed.

5.4.1 Lack of Health Awareness Programmes

Lack of health awareness programmes is the most common issue that the communities and schools identified. For the sake of this research, health awareness programmes refer to any health education programme that the Department of Health provides for the communities through radio and organised workshops. Almost all my research participants, ordinary community people, students, school staff, and even health officers felt that, in general, the health awareness programmes provided are inadequate. Importantly, these participants genuinely saw the importance and usefulness of health

awareness programmes that are provided by the Department of Health and valued them. I illustrate this community desire for more programmes by sharing one of my interviews with one community leader:

Al: You know, I used to listen to my radio, listen to health programmes, and I see that these programmes are important as they remind us about the things that we should do in order to prevent us from diseases such as cancer, TB, kidney failure, hypertension, diabetes and many others. I think these programmes are very important, and we should take them seriously. I do really value these health programmes, but you know… I need more! The communities deserve to engage with more health programmes.

Me: How often does the Health Department organise health awareness programmes in your community?

Al: Not much! Rare! Only a few times they come into the community. Just last month, a health workshop was done in our community…

Me: What was it about?

Al: The TB workshop.

Me: Wow! TB workshop?

Al: Yes, the nurses gave a presentation on TB and we asked questions. It was a very good session. There were some posters about TB that we saw… gave us a better understanding about TB. We learnt and saw the danger of getting TB… and many people were asking questions, you know?

Me: Many questions huh?

Al: Yes, it is an indication of wanting to learn more, eh? [*laughs*]...

Me: Do you think that the Health Department should increase its health awareness programmes in communities?

Al: Yes. Increase the number of health awareness programmes per year should be something that the Department of Health should look at. The important thing is for us to learn and be aware of health issues and diseases.

Me: You do like listening to radio, aye? You have a radio, huh?

Al: Yes! I listen to radio much.

Me: Will there be any difference if actual health awareness programmes are carried out in the community by health officers rather than just listening to health programmes over the radio?

Al: Oh yes! Very much! You know, it will be way better if the Department of Health's officers come into the communities to do their health programmes; and at the same time do their health programmes over the radio. It will be much more effective eh?

> This is because we would be more clearer when you see actual people talk in front of you, and also they will use visual aid resources such as posters... you know, some people here in this village don't have radios, and sometimes they don't keen listening to radio, or they just get bored by listening to such oral radio health, programmes… and they won't bother to tune in, you know… so coming in to communities to carry out health workshops with creative visual resources is a better and effective thing to do rather than just announcing their health programmes over the radio…

The participant talked about three main issues in relation to the Department of Health's programmes. Foremost was that the Department of Health's awareness programmes for communities are important and valuable. However, these awareness programmes are infrequent and what the community people desired the most from the Department of Health was to organise more regular health programmes. Thirdly, the communities desire that these programmes be organised and presented in creative ways: rather than just presenting it on radio, they would like for health officers to directly come to communities with resources that can effectively educate community people about health-related issues.

However, one relevant question is: Is it worth increasing health programmes in the communities if there are people who are not prepared to learn about and act on the health information or advice? Some participants saw that there is a stubborn attitude among some community people that makes them ignore the information taught by health officers. The chief of the public health section also emphasised this issue:

> ...now it is the people's behaviour that is a hindrance to our health promotions programmes… because we can't change people's behaviour overnight, eh? We are still working towards the behaviour of the people… some people just ignore our health programmes, thinking that listening to and carrying out what we talked about is waste of time... we are trying very hard to change the peoples' behaviour... (Director of Public Health, PMH)

While some people in the community may not be interested in health messages and behavioural change, this must not be an excuse for the Department of Health to decrease their health promotion programmes in communities and schools. Rather, the health officers and community people, with the assistance of health promotion and community development experts, could work together to devise programmes that may effectively teach community people and support community-based behavioural change if that is warranted.

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Definitely there are community people and students who desired to learn more about various health issues.

Lack of health awareness programmes is an issue that influences community people's and students' knowledge about various diseases and health practices. There is an association between the lack of health awareness programmes and the increasing rates of diseases. For example, in her historical research about TB and health services in Tuvalu, Resture (2010, p.101) concluded that: 'A lack of awareness of TB, what it is and how it is spread increases the rates of TB amongst the people' in Tuvalu. Learning about various diseases, health practices, and eating balanced diet through health programmes and education has the potential to help community people eat healthier and live longer. In addition, learning about certain diseases which may be stigmatised or make people *maa* ('shy'), such as TB and diabetes, can help dispel those social attitudes that make people reluctant to seek treatment and help of other kinds. The successful outcomes of health awareness programmes are key qualities of *ola lei*.

5.4.2 Inadequate staffing and services

> I remember during one participation observation session at PMH, a senior government official was there and we were talking. He suddenly realised the delay in the service, noticing that people were waiting and still no doctor had arrived after lunch. He finally erupted and headed towards the rooms calling out to one nurse and expressing his disappointment to this nurse. I noticed the people's supporting expressions, which indicated their appreciation for this senior government officer's genuine actions. (My field notes and comments, PMH, Funafuti Island, 2011)

The long wait at the outpatient area is a common dilemma at the PMH. Normally, PMH opens for patients from 8am to 11am, Monday to Friday. On average, around 40 to 50 patients came to see a doctor per day during my fieldwork. They need to register, if it is their first time visiting PMH, at the reception. Then would they wait until their name was called for their turn to see a doctor. They sometimes had to wait from morning until late afternoon because of the few doctors (only two or three) that were available for consultations. In addition to the large number of patients who came for consultations and treatment, a number of seamen, emigrants, and students came to do medical checkups that were required for their visas. This was too many patients for a hospital with so few staff.

I saw this delay at PMH where patients were waiting in the outpatient area, some even lying on wooden benches in pain, waiting for their turn. Every time I sat with patients in the outpatient area, I overheard people complaining about having to wait so long for their turns with the doctors. Moreover, the waiting patients whom I interviewed shared their frustrations, and there was no doubt that these patients were unhappy and dissatisfied, which was an extra stress on their already sick bodies. It was this long wait and discomfort that made the senior government official lose his temper. If this is an ongoing problem, and government officials and even Members of Parliament have seen this problem, I wondered why it persisted. Of course, it is obvious that these delays are due to the shortage of staff. The patients saw this ongoing problem as unfair. They wanted to be attended to more quickly and professionally by medical staff.

In developing countries, such as Tuvalu, queuing or waiting at a hospital is common. It is important for hospitals to consider this issue because longer wait times may worsen the pain and also decrease the patient's satisfaction (Derlet & Richards, 1999). Moreover, Brahma (2013, p.88) concluded and recommended that:

> Waiting in line will always be prevalent in our society and in our hospitals. As the health care industry continues to evolve, staff are under continued and growing pressure to do more and more. Wouldn't it be nice to practice hospital in a setting where the worry and burden of wait time management was eased, even eliminated – keeping patients happy and decreasing the anxiety of those behind the counter trying to provide the best hospital service?

This was what the patients at PMH desired: to be happy and to not have to worry about a long wait in hospital for their turn to see a doctor. Frustration because of delays can cause some tension between patients and medical staff, undermine the harmonious relationships between them, and cause people to avoid seeking medical care. Therefore, this issue impacts the *ola lei* of the patients and medical staff.

There is a growing international interest in patient dissatisfaction and complaints, and in addressing problems with quality in health care (Hickson, et. al, 2002). It is not the main intention of this section to look at the linkages or relationships between patient complaints and the quality of health care (as did Bismark, et. al, 2006; and Hickson, et. al, 2002); rather it seeks to present what patients feel about the quality of healthcare in Tuvalu. This is a sensitive issue for the Department of Health.

A review of public administration in Tuvalu in 2002 concluded that health services 'are quite inadequate by standards of more developed countries' (Tisdell, 2002, p. 916). It is not appropriate to compare the context of Tuvalu to developed countries, as they have totally different economies and health systems. Nevertheless, the 'health of populations living on islands [such as Tuvalu] is going to be an issue of increasing public health importance over ensuing decades as they struggle to maintain standards of public health and health care' (Binns, Hokama & Low, 2010, p. 22). The quality of any health care (both primary and secondary) depends on the quality of the organisation and administration of the health system, the quality of health programmes, the skills of staff, the availability of medical services like dentistry and pharmacy, and adequate funding. In Tuvalu, the problem is that those things mentioned above are in short supply, so health care quality is negatively affected. This issue of an inadequate health system was often mentioned by the community people who visited the hospital at Funafuti and experienced these limitations themselves. Some participants had been exposed to other countries' hospitals in Fiji, India, and New Zealand, which are more advanced. For example, the presence of specialists such as heart surgeons and advanced technology (such as an ultrasound scanner) in overseas hospitals made the participants talk about the differences between the services and facilities that PMH offers versus Auckland Hospital in New Zealand, for example.

Participants on outer islands, such as Vaitupu Island, also mentioned the lack of medical doctors and their need to rely on nurses in their health care centres. They think it is a shortcoming since there is a difference when they are examined and treated by a medical doctor rather than a nurse. Also on the outer islands, the facilities are often poor and not up to the standard of the facilities at PMH on Funafuti. I believe this is due, again, to the shortage of medical doctors and funds. There are too few doctors for each island to have one. The medical staff on the outer islands should be acknowledged for their effort to work with limited medical facilities. It is hoped that when the Tuvalu medical students in Cuba, Taiwan, and Fiji have completed their studies there will be enough doctors for the outer islands, but this will also have severe budgetary implications. The Department of Health also refers the more serious cases to PMH on Funafuti, so this is another way that the department addressed this lack of doctors on the outer islands.

Some participants, on the other hand, felt that community people need to understand that the Department of Health has limited resources and people should be more responsible in looking after their health rather than criticising the standard of healthcare in PMH and outer islands' health centres. One participant shared his thoughts:

Ask yourself about what things should be done in order for one to live well. I can see that there are many people who quickly see the weaknesses of the Government or the Department of Health, huh? But if you think seriously, we, the people of Tuvalu should strongly look at protecting us from sicknesses. Sometimes we get angry at the Department of Health due to the inadequacy and ineffectiveness of their facilities or the lack of awareness programmes, huh? But before you get angry or upset with the Department of Health, just ask yourself... did you do your part for you to live well with your family? Did you try hard to go fishing so that your family can eat fish instead of eating corned beef which are oily that can make you and your family obese? Did you even smoke tobacco up to the time you are seriously ill? Tufoua, I am not trying to be smart... but those are my feelings huh? We should look at ourselves and look after our lives... but not play around with our lives... and in the end you point your fingers to other people or to the Government for not doing a good job in the hospital huh? Look after your life; look after the wellbeing of your family... that's the way to be... (Community Member, 50+ years old, male, Vaitupu Island)

Interestingly, the above participant was an ordinary community member. Only a few of my research participants voiced the importance of encouraging people to help themselves and their families first, by providing a quality diet and undertaking other healthy practices. A few stated that it is not right to be quick to criticise the Department of Health's health care and system if people are not doing their part to look after their health. The participants noticed that providing quality health care in Tuvalu is difficult and they saw that the Department of Health tries its best to provide health care even with the limited resources and capacity they do have.

Some participants, on the other hand, claimed that many community people did not utilise the health services that the PMH provided to the fullest. For instance, it is rare for someone to go for a medical check or teeth cleaning on a regular schedule. Preventative services that are available at PMH include dentistry, physiotherapy, nutrition advice, radiography, and other general health services, but people go to PMH only to be treated when they are sick, and hardly utilise health services that help them prevent diseases. So, it seems that the people of Tuvalu view PMH as just for treatment but not for preventative purposes. The services provided by PMH are all free, so there should not be a problem for Tuvaluans to make use of these services, although transport and perhaps time can be barriers. How can the Department of Health convince community people that PMH is also

a place where they can get advice and help to protect themselves from sickness and enjoy positive health? This gap is a space where carefully worked-out partnerships between health staff, NGOs, and community people can, and are, making a difference: witness Tuvalu World Health Day, 2013.

During a team fieldtrip in February 2014 we heard about a 'health market' that had been set up in the *falekaupule* near the government building on World Health Day in 2013. Members of the public were invited to complete a health circuit, getting tests and health advice from specialists in diabetes, tuberculosis, cardiovascular diseases, and a range of other health areas in a happy atmosphere. Different parts of the health sector worked together with NGOs to take disease prevention and health education to the public. One of the nurses involved reported that there was excellent follow-through from this initiative over the following days and weeks as more patients appeared in the hospital for checkups or further treatment and advice.

Quality health care is definitely linked to the *Ola Lei* Conceptual Framework, particularly the 'being not-ill' feature of *ola lei*. The efforts to improve health care in Tuvalu will help to provide quality and efficient medical treatment to patients. What we, as a nation, have to do is try to look at how we can improve health and health care, given the problems that hinder quality and efficient health care in Tuvalu.

But the quality of care is not the only issue here. As some participants suggested and my observations confirmed, almost all the responsibility for health is laid on the Government. Yet some of the responsibility for health and health care could be shared by community groups, families, and individuals if attention were given to health promotion as a way of enabling and empowering communities to shoulder some responsibilities for personal and environmental health. Furthermore, research has demonstrated that health promotion and disease prevention is often more effective and sustainable if it is truly embedded in the community rather than being seen as the sole responsibility of officials (Beaglehole & Bonita, 1997, p. 222).

5.4.3 Not-so-friendly Medical Staff

> *E isi ne taimi, a tatou e tai mataku loa mana olo ki te fakaiamsaki o talavai ona ko te maa`taku i neesi i te mataitaita. E `maa foki la tatou, manafai e kote mai tatou ona ko tatou e olo atu i taimi mai tua o itulaa galue. Kaeaa ko faitali tigaina loa tatou ko te mea ke `tala a te fakaimasaki i te suaa taeao? [kata]. E isi la ne neesi i te gali ne? Matakatakata kae see kotekote ne?*

Sometimes we are little bit afraid to go to hospitals to be treated because some medical nurses are grumpy. It is shameful for us if we are scolded, because we only come to be treated after working hours. So, are we going to wait, with pain, until the next day? [*Laughs*] There are some good nurses, eh? They always laugh but don't scold, huh? (Female Interviewee, 40+ years old, 2011)

This is an issue that was voiced by participants on both islands, including students of Motufoua Secondary School (MSS). A serious effect of this is that some patients distance themselves from hospitals or clinics from fear that they may be scolded or humiliated by medical staff. Sometimes medical staff members seem to blame the individual for his or her illness and ignorance, but in reality there is more to be considered than just the individual. The individual's educational background, communal customs, and financial situation must be considered and understood by medical staff in order to maintain a harmonious space between staff and patients. The medical staff members have been trained in medical schools that strongly emphasise the importance of showing compassion to any patient, no matter what background and situation he or she hails from[52].

However, the friendliness of a medical person depends partly on their personal characteristics in addition to their professional training. More temperamental or stressed medical staff are more likely to scold or 'not talk politely' to patients if, for example, the patients have not followed their advice. Unfriendliness and grumpiness are practices that do not enhance a harmonious relationship between patients and medical staff. A harmonious relationship or space (*vasia*) among people is a key quality of the *Ola Lei* Conceptual Framework. If the space between staff and patients becomes discordant the course of the disease may be affected, as the patient may not feel comfortable to talk honestly to the staff about what is troubling them. Misdiagnosis may result. From the staff member's point of view, sometimes patients test their patience by ignoring medical advice or failing to take their medicine. These sorts of tensions or misunderstandings between medical staff and patients can be addressed through paying attention to the relationship between staff and patients (*tausi te vasia*), patient education, and professional development of staff.

Community people desired the space or relationship between them and medical staff to be filled with relaxation, friendliness, laughter, trustworthiness, respect, harmoniousness, consideration, and love. These values are important for health promotion

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[52] Several interviewed medical staff confirmed this point to me.

and also enhance peaceful and a harmonious relationships between patients and medical staff. Indeed, the medical staff also desired a harmonious relationship between themselves and patients.

5.4.4 More Medical Clinics at Funafuti Island

The far location of hospital from the school is a problem as sometimes students need a clinic nearby if a student gets sick. But now, students travel to the main settlement to get treatment, that sometimes they miss their classes since the hospital is far. Perhaps it would be nice to have a clinic nearby to the school so it will be easier to just walk to it for treatment aye? (FHS Senior Student)

One of the things that the Department of Health or the government should look into... is an attempt to have clinics at these places which are far from the hospital. Not only that, you can also see, that some of the families like us, do not have transport to go to the hospital to get our children treated when they are sick... it is also difficult to go on bus because there is no money aye? Therefore, it is an important thing for a clinic to be established in these far places... due to the situation that families living in these areas which are far from the hospital have... (Mother at a poorer community at the southern end of Funafuti Island)

The need for more health clinics was mainly expressed by the FHS students and a few people from the communities at the extreme ends of Funafuti. FHS is located about four kilometres north of the town centre and hospital (Figure 5.18). Students of FHS spoke of the inconvenience posed by the distance to the hospital. Sometimes, when they wanted to see the doctor during school hours, they had to walk the four kilometres, which seems a very long way to a young person who is feeling sick and is on foot in the heat.
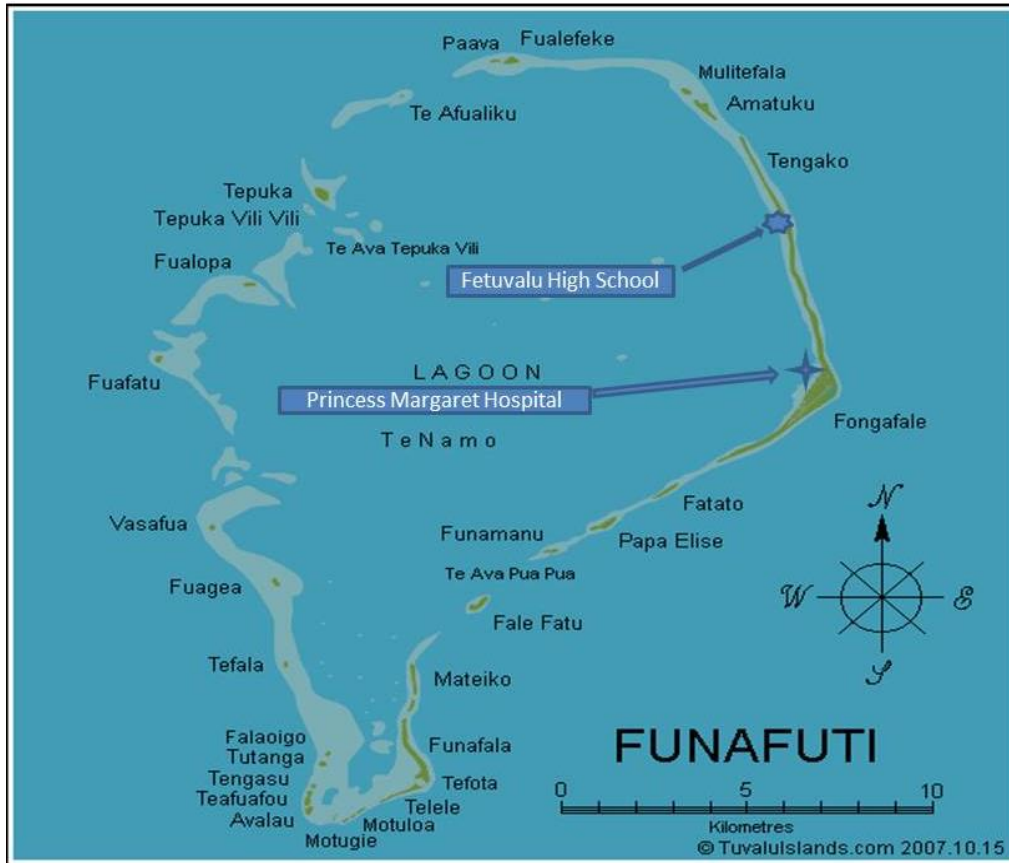
Figure 5.18: Funafuti Island map that shows the direction and distance of Princess Margaret Hospital from Fetuvalu High School.

The same comment was made by some participants at the northern and southern ends of the island. They are also four or five kilometres away from PMH and may not have transport or money for a taxi, which makes it difficult for them to get to hospital. On outer islands like Vaitupu, some people also live far away from the hospital but they do have transport such as motorbikes. This hardship concerning transport to hospital is therefore mainly confined to some people in the capital.

One alternative is a mobile clinic, which may serve different locations on different days. My suggestion, however, would be that these clinics should be centres for health promotion programmes as well as for treatment. But such clinics would need facilities, staff, and resources, and the clinic vehicle or trailer would need to be well-maintained.

5.4.5 Collaboration with Traditional Healers

In my work I observed and talked to people using both traditional healing and biomedicine. I also talked (through semi-structured interview and informal conversations)

to several traditional healers (*tufugas*). One of the *tufugas* revealed how he felt about working together with medical professionals:

Me: *E pefea a te galue fakatasi o koe mo te fakaimasaki? E talia ne koe a au maa`saki ke talavai i te fakaimasaki, kae `fo foki ne koe?*

How's your work in working together with the hospital? Do you agree to have your patients get medical treatment from the hospital while at the same time you treat them?

Tufuga: *Ao... e gaa`lue tasi maatou....me i vailaakau a te fakaimasaki pelaa mo fuaga mo `suki, e aogaa `ki te masaki ne? E isi foki ne taimi ko uga mai a naai maa`saki ne te neesi ki tufuga ne? Kae e isi laa ne tookitaa mo neesi, e see talia lele loa ne laatou a te feasoasoani tenei e maua atu mai i tufuga. Ki a au laa, se mea `lei `ki loa ke gaalue fakatasi maatou mo te fakaimasaki. `Lei `ki loa mana gaalue maatou fakatasi. Se mea e gali `ki manafai e fai ke olo tasi a `tou poto mo poto a palagi...ke gaalue fakatasi ke ola `lei a tino o te atufenua. A te aveega o te vailaakau a te tokitaa e `pau loa mo te aveega a te faainu a te tufuga... e tofotofo kae salasala foki me e tefea a te vailakau tonu ne? Ka kilo atu a ia e se lei a te masaki, ko fuli a tena vailakau... pau loa mo te tufuga.*

Yes... we do work together... as medicine from the hospital like tablets and immunisation are important to the sicknesses, huh? There are also times when patients are sent by the nurse to traditional healers, huh? But there are doctors and nurses who do not agree whatsoever, with the help that can be received from traditional healers. To me, it is a very good thing for us and the hospital to work together. Very good if we work together. It is a very nice thing to have 'our' know-how and the know-how of the Europeans [medical professionals]... to work together so people of the country can live well. The prescribing of medicine by a doctor is just the same as the medicine given by a traditional healer... it is tested and searched for which medicine is right, huh? If he or she sees the sickness is not healed, he or she will change the medicine... just the same as the traditional healer.

The practice of traditional healing is an important part of community health in Tuvalu, as elsewhere in the Pacific. Although a volume edited by Parsons (1985) describes different types of traditional medicine in different Pacific islands, there are many

commonalities between these medical practices: in the relationships between patients, traditional healers and health; the healing practices themselves; and in shared socially-focussed perceptions about illnesses and health in which balance and harmonious relationships are vital. In this same volume, Chambers and Chambers (1985) discussed traditional medical practices on Nanumea Island, Tuvalu. The practices they identified include herbal therapies, heat application to body bruises, treatment of abdominal pains and other illnesses, massage, bloodletting[53], and spiritual power therapies. What Chambers and Chambers discussed is likely to be much the same in all other Tuvalu islands, including Vaitupu Island, in terms of healing practices.

On Vaitupu Island, a known traditional masseur, for example, will have to work with two, three, or more than ten patients every day. In the afternoons, around 4pm or 5pm, patients are already in the healer's house. As they wait for their turns, the patients and healer exchange stories while the traditional healer is massaging (*foo*) one of the patients. *Foo* can be up to 30 minutes or more than an hour per patient, depending on the seriousness of the sickness. It is a free service, but many patients give some gifts in the forms of food or money to the *tufuga*. Traditional knowledge is supposed to be freely used to help other people and should not involve commercial transactions. Therefore, traditional healers try to discourage patients from giving gifts or payments; however, many times they accept gifts because the patients insist or beg them to do so.

After treatment or during their face-to-face consultation with patients, traditional healers often advise their patients to seek further treatment from the hospital. For example, a traditional healer that specialises in fractured bones may ask the patient to go to the hospital to get some pain relief. This reflects the practical integration of biomedical elements into the traditional practices. All the traditional healers that I interviewed mentioned that they do not have a problem with their patients seeking help from medical hospitals. However, they have witnessed that medical staff do not formally allow this interaction.

The community people that I interviewed also acknowledged that they would like to see these medical and traditional practitioners working more closely together. Sadly, in its health strategic plan, the Department of Health does not incorporate traditional healing. The New Zealand Ministry of Health, for example, works with Māori traditional healing

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[53] On Nanumea Island, bloodletting is locally known as *kikini*; other islands such as Vaitupu called it *poga*. It is the lightly striking of the affected part of the body with a shark tooth-tipped instrument (Chambers & Chambers, 1985) to let the blood out of that affected part of the body.

practitioners to make use of traditional healing practices such as the use of native fauna herbal medicine, massage, and prayer in the health and disability sector[54]. More formal cooperation between the biomedical and traditional healing sectors has the potential to assist in achieving *ola lei* for the community. Formal arrangements can reduce treatment delay, promote more honest communication between patients and their healers as well as between the healers themselves, and act as an important source of advice. For example, a traditional healer can provide psychological support and bodily comfort and encouragement to a patient undergoing unpleasant but effective biomedical treatments. The lengthy pharmaceutical treatment for TB disease is a good case in point.

However, there are some difficulties with the notion of collaboration between biomedical practitioners and traditional healers. For example, some researchers have found that going first to a traditional healer to treat, for example, TB, may delay TB diagnosis, especially if there is a lack of cooperation between the healer and the medical system. Delay will allow TB to spread in the community (Massey, et. al., 2011). This particular issue is difficult to solve for several reasons, one being the contrast in the principles and practices of biomedicine and traditional healing which may hinder cooperation between them. Research on the roles of traditional healers in the Pacific generally stresses the importance of encouraging collaboration between traditional healers and medical professionals as the main way to address the differences between them. Much of this work has been in Tonga (Toafa, Moata`ane & Guthrie, 2001; Vaka, et. al., 2009; Poltorak, 2010) and Samoa (see Macpherson & Macpherson, 1990; 2009). A recent historical analysis by members of my research group of the 'decimation' of TB in the Cook Islands has identified the cooperation and trust between biomedically-trained Cook Islands doctors and traditional local healers as one of the factors which led to a dramatic reduction in TB rates by the 1970s (Futter-Puati et al., 2014).

Some Tuvaluan medical doctors accept traditional healing in the process of medical treatment. For example, some medical doctors and nurses send patients with fractured joints to the *tufuga* who specialises in treating fractured and dislocated bones. Here we can see an informal interaction between the medical and traditional healing systems. However, the desire of the community people is for these two to have not only informal but also formal interaction where they can work together to treat and promote healthy lifestyles for Tuvaluans.

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[54] See the NZ Ministry of Health website: http://www.health.govt.nz/our-work/populations/maori-health/rongoa-maori-traditional-maori-healing-0

The attempt to revive and maintain traditional healing knowledge is part of the *Ola Lei* Conceptual Framework. Traditional healing has been used for many generations and has been effective in helping people recover from disease and injury. Hence, it is impossible for community people to ignore it and turn solely to biomedicine. Traditional healing working together with biomedicine would support *ola lei* and broaden the base of health promotion in Tuvalu.

5.5. Conclusion

This chapter discussed important issues raised by participants, supported by some of my observations and experiences. The issues include economic, social, cultural, political, and environmental matters. This chapter was not only about representing community people's concerns, but also understanding their concerns. It seemed that in some cases one issue led to another, and interrelationships are manifold. For example, the issues of urbanisation and alcoholism are linked and interrelated, and these in turn are linked to good nutrition and hygiene, and so on. These connections reflect the complexity of *ola lei*.

While there were some common issues raised by community people, the issues raised also varied by the participants' and their communities' socioeconomic and sociocultural status. It was obvious that some participants saw the Government of Tuvalu, especially the Departments of Health and Education, as failing in several of its duties to improve people's health. For example, some participants identified inadequacies in relation to food quality in schools, health awareness programmes, and the availability of medical staff and facilities.

When participants talked about what they need and desire in relation to health, they mostly talked about this in relation to provision by the Department of Health. However, it is also important to bear in mind that the Tuvalu Government, particularly the Department of Health, has limits in terms of facilities and resources, and it tries to provide health in the best way it can within its capacity. Only a small number of participants saw the individual Tuvaluan as failing in doing their part in achieving health. Yet ignoring health advice, such as about diet and exercise, are individual or family decisions (although these decisions are often constrained by external circumstances) that contribute to the prevalence of diabetes and cardiovascular diseases.

Everyone has a role to play in achieving better health in Tuvalu. Partnerships between the Department of Health and other government departments, community people, and *tufuga* could serve not just in improving health provision but also in engendering a sense of collective responsibility for health. With regard to the students, the ongoing problems they face are caused by ineffective administration, lack of funds, their social context, and other factors. In fact, students were aware of the health issues around them. MSS students, for example, talked about the poor handling of food and overcrowded dormitories, but they did not about how to change the situation. It seems that students do not take these issues seriously; hence, they do not organise petitions or strike against these issues. Instead, they just live with the situation. For example, MSS girls lived in deteriorating dorms for many years without vigorously and openly protesting to the school's administration. This lack of autonomy is the same with primary school students who live with their parents and families at home: children often do not have the opportunity to choose what to eat, as the parents or elders decide their menu and their activities in the family.

The community participants spoke out about the lack of professional services as well as about the negative attitudes of some medical staff towards patients. These weaknesses, I believe, can be worked on to bring the services up to the expected standard of quality, if the authorities implement and monitor appropriate guidelines. This could improve the health services for the betterment of the people of Tuvalu.

Overall, people's thoughts, feelings, and experiences revealed much dissatisfaction but also some appreciation of the Department of Health. People's stories and views also showed that a lot has to be done by all involved, including community members themselves, to achieve better health in Tuvalu. It is really about the responsibility of all Tuvaluans. *Ola lei* is an inclusive, not individualistic, view of health. Achieving it requires partnerships and collective responsibility on the part of institutions, community groups, families, and individuals.

In the next chapter I explore further some of the gaps between government and communities, and the impact of these gaps on health, in order to find ways to manage (*tausi*) the space between. Identifying and addressing these gaps has the potential to contribute to *ola lei.*

CHAPTER 6: DEVELOPMENT GAPS AND TENSIONS

6.1 Introduction

E see mafai ne se takitaki io me se matai-kaaiga o fakamalie a tino katoa o te fenua io me ko te kaaiga. E isi ne taimi, a faifaiiga a tatou takitaki e fetaui mo kanoloto o niisi tino – ko gali la i ei tenaa ne? Kae e uke a taimi, e kese faeloa a te manakooga o niisi tino mo te mea telaa e fautua ne taatou takitaki. Tenei la a te mea faka`mae ulu! Kae see fetaui loa a `tou mafaufauuga mo manakooga o niisi tino, e isi faeloa se fitaa e maua ne tatou ne? Kae ko au e talitonu me i te kesekeseega tenei, e see se mea masei! Kae ko te keseega tenei e akoako mai ne ia ki a tatou-takitaki mo tino o te fenua ke iloa ne tatou o faka`lei atu a te fakateleega mo te atiakeega o te fenua io me ko kaaiga ne? Tatou e tauloto mai i te keseega tenei….me ana faka`pulaaga ne ia a `tou mata ke `kite tatou moo te suaa taimi...

A leader or a head of the family cannot please all the people of the island or the family. Sometimes, our actions and decisions as leaders match with the wishes of some people – that will be nice, eh? However, many a times, there is always a difference in what some people need and what we leaders advise. This is a headache! When our thoughts and plans do not match with people's ideas, there will be friction and conflict, eh? However, I do believe that this difference is not a bad thing! This difference, however, teaches to us leaders and the people of the island to know how to improve the management and the developments of the island or the family, aye? We learn from this difference... as it opens our eyes to be able to be more aware for the next time... (Chief – Vaitupu Island)

The 'headache' that the chief was talking about involves the same issue that confronts health and education planners and service providers as they craft strategies to meet the needs of the people of Tuvalu. Inevitably, the only way to remedy the 'headache' mentioned by the chief is to *tausi te vasia*, to nurture a caring and reciprocal relationship with people. This is exactly what the government and other service providers must do as well.

In Chapter 4 I focussed on government policies, plans, and initiatives in health and education, and those of NGOs and external agencies, while in Chapter 5 I looked at issues and needs at the community level and their association with the *Ola Lei* Conceptual Framework. In this chapter, I focus on development gaps and tensions revealed by these

two earlier chapters and analyse how these are problems but also offer productive opportunities. Therefore this chapter seeks to illuminate the gap between (*te vasia*) policies and expressed community concerns so that they can be addressed. The three main questions that I address in this chapter are:

1. In what ways do the government's policies and services differ from the communities' needs?

2. To what extent do these tensions or gaps impact *ola lei*?

3. In what ways does the *Ola Lei* Conceptual Framework not reflect real life in Tuvalu, or vice versa?

When government, NGOs, external agencies, and community are mismatched – i.e., in those cases where strategies say one thing and community people desire another – a disturbance in the relationship may result. Government's, NGOs' and external agencies' initiatives may be well-meaning, but they perhaps may stem from a non-Tuvaluan worldview not from the expressed concerns of the community. This is where tensions begin. This chapter is about these tensions. In the following sections I discuss these tensions and how they impact *ola lei* and explore how the dimensions of the *Ola Lei* Conceptual Framework are reflected in specific examples of life in Tuvalu.

6.2 Tensions or Gaps (*te vasia*)

6.2.1 Policy Versus Practice

The formal plans and policies of the Department of Health aim to promote health and to minimise disease in communities. However, the Department of Health often finds it hard to act on or implement those plans due to lack of money, facilities, or expertise. Let us look at the examples below to illustrate the gap between what is written and what is actually practised in terms of health.

In the *Te Kakeega* II and Strategic Health Plan documents, the government clearly spelled out the importance of strengthening health education and awareness programmes to address non-communicable, communicable, and sexually-transmitted diseases, and also to promote healthy lifestyles and better diet. This is the plan, and in school it is in the formal junior curriculum. In Chapter 5, however, I noted that community people and students raised the need for more health awareness. This was a common and emphatic view. One teacher recalled:

I was a student here for six years, and then come back here to work. I have been teaching here for many years. For so long I have been in this school, as a student and teacher… you know… hardly any visit from the Department of Health. Perhaps they have health programmes over the radio, but the students do not have radios… (Senior teacher at MSS, Vaitupu Island)

This is a mismatch, which the government acknowledges in formal documents the importance of health education and awareness programmes. Yet because Health Science is not part of the curriculum, schools are dependent on programmes from the Department of Health for health education. But even a senior doctor admitted that there is a lack of health awareness programmes due to a shortage of staff, lack of funds, and other reasons. In practice, therefore, health awareness plans are not implemented due to staff shortages and because such programmes are not prioritised in the context of general financial constraints. While this lack in schools might be addressed through the curriculum, there is also a perceived lack of such programmes in the community. There are gaps in the policy area also.

On occasion, the government establishes health-related policies or Acts such as Tuvalu Tobacco Act 2008, but in fact community people do not practise what is said in those policies or Acts. For example, section 3 of the Tuvalu Food Safety Act 2006 clearly requires labelling for all packaged food. Any information about the food package must be provided in English or Tuvaluan. However, in several cases, I witnessed that some shops on Funafuti Island sell foods such as noodles that have non-English labels on them. We can see that these health laws that enhance and promote health by guiding people to make healthy choices about their food purchases and practise healthy lifestyles. However, the problem now is related to the resources – human, capital, and technological – to implement and audit those policies. The recent establishment of a Food Safety Officer is a welcome move.

The mismatch between health plans and practice needs to be considered seriously because if it prevails it will hinder the development of health in Tuvalu. In addition, it creates a situation where the community and officials learn that policies and laws are words only and can be disregarded. Why the government passes laws that cannot be implemented is a question worthy of discussion. Are these external forces, such as development or health project funding, dependent on such laws being enacted? Laws like

the Food Safety Act 2006 require cooperation between government departments, such as Trade and Health, so that mislabelled or expired goods are refused entry[55].

6.2.2 Department of Health's Advice Versus Community Cultural Contexts

The Department of Health, as part of its Strategic Health Plan 2009–2019, tried to put forward programmes to reduce the burden of non-communicable diseases (NCDs). The most common advice given to community people, particularly obese and diabetic patients, was to do physical activities such as walking, control smoking and alcohol consumption, and eat a good diet (see Strategic Health Plan Performance Indicators in Government of Tuvalu, n.d.). This is sound medical advice, but getting this advice across to the community people is a challenge. They may be shocked due to the clash such advice has with their normal activities and practices. The following examples show some of these clashes between health advice and the community people's views of that advice.

Exercise

One of the things health officers try to encourage is exercise, in the form of walking, doing physical chores, moving around, and playing sports to reduce their risk of NCDs such as diabetes and cardiovascular disease. Physical activities lower the risk of developing NCDs (Bassuk & Manson, 2005). Moreover, there is evidence that 'exercise targets many aspects of brain function and has broad effects on overall brain health, resilience, learning and memory' (Cotman, Berchtold & Christie, 2007, p. 469). However, some types of physical activities do not work well or are culturally unsuitable in Tuvaluan communities. For example, walking around the island simply to exercise is an awkward thing to do on outer islands:

> *E tonu, se mea e aogaa a te sasale io me ko te teletele o exercise...kae ko oko foki loa a te faigataa o sasale koe io me e teletele koe i te auala just for the sake of exercise...i tou fenua laa nei e tai fai-fakaatea foki loa a kita manafai e sasale fua io me e teletele a ia i te taeao io me ko te afiafi o excersie ne? Io me e kilogina koe ne tino me ia koe e fakamaumau taimi fua [kata].*

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[55] Given the small economy and limited personnel perhaps one solution to staff shortages is cooperation between departments. If the government department responsible for imports did spot checks on imported food following the Food Safety Act regulations, that might save a lot of time for health inspectors going around stores, though they would still have to check for expired goods.

It is true that it is important to walk or run for exercising... but it is very hard to walk or run on the road just for the sake of exercise... in our island it is quite weird for someone to just walk or run in the morning or evening just to exercise, aye? Or you will be seen by people as only wasting time [laughs]. (Community male elder, Vaitupu Island)

Koe e fai ke sasale a fafine?... Aitapa! Ailoga e talia ne fafine ke sasale latou i te auala...e iloa loa ne koe i mea penaa sa excercise mo sa sasale i te auala o fakamalosilosi foitino e see taitai o fakamaumau olotou taimi ki ei ne?

You mean for women to walk? ...Oh my! It is unlikely that women will agree to walk on the road... you know it that things like walking on the road to exercise the body will not even be things to be wasted time upon, aye? (Woman in the community, Vaitupu Island)

Encouraging diabetic patients or any local people to walk or jog would enhance health, but unfortunately walking around the island or on the airstrip[56] is uncomfortable physically and culturally unacceptable because it is seen as a waste of time. Ordinary adults perceive walking for the sake of exercise as an awkward thing to do, while walking from home to the plantation, for example, is not. Community people tend to think that walking to exercise is a western notion. On the other hand, walking to the nearby store or to a relative's house to get something, or to walk to the bush to get firewood, is culturally acceptable. Walking for the sake of exercising has not yet been embedded into the lifestyle of community people. Perhaps in the future, if walking for exercise prevails then it will no longer be awkward.

On the outer islands, such as Vaitupu Island, it is hard to find a group of local people or individuals walking or jogging around the island or on the field. Only the youth and younger people on the island tend to play sports – particularly soccer, volleyball, and basketball – in the afternoons. For older men on outer islands such as Vaitupu, the most common physical activity is working in their *pulaka* plantation – doing some weeding, digging, composting, and planting – and sometimes fishing. Some older men still climb coconut trees to collect green coconuts for drinking or cut toddy. The women do the washing, cooking, and tasks like sweeping inside and around the house, as well as those related to childcare. A few older women and men sometimes joined the younger people in

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[56] On Funafuti Island, people mostly use the airstrip as a walkway in the mornings and afternoons.

local games such as *ano*[57]. There are locals who claim that they have enough exercise from their normal daily chores such as gardening, sweeping, climbing coconut trees and other activities.

This situation seems to be changing on Funafuti:

Oh yes, the uncomfortable feeling when walking on the [outer] island is understandable... just because we do not do such walking and jogging on the island as a common activity. Here, [on Funafuti Island] perhaps many people particularly those in employment had been exposed to healthy practices and learnt healthy practices when they did their education, aye? (Government officer, male, Funafuti Island)

Every early morning and late afternoon on Funafuti, a large number of people (primarily older people aged 40–70) use the airstrip to walk and jog. I noted that nearly all those people who walked and jogged were government workers, the more 'educated' ones, along with some school children. I also saw several foreigners walking and jogging. So it seems that walking and jogging on Funafuti Island, on the airstrip, is now an acceptable activity for government workers, officials, and some younger people. This attitude presumably indicates and reflects the role of education in encouraging people to choose healthy practices. Moreover, several government workers whom I talked to as we walked for exercise on the airstrip stated that they felt comfortable walking here on the airstrip and hoped to maintain this activity when returning to their home islands. In 2014, on every second Sunday morning, SDA youth walked for exercise on the airstrip. Perhaps change is in the air.

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[57] *Ano* is a traditional game rather similar to the game of volleyball, involving two teams whose object is to return a hurled ball to the other side. Any number can play and usually teams consist of the members of a village or other.

Figure 6.1: The airstrip is filled with people exercising and playing sport.

Source: Keith Chambers, 2009.

Every afternoon, the airstrip is engulfed by active play (Figure 6.1). Along the airstrip, hundreds of people from different communities turn out and play various games such as soccer, volleyball, and rugby. Kids mess around on the paved court area doing all sorts of active informal playing on the fringes of organised games. Some old people strolled along the airstrip. Some people just sit around on the airstrip to enjoy the nice breeze.

Food

Another way in which health advice creates tension with cultural practices is around food.

> In one health talk session that I observed, the nurse talked about foods that diabetic patients should eat more and foods that should be consumed less. She had a tray of different foods, in which foods were grouped into two major categories: 'eat these foods more' and 'eat these food less'. The patients – males and females over 40 years old – were listening very carefully and were very quiet, which I interpreted as an indication of being keen to learn. After the brief talk, the patients asked questions. It was good to see a lively discussion between the public health nurse and the patients, which indicated that patients desired to learn more about this 'new

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disease'. I vividly remember how patients reacted to some of the health information they received.

First reaction:

Patient: *Ko tena uinga nei a te niu e tai too i meakai kolaa e tau mo tatou o see kai malosi ki ei?*

Does this mean that coconut flesh is also included in the foods that we should not eat more of?

Nurse: *Ao! Masaua me i te niu e lasi a te lolo `sinu i loto, telaa e see naa loa ko `lei ki a tatou kolaa e maua ne te masaki ko te suka. Kai fua ki ei [niu] fakatasi i te vaiaso.*

Yes! Remember that the coconut flesh has a lot of creamy oil within it, so it is not quite good for us who have diabetes. Just eat coconut once a week.

Patient: *Tapa! Ko fai a te mea! Au nei e fia kai `ki loa ki niu. Ko fai te mea! [kata]*

Oh! This is a problem! I really like to eat coconut. Oh my, this is a problem! [*laughs*].

Second reaction:

Nurse: *Te aofaki o laisi e `tau o kai ne koe i te `kaiga, e `tau o penei fua mo tou lima mana kumi penei ...[te neesi e kumi tena lima kae fakaasi ki tino masaki]*

The amount of rice that you should eat in a meal should only be a handful… [the nurse was making almost a fist to show to the patients].

Patients: [*kata loa i luga kae ko niisi e luuluu a olotou ulu...*]

[laughed sarcastically and some shook their heads with disbelief…]

(Field-notes during participant observation at PMH, Funafuti Island)

The cultural importance of coconut as a food remains great in Tuvalu. Interestingly, Hughes (2005, p. 299) wrote that 'people were 2.2 times more likely to be obese and 2.4 times more likely to be diabetic if they consumed fat from imported foods rather than from traditional fat sources, such as coconuts'. This research finding was not conveyed to the

diabetic patients during the health talk; it seems that the medical staff member was trying to discourage patients from eating coconut flesh and cream. However, it was hard for some locals to take in the fact that coconut flesh should be consumed less because it contains oil. This is because coconut is a cultural crop, which has been a staple food for hundreds of years, and is also readily available, at least on the outer islands. As Chambers and Chambers (2001) described for Nanumea, local people view coconut as 'the food from which we live' because of the great variety of food items it produces, including both mature nuts and toddy molasses which can be stored as reserve foods, and because the coconut endures atoll conditions such as salinity and drought to an extent not matched by any other traditional food source. In her discussion of Tokelau cuisine, Huntsman (1983) also described the social importance of coconut and fish in that atoll society. Coconut is thus a traditional and highly valued food that is embedded in people's diet. Almost all local dishes include coconut cream and the creamy white flesh of mature nuts is also relished as a side dish with meals by many people. While the coconut flesh and cream are daily staples they are eaten as an adjunct to the starch and protein that are the main substance of the meal.

Eating large portions of starchy food is the norm in Tuvalu, so to eat less food such as rice is also a hard thing to carry out. It can be seen here that controlling diabetes through diet may clash with Tuvaluans' cultural ways of eating.

Furthermore, growing vegetables is hard and expensive in Tuvalu, due to soil infertility. Furthermore on Funafuti Island, where half the population live, lack of access to land makes growing vegetables even more difficult. As a Funafuti resident explained to me:

E faigofie a te fautua mai ke kai malosi tatou ki lau-laakau...kae ko mea penaa mo saa lau-laakau mo fuaga-lakau e tai faigataa loa o toki i konei, ona ko te mativa o te laukele mo te seai foki loa ne laukele mo toki a laakau-kaina... Ia, ko lakau-kaina foki loa i te sitoa, e tai togi mafa loa ne? Maise ki kaaiga penei mo matou kolaa e seai ne sene ne?

It is easy [for health officers] to advise us to eat a lot of vegetables... but those things like vegetables and fruits are really hard to grow here, due to soil infertility and even lack of land to grow vegetables... And the vegetables and fruits in the shop are quite expensive, aye? Especially for families like us that do not have money, eh? (Mother at a poorer settlement, 50+ years old, Funafuti Island)

Gardening and its discontents

It seems that the advice that health professionals provided about nutritious diets are not realistic given the financial and environmental situations of most community people. On Funafuti Island, suitable land for gardening is not available, especially for families that live on swampy land[58]. During high tides, seawater is pushed up through the surface and floods the lower areas. Soil salinity is high (see Nakada et al., 2012) and soil is relatively infertile (see Tisdell & Fairburn, 1983). On the northern and southern ends of Funafuti Island the ground is full of coral pebbles and stones that make it harder for residents to grow a garden. As it is prohibited under the Funafuti *kaupule* law to extract soil from another person's land, growing a garden is not possible for people who live in stony and swampy areas. On Funafuti Island, neighbourhoods are congested and most houses are only one or two metres from each other. Thus, available space for gardening is limited or nonexistent. The cost of making a garden even when some land is available is another problem. This is because one has to buy fertilisers, compost, and seeds, and perhaps chicken wire to avoid chickens damaging the germinating seeds. Shade cloths to protect from salt, winds, and sun may also be needed. All of these cost money that is needed to meet basic household needs.

Those people who grow small gardens outside their houses (Figure 6.2) felt that it was beneficial to have a garden as it provided some vegetables for the family. However, maintaining a garden is often hard.

> The heat of the sun just burnt my tomatoes. You know, sometimes, especially when there is no rain for weeks it is hard to water our garden because we have to save water for drinking, eh? Maintaining the garden so that it supplies vegetables to our family every day of the year is hard, you know? (Male – Funafuti Island)

My interviews showed that even people who manage to have a garden outside their houses on Funafuti Island are not able to maintain them, especially during long periods of no rainfall. Of course, to permanently maintain the garden is hard, so this means that some people do not re-plant their gardens after harvesting. However, a few people are quite successful gardeners and even have a little surplus to bring to the weekly market in the town centre. In 2014, for example, a man brought six cucumbers to sell one Saturday

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[58] Plans to fill in the borrow pits could help enormously in providing arable garden plots.

morning, priced at $1 or $2, depending on size. He said they were easy to grow. He bought compost from the Taiwan garden project, and water was the only limitation that he saw.

Figure 6.2: A family vegetable garden on Funafuti Island.

The *Fatoaaga o Taugasoa Fiafia* (Figures 6.3 & 6.4) – a garden project that is funded by Taiwan and the Government of Tuvalu – is a successful vegetable garden on Funafuti Island. It is an approximately 500 m^2 garden with various vegetables including cucumbers, cabbages, tomatoes, eggplants, onions, cauliflower, chilli, melons, radishes, bottle gourds and pumpkins, as well as asparagus. Limited amounts of the garden's harvest are for sale on a first come first served basis, usually one morning a week, and there is always a crowd to the garden at those times (Figure 6.5). A composting operation is an essential part of this project since the area on which the garden is located is stony, requiring raised beds and soil input to make the garden viable.

Figure 6.3: *Fatoaga O Taugasoa Fiafia* **is located at Vaiaku, Funafuti Island, an area that has always been stony.**

Source: Sagaa Malua.

Figure 6.4: Vegetables flourishing at *Fatoaga O Taugasoa Fiafia.*

Source: Sagaa Malua.

Figure 6.5: Sale of vegetables at *Fatoaga O Taugasoa Fiafia* on a Friday morning.

Source: Sagaa Malua.

This project supports and inspires community people to grow their own gardens. The garden project also extends its assistance to local gardeners by providing seedlings and advice and selling compost. The sustainability of the garden depends entirely on the availability of funds. Taiwan granted around AUD$30,000 per year to run the *Fatoaga O Taugasoa Fiafia*. Some interviewees mentioned that as long as Taiwan stays involved in the garden, it will be sustainable. This means that the *Fatoaaga o Taugasoa Fiafia* is not yet sustainable without external assistance. It is Taiwan's funding, garden expertise, and technology that contribute to the success and maintenance of the garden. This gives an indication of the difficulties of providing foods required for a healthy diet on Funafuti.

On the outer islands, on the other hand, there is ample land for families to grow vegetables. However, on Vaitupu Island, for example, only a few families grow vegetable gardens outside their houses or on land farther from their homes. This is mainly because – besides soil infertility and the expense of making a vegetable garden – community people still prioritise culturally important crops such as *pulaka*, taro, and coconut trees. After all, the efforts to grow vegetables described above involve western imports, none of which existed in Tuvalu before 50 years ago.

Figure 6.6: A *pulaka* pit, the main cultural garden, Vaitupu Island, 2013.

Source: Ulisese Kainano.

A family that has well-grown *pulaka* crops (Figure 6.6) will be praised by community people; one way to measure a status of a man in the community is through the growth and number of his *pulaka* and *taro* crops. Production of vegetables is not considered in this assessment, nor is the production of staple food crops such as breadfruit and bananas. *Pulaka* pits, just like land, are important parts of a family system, which are all listed and registered in the island's land court. This indicates the cultural importance of these root crops in society. In the eyes of the community, the family's *pulaka* pits are its main 'gardens' and should be the focus of time and energy. Family members are expected to make an effort to work on their *pulaka* crops at least once a day every week.

The feasibility and cultural appropriateness of advice is important in relation to exercise, diet, and gardening. However, the area of sexual health is even more fraught.

Sexual and reproductive health

When it comes to advice around sexual health, tensions arise between the Department of Health (and other non-governmental health agencies, such as the Tuvalu Family Health Association) and community people. I still remember one common advertisement over Tuvalu radio whereby a youth excitedly told her mother about what she learnt in an HIV/AIDS workshop. As soon as she told the story, the mother slapped her and

angrily told her to stop talking openly about sex-related issues in the household. Then the advertisement went on to urge families to move away from the silence around sex: families should talk together about sexual health issues. Two issues are apparent in this advertisement: the first is that discussion of STIs involves transgression of a cultural taboo, which made the mother angry. Secondly, slapping is a common punishment for openly talking about sex-related topics in the family. Though the main point of this advertisement was to encourage families to talk amongst themselves about health-related issues and diseases such as AIDS, it also illustrates how taboo it is to talk about sex-related matters in the family.

Talking about sex-related issues in front of older relatives such as uncles, aunts, parents, and especially with opposite-sex siblings and cousins is not culturally accepted in Tuvalu and other Pacific Islands. For example, Park & Morris (2004) described more fully the sacred brother/sister relationship of Samoans in New Zealand, which influences how they behave in their homes or public. Chambers and Chambers (2001) also discussed the brother/sister (and male cousin/female cousin) relationship on Nanumea Island, Tuvalu. In a Tuvaluan home, a girl must take care to wear proper dress that covers most of her body whenever her brothers and opposite-sex cousins are around the house. Moreover, there is an uncomfortable feeling among family members when they watch a movie that shows characters swearing or kissing, let alone sexual intercourse. Whoever is holding the video player's remote control will quickly fast-forward that scene or completely turn it off. All these examples indicate that it is not culturally acceptable to discuss sex-related issues in homes.

Furthermore, according to a medical officer from the PMH, the parents of primary school students on Funafuti Island did not approve of them delivering sexual health advice or programmes to their children as part of their health awareness programmes. The cultural sensitivity of sex-related topics made community people feel that such issues should not be openly discussed in schools or their own homes. Many Samoan parents in New Zealand found it hard to talk to their children about sexuality, although some were eager to learn successful strategies (Park & Morris, 2004). This reluctance to talk about sexuality is also present in Tuvalu; however, from the perspective of the Department of Health and NGOs such as TuFHA, there is a need to discuss and promote health awareness programmes to address sex-related issues such as HIV/AIDS and teenage pregnancy, but using appropriate methods and levels of language.

Relations between traditional healing and biomedicine

Last but not least, there is also the tension between medical practice and traditional healing. From a trained medical person's perspective, going first to a traditional healer for treatment of, for example, TB, will only delay TB diagnosis and treatment (see Massey et. al., 2011). Several medical officers interviewed believed that patients should visit the hospital first instead of traditional healers.

> I always advise people to come first to the hospital to be medically examined and treated... but not to go first to a traditional healer. Well, you know, sometimes traditional healers' medicine and massaging [or rubbing] could just worsen the patient's sickness/illness. Sometimes a masseur just mistakenly massages someone with a heart problem thinking it is an '*atua 'leo*'. So it is better if a sick person visits the hospital for a proper examination and treatment... (Medical Officer)

Medical staff members assume that it is always in everyone's best interest to use biomedical therapies first. This assumption is largely unquestioned in their training and in their health education efforts. However, some people choose to approach the traditional healers first rather than the hospital.

> A couple from the main village came with their 12-year-old son to a masseur who lives near the Motufoua Secondary School campus. The son had a swollen groin and feet, and could not walk on his own. The couple approached me and asked if they could stay with me and my family so that their son could live closer to the masseur, in order to save them time and money to bring him twice a day to the masseur's house. Every morning and evening, the masseur visited our house and gently rubbed the boy's groin and feet with oil. They returned to their family when their son recovered and walked again after three weeks. The couple never sought medical assistance from the nurses. (Field notes, 2010)

This account reveals that the role of masseurs and local healers is still needed and used by community people, even though this is a biomedical era in which they are encouraged by health professionals to seek medical treatment from hospital. When they get ill, many community people choose the traditional healer in the first instance. This is because the traditional healer (*tufuga*) could be a close relative. People feel more comfortable to approach the *tufuga* in a house rather than a formal clinic, and also because the *tufuga* has successfully treated previous patients, people are attracted because they feel

confident in their healer. Often it is convenient for people to visit a traditional practitioner rather than to endure a long wait at the hospital in the capital. A *tufuga* cannot turn people away.

The important point here is that the community people, in times of disease or injury, are able to choose between biomedical and local therapies, or a combination of both. In fact, it seems hard for some community people to disregard traditional healing practices; thus, the advice from medical officers to use biomedicine rather than traditional healing can fall on deaf ears. It is important to note that western medicine and Tuvaluans practices are all cultural practices. Some accommodation on both sides will be necessary for effective cooperation. For example, specific cultural change towards being about to talk about sexual health issues in the household would be ideal, but also biomedicine moving to accommodate patients seeing *tufuga*. Along the same lines, another possible suggestion is to incorporate or link Tuvaluan medicine or traditional healing practices to the Department of Health's medical system. For example, the integration of Māori medicine and traditional healing with the NZ Ministry of Health's system is a possible model (see Chapter 7). This integration is one way to bring out better health outcomes in Tuvalu.

The areas I have outlined above – exercise, diet, gardening, sexual health, and traditional healing – all cover some mismatch between health advice from a western biomedical perspective and important Tuvaluan cultural understandings and practices. There is a need to bridge these gaps to plan and deliver better health services and programmes for community people. Health promotion can provide a possible solution for this, because it seeks to empower and guide people to make healthy choices (Laverack, 2004; 2007). One existing health promotion activity on Vaitupu Island is the sports day held every Saturday, except when there is a funeral or other communal activity. Every active man and woman is expected to be involved. It could be a game of volleyball, soccer, or a local game such as *ano*. The Saturday games allow community people (mostly those aged 16– 60) to come and play; hence, they are guided by this community activity to exercise. I believe that strengthening and organising cultural physical activities – such as working on *pulaka* plantations, *fatele* (local dancing, singing, and drumming), sports, and communal work parties – as part of health promotion will guide people to choose healthy practices. So, it is important for health promoters and officers to strengthen their partnership with communities because together they can plan what health promotion activities are suitable and culturally acceptable within local communities.

6.2.3 Understandings of Health in the Community versus the Department of Health

Not only were there tensions and gaps between the Department of Health's health advice and community people's needs and desires, but there was also an obvious tension and disparity between Tuvaluan's understanding of health (*ola lei*) and the Department of Health's view of health.

In Chapter 2, I discussed in detail an important WHO definition of health which has been adopted by the Tuvaluan Department of Health and some of its shortfalls in the Tuvaluan context, and in Chapter 3 I introduced the concept of *ola lei*. In this section, I build on this to emphasise that the Tuvaluans' concept of *ola lei* is much broader than the 1946 WHO definition of health and, though it includes individuals, is community-based. The WHO defines health as a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity. Despite being the official definition of health in Tuvalu, it does not fully cover the way Tuvaluans understand health (see Chapter 3). The disparity or tension between Tuvaluan understandings of health and how the Department of Health views health can be clearly seen when we look, again, at the *Ola Lei* Conceptual Framework shown in Figure 6.7.
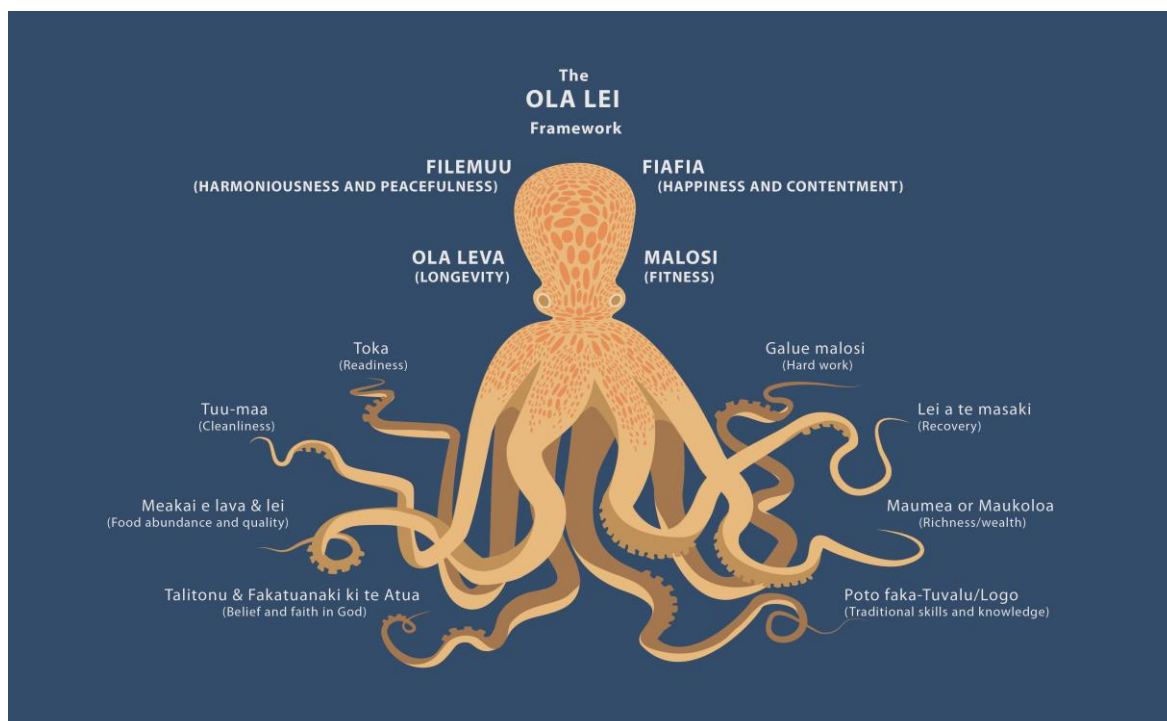
Figure 6.7: The *Ola Lei Conceptual Framework* in the form of an octopus. (Artist Briar Sefton)

The most noticeable differences between *ola lei* and the WHO's definition of health are the broadness and complexity of the *ola lei* concept and its communal orientation.

Reading Chapter 3, and more briefly looking at the diagram of the *Ola Lei* Conceptual Framework in Figure 6.7, we can easily see this difference between *ola lei* in the eyes of the Tuvaluans compared with the WHO idea of health.

The 1946 WHO definition of health does not cover some features of *ola lei* such as readiness, accessing traditional skills and knowledge, believing in and having faith in God, and richness, and is primarily focussed on individual health. When Tuvaluans talk about *ola lei* or health, they talk about all these qualities and dimensions. As the diagram below, (Figure 6.8) sums up, the understandings and perceptions about health of these two groups or institutions – the Department of Health and ordinary Tuvaluans – are quite different.
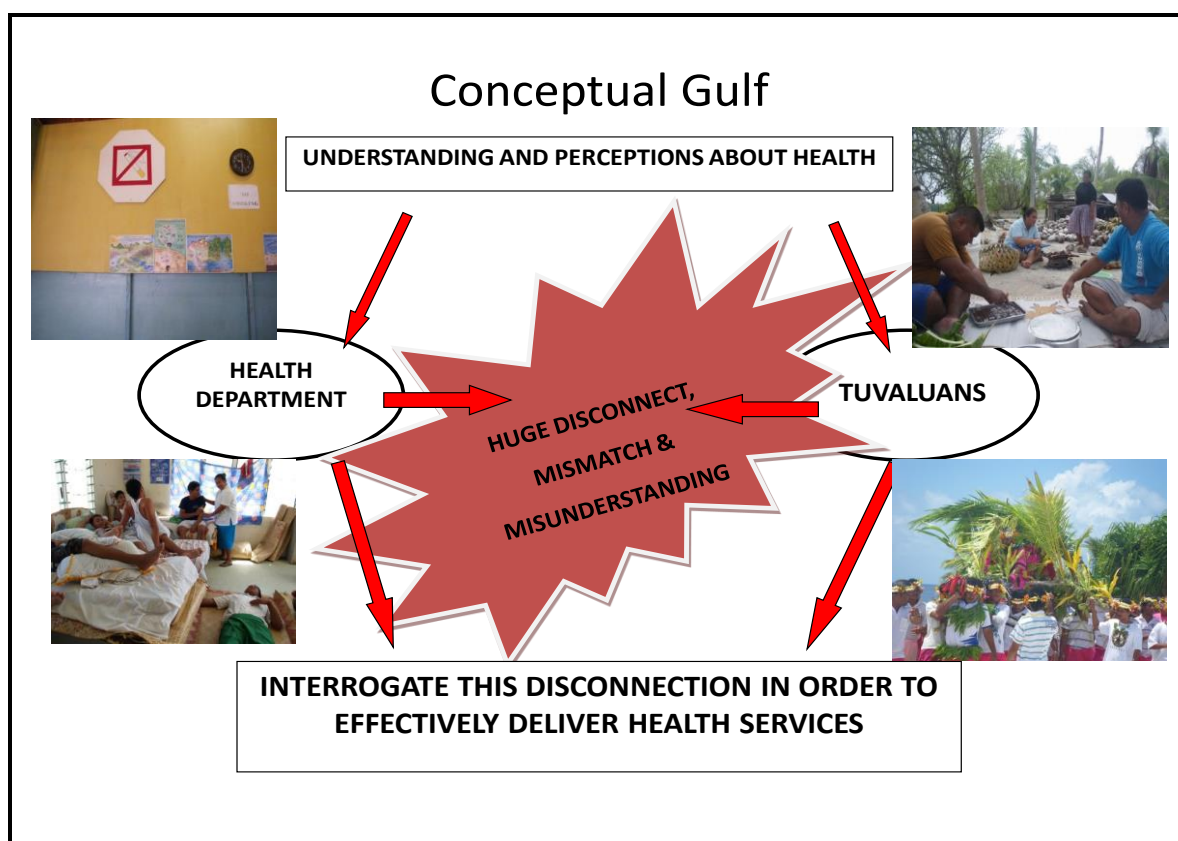
Figure 6.8: Conceptual gulf between Tuvaluans and the Department of Health that is caused by different understanding and perceptions.

There is a disconnect between how Department of Health and NGO officers and ordinary Tuvaluans understand and perceive health. It is important to note that the different institutions are founded on different concepts of health. The Department of Health and NGOs such as TuFHA are founded on the concept of health that comes from WHO, but the community people's understanding of health is founded on the concept of *ola lei*. However, the individuals involve move between these different institutions. That is, health

officers are also community people; hence, they may be like other community people who perceive health in a more holistic and communal way. I call this disconnection or mismatch a 'conceptual gulf'. This conceptual gulf is a problem when it comes to health services or health promotion programmes; hence, the Department of Health, NGOs, and Tuvaluans should interrogate and make sure they understand this conceptual gulf. I believe that if we understand this conceptual gulf we will be able to effectively deliver health services and health promotion programmes in communities and schools.

6.2.4 External Agencies' Health Policies and Aid versus Tuvaluan Needs

In Chapter 4, I provided an overview of external agencies' and the types of aid that Tuvalu receives to assist Tuvalu to improve its health outcomes. In the process of 'development', there are often tensions or gaps between or among the funders and recipients, or between formal and informal institutions. Relationships do not gel well all the time. Sometimes frictions develop due to clashes of interests, priorities, values, and principles. In this section, I will focus mainly on the tensions or gaps between foreign aid projects, the government, and communities.

The first example that reflects the mismatch between external agencies' aid and community needs is the fact that development aid projects may be driven by donors themselves. In a worst case scenario:

> Development agencies play a major role in determining the content and implementation procedures of development interventions. Rather than working with, and empowering, existing local institutions, each development agency tends to prescribe its own courses of action. Development agencies also tend to bring with them predetermined rules and regulations to apply either to development activities that they manage directly, or to those implemented with their support (Msukwa & Taylor, 2012, p.68).

The provision and implementation of development aid projects are largely decided by donors themselves. For example, Japanese aid to Tuvalu is mostly in the form of infrastructural development (see Government of Tuvalu, 2009). Whether Tuvalu prefers it or not, it has no choice because it is Japan's foreign aid policy to give its aid in the form of infrastructure. Moreover, according to a senior officer in the Tuvalu Aid Department, Taiwan predetermines that its financial assistance is not to be used for Tuvalu Medical Treatment Scheme (TMTS) expenditure. This is a mismatch between external agencies and

donors and Tuvalu – both the government and community people – as the budget for TMTS often runs out before the next financial year's budget.

Moreover, it is worth mentioning the fact that from the perspective of my participants, Tuvaluans value the content of the aid projects or development programmes because they benefit the health and wellbeing of Tuvaluans. However, the problem is the community engagement to sustain the aid projects is not there in many cases. This is a gap between the providers and community that has not been sufficiently researched to allow community people to take on the project themeselves. For example, people on Funafuti really like the Taiwan garden (*Fatoaga o Taugasoa Fiafia*) project, but they are not buying into it. Hence, when Taiwan finishes its assistance, this garden project is likely to be gone because Tuvalu has been relying on Taiwan's assistance. It is therefore important for external agencies and recipients to thoroughly talk about the maintenance of the aid projects in communities and to put steps in place so that these worthwhile developments are localised.

On some occasions, communities do not have a say in how a development project is planned and implemented, yet there are cultural models which would assist success. Msukwa and Taylor (2011, p.70) used the analogy of a funeral in a traditional context to propose how development projects should operate within a community:

> Power relationships will need to change in order for communities to own the development process… This returns us to our original argument: that development must be owned by communities, who can then manage it much more like a funeral.

This is one way to minimise the potential gap and mismatch between external agencies' development aid and what the community people really desire and need. Communities need to have a voice in the planning and implementation of development aid projects, just like a funeral in a local community. In a Tuvaluan funeral context, for example, the family sits down and talks about everything, including the place where the deceased person would lie for families to pay their respects, the time and place of burial, the time of feasting to close off the funeral, and preparation of the foods. The decisions that are made take account of the resources available, who can participate and the roles they can choose to play, time constraints, past history, and the tenor of current relationships. The families – a part of the community – own the project (funeral) and run it in a way that meets their needs. Neither the *kaupule* (local government) nor pastor may have direct influence on the funeral's programme.

Currently, aid delivery to the Pacific Islands, such as Tuvalu, has been described as falling into the category of a neostructural development approach (Murray & Overton, 2011). Neostructuralism is another way of understanding development aid in Tuvalu. Murray and Overton (2011, p.278) define neostructuralism in the following terms:

> …aid policies now [in Oceania] reflect elements of a PWC [Post Washington Consensus] approach that are much more neostructural in character: building the capacity of the state to govern effectively, promoting democracy and citizen participation, addressing poverty and encouraging the market but balancing it with key government institutions and forms of regulation.

Unlike neoliberalism, neostructuralism does not signify the 'market' as a key agent for development (Leiva, 2008); however, it still does require the interaction between the state, society, and market. In this way, it seeks participation in the economy, builds the capacity of states, and enhances sovereignty of the recipient countries. The state or government is seen as having a responsibility up to the donors and as well down to its people. That is, it needs to facilitate the aid projects in communities and also ensure that the community people's rights are maintained during the implementation of aid. However, it also assumes that development involves integration into the global economy, and thus the projects that it encourages are securely grounded in the market economy. These assumptions privilege entrepreneurship and private business and work against traditional Tuvaluan sharing obligations and communal projects. Pressure to shift from a sharing-based economy to a market economy is enforced by every aspect of globalisation and westernisation imposed since the early contact era. This pressure amounts to a classic example of hegemonic control by external entities.

But to return to the topic of donor control of aid, it is important to note that Tuvalu has also another different mode of receiving aid, through the Tuvalu Trust Fund. As a sovereign wealth fund, the Tuvalu Trust Fund (TTF) was set up in 1987 by Tuvalu, New Zealand, Australia, and the United Kingdom. The Fund was set up to safeguard Tuvalu against deficits in Government income and also to assist Tuvalu's development. It is a different form of aid modality as it is a 'sovereign wealth fund where income from investment of fund monies, provided by the donors and Tuvalu itself, is channelled automatically into the recurrent budget of the GOT [Government of Tuvalu]' (Wrighton & Overton, 2012, p.253). Hence, TTF provides a vehicle for the sustainability of the

country's economy. It is a special kind of aid development, i.e. rather than donors giving project aid, they contribute to the TTF and let Tuvalu decide how it spent.

Despite my and other academics' critiques of development aid, community people have other responses. They did not publicly offer criticism of overseas aid projects. The fact is that the people of Tuvalu are happy with any kind of assistance at all.

> *Au pelaa me seai ne aku faitiooga ki polotieki feasoasoani konei e maua ne tatou mai i fenua maumea ne? Te mea taaua loa ki a au ko te isi o se feasoasoani moo tatou tino Tuvalu. Polotieki konei ki tane-vai...e maua mai fea foki laa a tou tane moi ne fai e seai ne vaaegaa polotieki penaa ne? Ko te fakafetai fua o tatou ona ko feasoasoani ko maua ne tatou ne? Au foki e lasi toku fiafia ki polotieki konei a Tiapaani...e aogaa kii. Se gata ko isi se uuafu a tatou, ko gali foki `tou fakaimasaki... ia ko Motufoua ko faka`lei atu ne laatou...kae see gata i konaa, tokouke a `tou tino ko isi ne galuega ona e gaalue latou i te fakatuutuuga o fale konaa..maua loa ne muu sene.*

> I do not seem to feel any criticism against the aid projects that we get from rich countries? The important thing to me is that there is assistance to us Tuvalu people. These projects of water tanks... where else can we get tanks if we didn't have this kind of project? We will have to be just thankful of the assistance we now get, eh? I am also very happy with these projects of the Japanese... they are very important. Not only do we have a wharf, we do also have a better hospital... also Motufoua [Secondary School] is refurbished by them... not only that, many of our people have got jobs since they work in the building of those buildings... received quite some money. (Community member, male, Vaitupu Island)

In general, community people thought that it is better to have at least some projects rather than none at all. From what the above participant said, people favour aid projects in the form of infrastructure that enable job opportunities for the people in the community. For example, the 2013–2014 upgrading project of MSS by Japan recruited around 90 to 100 locals to work as labourers. The wage is about AUD$210 to AUD$340 a fortnight. That these projects also result in tangible buildings is viewed as a positive result and as development as well. Most of the time the people of Tuvalu do not analyse the projects in terms of its impacts to the environment, jobs, and local economy; rather, any aid coming into the community is seen as better than nothing.

6.2.5 Interactions between Formal Health and Education Sectors

Many of the teachers, students and health professionals whom I interviewed said that practical interactions between the Departments of Health and Education were lacking. In Chapter 5, we saw a common issue mentioned by schools was the lack of health awareness programmes. As one teacher put it:

> There is a weak interaction between the Department of Education and Department of Health. I have no fear of saying that because it is true! Look at the number of the Department of Health's visits to our school to talk about health issues… how many in a year? Perhaps one or two… or none at all! There must be a bridge between our schools and the Department of Health… and I think the bridge should be built by the two departments and us, schools. (Senior teacher, male)

This is a development issue because interaction between these two sectors is necessary in order to improve health outcomes for students and community people. It is important to bear in mind that the Department of Education has a role to play in health, as outlined in Chapter 4. It is responsible for children's safety in the school environment as well as the health and health science curriculum. The above participant felt that the gap can be bridged if the Departments of Education and Health take seriously their mutual responsibility to collaborate. Bridging of this gap is addressed particularly by the Department of Education in its Tuvalu Education Strategic Plan (TESP) II for 2011–2015. One of the TESP II's objectives is to strengthen partnerships with communities, *kaupules*, regional and international organisations, churches, NGOs, and other government departments. Within this TESP II, the Department of Education included a Memorandum of Understanding (MOU) with the Department of Health. This is a good strategy to pull the two sectors closer together. Unfortunately, the MOU does not have specific content. It is just a sentence in the TESP II that generally reminds of the importance for the two sectors to cooperate more, at least at the policy level. This MOU will become meaningful only through action. The gap will still be there if officers of the two sectors do not use each other to promote health to the students and community people.

Most of the research participants seem to blame the two formal departments (Education and Health) for distancing themselves from each other. Unfortunately, the consequence of not building relationships is mostly borne by the schools' students, and the issue of how to collaborate effectively cannot be resolved by them. Instead, explicit strategies need to be developed, as one teacher explained:

I think their [Departments of Education and Health] common goal here – in terms of schools – is to improve health of the students, aye? So if they keep on not working together more closely the students will keep on getting the same health outcomes… But you know, I also believe that we, teachers, can always act as the Department of Health by teaching or sharing to our students some health concepts or issues. You know, ten or five minutes of your lesson… you talk about the damages of smoking can do to your lungs, teeth… that's easy, isn't it? (Senior teacher, female)

Like this participant, several community people wondered why teachers could not act as health education professionals to share some health information with students. This is one of the proposed strategies that may informally bridge the gap between schools and the Department of Health. However, some teachers felt that they do not have the medical capacity to talk about some health issues, so support from a qualified medical officer is required. While Science and Home Economics teachers might be able to deliver health talks because they have some knowledge on diseases and other health topics, there is a common belief among teachers that students believe more in health information that qualified medical staff and Science teachers deliver rather than from what other non-medical or non-science teachers tell them. The evaluation report on the Tuvalu Health Promotion project on TB in Auckland also revealed that a strong sense that that status of the person was crucial to the people's respect for the information, which mean that Tuvaluan medical doctors, pastors, and nurses were very important in the success of the programme (Park, Resture & Littleton, 2009)[59].

As also mentioned in Chapter 5, most teachers and students felt that the health curriculum is lacking and secondary in importance. The gap between the Departments of Education and Health was mostly felt by the schools because they are the ones who would benefit from the two departments' interactions. The students measured the gap by reflecting on the number of health visits, health awareness programmes, and the prominence of the health subject in schools. These are development gaps that need to be addressed because they practically affect the health knowledge and future prospects of the students.

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[59] This report is available at https://cdn.auckland.ac.nz/assets/arts/Departments/anthropology/documents-publications/Evaluation_of_the_Tuvalu%20TB_Awareness_Programme.pdf

6.2.6 Community People's Knowledge and Awareness about Health Facilities and Services

A large number of the community people and students did not know that there were health services and consultations available for them at the PMH. There is a belief that the hospital (and Department of Health) is a centre for curative care only. The Department of Health's Strategic Plan 2009–2019 aimed to strengthen and promote preventive health services to Tuvaluans. This strategy reminded the Tuvaluans that the Department of Health (PMH) does not only cure or treat sick and injured people, but is also a centre that provides health advice and preventative measures. As one nurse described:

> The problem is that many people of Tuvalu do not know that the hospital is also a place that offers advice and assistance that can protect us from sicknesses, aye? Our hospital is also a place that people can come to and ask about what they have to do to protect them from sicknesses, aye? It is not just a place to come to when they are sick, but a place of guidance and also a place that can advise them so to avoid themselves from getting sicknesses, aye? For example: many youths here do not know that they can just come to the hospital and ask for contraceptive methods, aye? (Medical nurse, Vaitupu Island)

The above participant saw that a large number of community people hardly make use of the hospital as a centre for preventative care. The participant hoped that the community people knew that the health centres on the outer islands (and PMH on Funafuti Island) were not only curative centres but also centres for prevention. Of course, the Department of Health has used Radio Tuvalu to pass the message that if anyone has a query about a particular health topic or disease to come to PMH and seek advice. The dentistry section in PMH has brochures available in its doorway that promote oral health. I picked up a few brochures and read them, and found that they contained good information about oral health. However, most of the brochures are written in English and thus there is a need to translate these as some Tuvaluans may not be able to read in English. I believe that more has to be done to make PMH known as a preventative centre to the community people.

I once told a participant on Vaitupu Island about my experience when the qualified dentist at PMH cleaned and filled my decayed teeth. I enthusiastically told him that the facilities, equipment, and expertise of the local qualified dentists who attended to me were just awesome. The quality of the service was also excellent, at least to me. I even told him

that the dentists promoted preventative methods such as cleaning and filling rather than extracting decayed teeth. The participant then told me:

> *Fai koe? Oku nifo nei ko palele loa ne too…niisi nifo ne too loa ia latou kae ko niisi nifo ne unu ikonei ne te neesi ona me ko popo kae ko `mae `ki. Kae tenaa la ne mafai loa o pono fua oku nifo i Funafuti kae see unu katoa ne? Au nei ko tiigaina loa i te seai ne nifo, se `lei loa a te kai ki meakai kolaa tai maakeke [kata]. Au nei e leake loa me ka popo ou nifo, ko te unu loa io me e tuku fua penaa ke too loa ia ia [kata].*

> Oh yeah? My teeth now have all been fallen... some teeth fell by themselves while some were extracted here by the nurse as they were decayed and very painful. And yet they could have been filled at Funafuti rather than completely extracting them all out, aye? I am in pain these days due to toothlessness; eating solid food is difficult [*laughs*]. I thought when your teeth are rotten they would only have to be pulled out or left to fall by themselves [*laughs*]. (Male community member, Vaitupu Island)

This participant is a classic example of the many Tuvaluans who were not aware of the preventative services that the outer islands' health centres and PMH offered. The question to be raised here is: Who is responsible for overcoming this misunderstanding about the role and services of the Department of Health (PMH)? On one side, there were not enough programmes to promote the curative and preventive services that were available. On the other side, it is clear that some community people were aware of those services but they just did not make use of them, perhaps because they are too shy to approach the medical staff to advise them on some sensitive health issues, such as sex-related diseases. From my interviews I also gathered that another reason why some people do not make use of the services is just that they were stubborn or stoic. One participant admitted that when he felt that his body size decrease dramatically, he still hesitated to go to hospital, and did not go until he fainted, which prompted his family to take him to hospital, where he was diagnosed with diabetes. The most important point here is that community people themselves need to value the importance of using preventative services provided by the Department of Health. I believe that this mismatch between the community people and Department of Health in terms of their conceptions about the functions of health centres is one factor that affects the number of people who go to health centres for preventative guidance and advice.

6.3. *Ola Lei Conceptual Framework*: Contradictions

In this section, I will discuss how some aspects of the *Ola Lei* Conceptual Framework do not reflect the observed situation in Tuvalu. In this way, some mismatches or tensions between *ola lei* worldview and real life in Tuvalu will be brought to light. Note that I am not going to discuss all the *Ola Lei* Conceptual Framework's features; rather, I have selected four features of the *Ola Lei* Conceptual Framework that the contemporary situation on Tuvalu makes most challenging to achieve.

6.3.1 *Harmoniousness and Peacefulness (filemuu)*

In Chapter 3, we saw that harmoniousness and peacefulness are two of the most frequently mentioned key emotional qualities of *ola lei* in Tuvalu. According to Younger (2008), during the pre-contact period, small Pacific islands such as the islands of Tuvalu were peaceful because of their small populations and egalitarianism. However, I also believe that the peacefulness of Tuvalu and other smaller Pacific islands such as Tokelau (see Huntsman & Hooper, 1996) is associated with its social values such as respect and sharing (Chambers and Chambers, 2001), which enhance living peacefully. These key social values were embedded – and, if necessary, enforced – by everyday arrangements and widely shared cultural expectation. For example, any adult would feel entitled to tell off any disrespectful child without any repercussion from the child's parents. The questions to be asked are: Is Tuvalu still peaceful? To what extent do members of a community still show respect towards elders and other people of the community? Of course, I am not saying that Tuvalu has been the ideal example of peaceful islands; but I am emphasising the fact that there is an obvious change in the way some community people behave, which disrupts the peacefulness of communities in Tuvalu. Table 6.1 shows the number of 'offences against the person' in 2010 and 2011.

Crime Type	Incidence	
	2010	2011
Murder	1	3
Attempted murder/manslaughter	0	1
Causing death by reckless driving	0	0
Assault causing actual bodily harm	4	3
Common assault	61	77
Assaulting a police	1	0
Commit suicide	7	10
Other offences against the person	20	1
Total	**94**	**97**

Table 6.1: Offences against the person.
Source: Tuvalu Police Service Annual Report, 2011[60].

Although two years are not sufficient for a robust comparison, Table 6.1 reveals that there were a significant number of 'offences against the person' in 2010 and 2011. 'Common assault', such as fighting, is the most common crime type in terms of offences against people, which increased by 26 percent from 2010 and 2011. Because of such incidents, a large number of research participants, particularly the elders and women and especially on Funafuti Island, questioned the validity of these Tuvaluan values and qualities (peacefulness and harmoniousness) of *ola lei* in Tuvalu.

> *I aso mua, koi foliki au, a matou e see tii loka a mataloa o te motou fale i poo. E seai foki la se aogaa e loka i ei a te mataloa me seai ne windows [kata]. E pelaa me seai se loto-manavasee ki tino ma`sei mana ulu mai ki loto kae `taa tatou ne? Kae nei, a tatou e pelaa loa me ko isi ne loto maa`taku manafai e see loka fakalei a `tou fale ona ko te olaaga i aso nei ko tai kese malie ne? Ko too tokouke a tino `vale ko olo valevale, maise i weekends, tela la ko nofo maa`taku foki tatou ki tino `vale konaa mana aumai o fakasoesaa a tatou. I Funafuti nei, ko oko i te fakaeteete tatou ona ko tai tokouke foki loa a tino vale masei kolaa e mafai loa ne latou o fakasoesaa a te filemuu i `tou fenua nei ne? I poo o weekends, a tatou ko see moe loa i te logoaa o pasika-iti mo tino vale e pati-masei, i niisi taimi ko kiinau io me e fusu mai tua naa i te auala…*

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[60] It is difficult to reconcile the figures for suicide from the Tuvalu Police Service and the Department of Health raw data for the decade 2004–2013. In that decade only 13 suicides are recorded as such in the health data. Possibly the police figures referred to attempted suicide as well as completed suicide.

In the olden days, when I was young, we did not use to lock our house's doors at night times. Well, there was no point of locking our doors because our house had no windows [*laughs*]. It seemed we did not worry that some bad guys would enter our house and beat us, aye? But now, we seem worry and scared if we don't lock properly our doors, because it is different in these days, aye? There are far too many drunk people who wandered around the island, especially on weekends, which make us worry and scared that those drunkards would come and harass us. Here on Funafuti Island, we are concerned because there are many bad-behaved drunk people who often disturb the peacefulness in our societies, aye? During weekends' nights, we do not sleep well because of the noises that were produced by drunkards' over-speed motorbikes, and their swearing; sometimes they argue or fight, just outside there by the road… (Community member, male, 70 + years old, Funafuti Island)

One factor that spoils the peacefulness and harmoniousness in communities is alcohol abuse. In fact, the relationship between intoxication and crime is not a new phenomenon in Tuvalu. Chambers and Chambers (2001, p.216) illustrated that over 60 percent of the court cases on Nanumea between 1973 and 1974 'stemmed from consumption of alcohol, mainly by young men'. In Chapter 5 we see that alcohol abuse is still one of the common issues voiced by elders and women in Tuvalu. According to the annual report of the Tuvalu Police Service (TPS, 2011), the majority of common assault and suicide incidents involved alcohol abuse. Table 6.2 shows the recorded offences against Alcoholic Drinks Act in 2010 and 2011.

Crime Type	Recorded	
	2010	2011
Drunk and disorderly	126	285
Drinking underage	65	66
Possess weapon	14	8
Selling liquor without licence	2	6
Drinking in prohibited area	27	50
Drunk and incapable	27	36
Making alcohol	1	27
Offences against alcoholic drinks	2	6
Prohibited person found drunk	2	19
Total	266	503

Table 6.2: Offences against Alcoholic Drinks Act.
Source: Tuvalu Police Service (TPS) Annual Report 2011.

Alcohol abuse is one of the factors that contributed to the high incidence of 'fighting' and 'challenging to fight' crimes in Tuvalu (TPS, 2011). Table 6.2 shows that 'drunk and disorderly' is the most common crime type against Alcoholic Drinks Act, and definitely this crime disrupts the peacefulness of the community. Alcohol abuse is an adverse behaviour, which together with other factors causes family violence, physical fights, injuries, noise, and disharmoniousness in communities, and these discordant outcomes are happening in Tuvalu. The number of drink-related incidents on Funafuti Island indicated that the male elder quoted above had every reason to be wary of drunk people.

Tuvaluans regarded *ola lei* as including peacefulness and harmoniousness in communities and families; however, these qualities of *ola lei* seem to be weakening in the growing and high density capital of Funafuti Island. On outer islands, such as Vaitupu Island, there was also a concern from the community people, mainly the elders and women, about the peacefulness of the island and families in the future. The common thought from participants who were concerned about the consistency of Tuvalu's peacefulness was that Tuvaluans need to create and maintain peacefulness and harmoniousness, otherwise *ola lei* in Tuvalu will be only be a caricature. That is, it will be hypocritical to maintain that peacefulness and harmoniousness are Tuvaluan values and

practices in *ola lei* when these qualities are fading in communities and vigorous efforts are not made to prevent that slide.

6.3.2 Cleanliness

> When I have free time, mainly in the afternoons, I used to ride my motorbike around Funafuti Island. It takes less than 30 minutes to ride from one end to another end. I love my motorbike riding, not only because I needed fresh air to cool me down from the scorched sun's heat, but I also went to check the rubbish dumps at the two ends of the island. Whenever I reached the rubbish dumps and swampy areas that were filled with various waste materials, my heart sank. I was worried and kept thinking about Funafuti Island's future if these rubbish dumps keep on receiving more and more waste. The amount of plastics, tyres, metals, vehicles, nappies and other waste piled on top of each other was appalling.
>
> One afternoon, I was sitting under a coconut palm tree at the southern end of the island when some workers from one retail store drove down their truck and dumped a load of expired foods (tin food) and thousands of receipts/dockets. The dumped waste attracted a few dogs and kids who curiously scavenged the contents of the dumped waste (Figure 6.9). The wind blew hundreds of dockets onto the road and nearby shrubs. (Field notes on Funafuti Island, September, 2011)

Figure 6.9: The spot where the workers of the retail store dumped their waste, 2011. I watched a few kids scavenge from the waste.

These field note comments illustrate the waste problem on Funafuti Island, the capital of Tuvalu. I have witnessed some people carelessly dump their rubbish at public dump sites and even alongside the roads. It is a pity and also a worry to see plastics, cardboard, metals, cans, and other types of waste accumulate at dump sites on Funafuti Island.

Figure 6.10: One of the spots, on Funafuti Island, where rubbish is dumped, 2011. Note that most of this waste is plastic and cardboard packages.

Figure 6.11: Metal at the northern end's rubbish dump, Funafuti Island, 2011.

This waste problem, which makes Funafuti Island unclean, does not match the ideal of cleanliness that is featured in the *Ola Lei* Conceptual Framework. Tuvaluans carelessly dump their rubbish even though cleanliness is one of the most common values in Tuvalu.

Interestingly, I found out that when it comes to the household, family members make their household's interior and surroundings clean and orderly. However, they feel alright about dumping their household rubbish at the beach and alongside the road, just to get rid of it. This is possibly because some Tuvaluans on Funafuti and Vaitupu do not identify much with the public areas, such as beach, roadsides, and unoccupied lands; these places are not theirs so they are tempted to dump their waste there.

Of course, there are Tuvalu Acts – such as Environmental Protection Act 2008 and Wastes Operations and Services 2009 – that ensure the protection of the environment. The Department of Environment and *kaupule* have a crucial role in ensuring that waste in Tuvalu is managed well. However, the lack of funds and expertise to operate effective waste minimisation and management programmes are barriers. Monitoring and patrolling to ensure that people do not dump their rubbish in public places is also poor. The large dependence of Tuvalu on imported foods and other materials creates a lot of rubbish to be disposed of. By looking at the rubbish dumps (Figures 6.9, 6.10 and 6.11) it is clear that nearly all this dumped waste comes from products that are imported from overseas. The introduction of a small charge for plastic bags appears to my casual observation to have reduced the numbers of plastic bags blowing or lying about on the island, which is a very positive move.

On Vaitupu Island, the practice of looking after the household's cleanliness is culturally significant and valued. During my fieldwork, when I was permitted to join the Vaitupu Island's Health Committee that inspected the cleanliness and hygiene of the residential area, I observed that the residences' interiors and surroundings were very clean. As I walked with the local councillor (*kaupule*) – who is the chairman of the health committee on Vaitupu Island – back to the *Kaupule* Office, he said:

> I am very happy that the households are generally clean. The surroundings and toilets are fine... [Paused for a couple of minutes]. However, Tufoua, please can you advise me on how to tackle this problem of waste, which is dumped carelessly along the roads, or in the bush, or buried at the beach... you know, people tend to care about the cleanliness of their households' interiors and surroundings but they don't have that attitude toward the environment outside their own properties. (Kaupule, Vaitupu Island)

The *Kaupule* was right. Some community people seem to just dump their rubbish – a mixture of biodegradable and non-biodegradable waste – in places such as under the

shrubs, at the beach, along the coast of the lagoon, and alongside the road. For example, Figure 6.12 shows a pile of used nappies dumped alongside the road on Vaitupu Island.

Figure 6.12: A bunch of used nappies that were dumped alongside the road, on top of some coconut-palm frond leaves – Vaitupu Island.

This illustrates the gap between what the people perceive as *ola lei* and what actually is seen in the communities. Some community people do not practice cleanliness except in and around their own homes, even though it is one of the most important features of *ola lei* and the island's environment affects everyone's wellbeing. These people may not understand the importance of cleanliness outside households and in other parts of the island. But also, there appear to be limits to the sense of responsibility among some people when it comes to rubbish. There are clear needs for the promotion of health and environmental protection and information about the damage that those imported goods such as nappies and metals do to the environment and health of the people. Moreover, the government might also restrict the importation of goods that are known to be environmentally harmful. Banning disposable nappies, for example, would be a good starting place. As Tuvalu is a small country that is increasingly dependent on imported products, it is even more important that the Department of Education integrate more of these environmental health issues into the curriculum.

6.3.3 Readiness

> I found one interesting (and funny) concept from today's focus group interview
> with some community women. We were discussing the importance of readiness
> (*toka*) and its role in *ola lei*. The women all nodded to show their approval of and
> pride for their finding that *toka* is *ola lei*. Then suddenly one of the women called
> out: '*Mafole[61], ako te faigataa foki laa o fakatoka ke toka au mea, ona ko te seai ne*
> *sene mo togi au mea...*' [Mafole, but it is hard to get things and materials ready,
> due to the lack of money to buy your items/materials…] The women laughed out
> loud, perhaps either because of the usage of *mafole* or due to the genuineness of
> the statement in relation to readiness. I also laughed because if I didn't, I would be
> the only one who did not laugh in the room. However, as we laughed, I was sure
> that it is very true that readiness is not easy to achieve in these days. (Field notes,
> December 2011)

Readiness is another key feature that was mostly mentioned by adults, especially the women and heads of families who were mostly men. This field note illustrated that there is difficulty in attaining 'readiness'. If the women, for example, regarded readiness as *ola lei*, who then can say that she is ready in terms of all the local and western materials that a woman should have? Readiness is hard for all women in Tuvalu to have. Due to the western style of living that most Tuvaluans live or try to adopt these days, readiness means having western materials such as an oven and fridge. These household goods are costly and can only be obtained by skimping on other purchases or by relying on gifts from overseas relatives.

Most women in Tuvalu are not in paid employment (Esela, 2005) and reside on outer islands where there are fewer job opportunities and difficulty in obtaining these western materials. If it was still the Tuvaluan traditional way of living that was commonly practiced by Tuvaluans in the 16th or 17th centuries, for example – whereby readiness is determined by having traditionally-made materials – it would be easier for all women to be ready, as local materials such as *pandanus* leaves and other resources needed for local products are readily available and accessible in the environment. It just needs hard work to produce those local materials. But those days are gone, especially in Funafuti, and cash is required too.

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[61] *Mafole* literally means scratched or peeled. However, in Tuvalu, it is an informal and colloquial word that seems impolite.

A woman in paid employment on Funafuti can be seen to be rich, and therefore ready, as she has money to get a motorbike, for instance. A woman especially living on the outer islands, on the other hand, can be seen by other Tuvaluans to be rich and ready as she can make herself local mats and other traditional materials. It is therefore then the type of materials that a woman has – either western or traditional – that put that woman in a relevant category of potential readiness. My point here is that readiness requires resources and hard work. It is hard to attain or produce every local and western material that the community people require to have at hand. In addition, the idea of richness and what is actually a practical level of *toka* is made more difficult by the lack of institutionalised ways to ensure equal access to resources across the community in this new context. Increasingly, affluent Tuvaluans in the community can afford to keep themselves *toka*, while most people struggle just to make ends meet.

6.3.4 Food Quality

Most families are dependent on imported food such as rice, corned beef, and other manufactured foods. In their study on Nanumea Island, Tuvalu, Chambers and Chambers (2001, p.114) also discussed the change in people's preferences of food. They wrote: 'Reliance on store food, especially rice, flour, and cabin crackers, has increased markedly over the last twenty years'. This heavy dependence of Tuvaluans on imported food was a popular issue that was also talked about by the community people during my research. The dependence on imported foods led Tuvaluans to consume manufactured food such as corned beef, salted beef, and rice. It is ironic that food quality is an important feature of *ola lei* in Tuvalu, when in reality Tuvalu is heavily dependent on imported foods, which are mostly high in saturated fats, salt and sugar.

Secondly, community people have their own perception and taste when it comes to food quality. To the community people, food quality relates to cultural food such as pigs, turtle meat, *fekei*[62] and other local dishes. There seems to be a perception in the community that it is the succulence and oiliness of food that makes it delicious and high quality. There is clearly a gap between what the community people and biomedicine hold as quality food.

The food quality that the *Ola Lei* Conceptual Framework talks about is sometimes hard to get because of the lack of the availability of the quality local food. Hence healthy foods such as vegetables and fruits have to be imported and are sold in shops, often at high

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[62] Grated *pulaka* is boiled and baked, then mixed with coconut cream (*lolo*) and toddy molasses.

prices, alongside a large range of much less healthy but cheaper options[63]. Consequently, families find it hard and expensive to obtain balanced and nutritious meals every day. In Tuvalu, whatever a family gets each day, that is it for the day. So sometimes a family can have a meal that is not nutritious but which help them live another day.

Moreover, as mentioned in Chapter 5, I found out from my focus group interview with MSS students that students were aware that the foods they ate were not very nutritious. Almost every day MSS students eat seven or eight biscuit crackers with tea for breakfast, and may have rice and stew of corned beef or fish for lunch and dinner. When the school's food ration runs out, due to unreliable shipping, students may have plain rice mixed with cocoa or just plain noodles. The students do not have a choice because their menu is decided by the administration and the school kitchen staff. It also depends on money and whatever food that is available in the school rations. The inclusion of food (in terms of both abundance and quality) in the *Ola Lei* Conceptual Framework indicates that 'food' is important to the people of the community and the students. However, in real life in Tuvalu, the achievement of a quality meal in terms of nutrition by a Tuvaluan family or the school is expensive, unreliable, and therefore difficult. This is because of the economic, geographical, and environmental factors that contribute to the difficulty of producing and obtaining quality food.

6.4. Conclusion

This chapter highlighted the mismatches and gaps between government health priorities and communities' needs, supported by examples from my fieldwork. It also pointed out the effects of these gaps on *ola lei*. The gap between the Department of Health and community is mainly due to financial and expertise limitations. Any Health Department in the world must have health priorities and goals to improve the health of its people. Tuvalu's Health Department is among these; however, it is often the case that although we know what is right and we think about it, we do not execute it in reality. As demonstrated in this particular chapter, the government (Departments of Health and Education), external agencies, NGOs, and community people were aware of the importance of good health and its implications and thus organised health targets and projects to achieve that. They all desired to put them in action, but in reality there are

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[63] Note that in Tuvalu there are no policies that restrict specific foods such as fatty lamb flaps.

barriers and unfavourable situations. This is the case in Tuvalu, and such barriers challenge every stakeholder's plans and hopes.

Secondly, this chapter also had a closer look at the *Ola Lei* Conceptual Framework by discussing some selected key qualities and features of *ola lei* in order to point out the fact that *ola lei* is not easy and cheap to attain. The discussion of selected *ola lei* features was based on how those features were actually practiced and reflected in Tuvaluan life. These selected features were sufficient to highlight the point that it is quite hard to see these *ola lei* features achieved in reality. Peacefulness, cleanliness, readiness, and food quality were some of the important features of *ola lei* that Tuvaluans talked about. However, these features are not wholly reflected in real life due to social, economic, and environmental factors. In other words, this was about the contradiction or mismatch between *ola lei* as ideal and the practice of *ola lei*.

I am not intending to dismiss the *Ola Lei* Conceptual Framework just because of the difficulties in achieving the features that lead to *ola lei*. But my intention here is to bring to light the gaps and tensions between the conceptual framework and the reality of achieving *ola lei* in the commnunity. Why do these gaps exist? The chief's words that are quoted right at the beginning of this chapter summed up the fact that in reality, leaders – either in formal or informal institutions – have different views and priorities from some or most of the members of the institution. These mismatches are often regarded as headaches, at least by leaders, but we can learn from those mismatches and create better strategies. For example, the fact that community people do not make use of the preventative health services that are provided by PMH and NGOs will allow the Department of Health and NGOs to strategise and implement ways that may guide people to use more of their available services. This is the importance of looking at the gaps and total mismatches: they can be lessons for the future.

The next and final chapter concludes and sums up the thesis. It also suggests and discusses practical ways for achieving *ola lei* or health in Tuvalu.

CHAPTER 7: CONCLUSION

7.1 Introduction

The *Ola Lei* Conceptual Framework encapsulates Tuvaluans' own understandings and perceptions of health. This conceptual framework was built up into a cohesive conceptual framework on the basis of my interviews and informal discussions with many different research participants. No single participant would discuss it in exactly this way. It is I who turned it into an octopus, but this too was on the prompting of a participant. While I have synthesised my participants' contributions I have not homogenised them. Different participants have different emphases. The draft framework itself was discussed and validated with some of my participants towards the end of my research. *Ola lei*, as a conceptual framework, has a number of applications, not least of which is to evaluate past and present practices and to guide those plans for the future which aim to improve the health of the people.

Understanding local concepts of health, examining policies and practices and their contribution to health, and considering how to improve the health of the people of Tuvalu informed my research aims and drove the research. My specific aims were to examine the following questions:

1. How do informal structures and experiences contribute to the existing knowledge and practice of community people around health (*ola lei*)?
2. How do the government and NGOs contribute to health in communities?
3. What do community people do and say about the health services and programmes provided by the government?
4. What is the relationship between health policies and initiatives, and community needs and desires?
5. How might the formal health sector, and other arms of the government such as the education sector, NGOs, and communities, work together more effectively to achieve better health outcomes?

This final chapter briefly discusses the findings for these research questions, the theoretical contributions of the thesis, and the policy implications. It concludes with my reflections on my research.

7.2 Findings: An Overview

The meaning of health varies from place to place. This means that the concept of health is definitely not the same in indigenous, non-western, and western societies; nor is it the same throughout any given society (Blaxter, 2001; Dixon et. al., 2013). In Tuvalu, the *Ola Lei* Conceptual Framework exemplifies the ways in which Tuvaluans see and understand health and wellbeing. Within Tuvalu, individuals also emphasise the different dimensions and practices of *ola lei* differently, depending on their values, situations and experiences, and the context in which the conversation about health is taking place. For example, most students associated cleanliness and physical fitness with *ola lei* due to the fact that cleanliness and being physically fit are often emphasised in school through the curriculum. The women linked *ola lei* with readiness because women in Tuvalu are the ones who manage the household. Religious people such as pastors, deacons, and other individuals who experienced the spiritual influence of God considered 'believing and having faith in God' as an important practice to achieve *ola lei*.

This suggests that *ola lei* is a complex and multidimensional concept, which is defined distinctively by individuals according to what they have learnt and experienced. These different emphases are also influenced by the context in which the discussions of *ola lei* take place. The *Ola Lei* Conceptual Framework is dynamic. It is not going to have the same number of tentacles and dimensions forever. In the future, when Tuvaluan communities experience different situations, some aspects of the *Ola Lei* Conceptual Framework may be totally changed, disappear, or be transformed.

Not all the dimensions and features of the *Ola Lei* Conceptual Framework have been integrated in the Government's and NGOs' development plans. This is because the Government, through the Department of Health, promotes health largely in terms of individually-focussed biomedicine, particularly in terms of the clinical, curative side of health.

This does not mean that the biomedical approach is irrelevant and incompatible with the *Ola Lei* Conceptual Framework. Indeed, it can be part of it. The National Strategy for Sustainable Development (*Te Kakeega* II) and Department of Health's Strategic Plan prioritised, for example, promoting health programmes and improving medical facilities. These link very immediately to the physical fitness and happiness of the people, which are both features of *ola lei*. The way in which the Department of Health and NGOs contribute to health in communities is clearly demonstrated in their services and programmes.

Community people saw the importance of the clinical services and preventative programmes that the Department of Health and NGOs provided. However, there was a shared view that the Government had not committed sufficient resources to improve those services and facilities. For example, the lack of health awareness workshops in communities and the long wait at the hospital's outpatient area were cited as examples of the Government's constraints. Not only were community people concerned about the Government's performance but they also discussed what they needed and expected from the Department of Health.

All the issues and desires raised by the communities and schools link to the qualities and features of *ola lei*. Thus the desires, if fulfilled, may minimise negative impacts on people's *ola lei*. It was notable that when participants talked about what they need and desire, they mostly talked about these things in relation to the Department of Health. This indicated that community people felt that the Government, and especially the Department of Health, was responsible whenever health-related issues emerged. It was unfortunate that Tuvaluans have this mindset but are not concerned about or given to reflect on their own actions in relation to their health, because this can lead to more health problems.

Here, we can see that there is a need to enhance a sense of responsibility and to encourage communities so that they can exert some control over the foundations of health: in health promotion terms, they need to be empowered and made to recognise that individual and collective actions may affect their own and others' health for good or ill (WHO Bangkok Charter, 2005). To accomplish this, the Department of Health and NGOs would have to strengthen their relationships with communities, including schools, through genuine partnerships. For example, if trying to draw up a policy on smoking, the government, NGOs, and community people have to work together to set the goals, to decide how to achieve them, and to ensure that all the people are aware of the importance of the proposed smoking policy on health and *ola lei*. Such health promotion needs the communities' engagement to be effective and sustained; otherwise it is likely to be a waste of effort.

The mismatch between the government health priorities and communities' needs was mostly due to financial and expertise limitations. For example, the community people want more health awareness programmes to be organised in communities by face-to face-workshops. Only a few people, mainly the leaders, specified the content of these workshops, and that was about diabetes. This is because they were very concerned about

the effects of diabetes on their islands. In general the people felt they did not know the possibilities for workshops. They wanted to be given more biomedical knowledge about disease and disease prevention. For example, one leader who had attended a TB workshop said it had really opened his eyes and he wanted to learn more about other diseases and their prevention in order to improve his people's health. However, the limited budget and shortage of staff of the Department of Health and NGOs prevent many such health awareness programmes from being delivered. This is the source of the problem, because almost everything – particularly health related programmes and services – comes down to the financial capability of the Department of Health and NGOs.

A mismatch between Tuvaluan and Western understandings of health and wellbeing also creates some discordance in the delivery of health services and health promotion. Generally, ordinary Tuvaluans viewed health through the *Ola Lei* Conceptual Framework, while other Tuvaluans, such as medical doctors, are more influenced by biomedicine because they were trained in western medical institutions. This does not mean that ordinary Tuvaluan people and Tuvaluan qualified medical officers rigidly stick to a certain understanding or view. It is important to note that the Department of Health is founded on the relatively holistic but individualised concept of health that comes from the WHO, as discussed in Chapter 2, while the community people's concept of health is founded on the concept of *ola lei,* which is even more holistic (e.g., it includes spirituality) and more communally-focussed (e.g. *toka* applies to the entire family being prepared). So, people move between these models. That is, health officers and NGO employees are also community people; hence, they may be like other community people who perceive health in a more holistic, community-oriented way. For example, during the drought the TRCS drew on community values on sharing to allocate water resources. In addition, some local medical doctors value traditional healing. There may be differences of emphasis too between people: some Tuvaluans understand that there are biomedical ways of diagnosing and treating diseases, but they are also still far more influenced by their own concept of *ola lei*. The mismatch and gaps are important to consider, as we can learn from them and restructure better health development plans.

7.3 Theoretical Contribution

The most important theoretical contribution of this thesis is to bring the *Ola Lei* Conceptual Framework into the light. Making it available for other scholars and Tuvaluans

is not only a way to shed light on *ola lei*, but it is also an opportunity for them to think about why and how the broad and deep Tuvaluan understanding of wellbeing can be understood in order to have successful health and education development. It is important to note that the thesis is not arguing that the *Ola Lei* Conceptual Framework is the only solution for Tuvalu. However, the thesis argues that the core for successful health programmes and services is that the government (Department of Health and Department of Education), NGOs, and external agencies and donors need to have a good understanding of what the community considers to be being well and healthy, and how that might be achieved. To really control diabetes in Tuvalu will require a re-envisioning of government structures, and the place to start is getting the relevant government departments and NGOs working with community people. This means that it is important to consider and include local worldviews of health and wellbeing into, for example, health or education development agendas in the communities. For example, if a team of health professionals go to a particular local community to look at the community's diabetes situation, they need first to understand people's understanding of wellbeing, disease, and health.

This idea of including local worldviews in practice has been recognised by Pacific and other indigenous authors in other fields. For example, in the area of research methodologies and education, Pacific scholars such as Vaioleti (2006) and Thaman (2009) emphasised the importance of recognising the indigenous cultural values and theoretical frameworks in Pacific research. These include the concepts of *talanoa* (Vaioleti, 2006) and *tui kakala* (Thaman, 2009). *Talanoa* is a conversation or exchanging of ideas and stories, which is a cultural way of transmitting and acquiring information and knowledge. Thaman came up with the metaphor of *tui-kakala*, which is a Tongan word for the process of weaving flowers and leaves together. These concepts broaden my, and perhaps other researchers', knowledge in terms of research methodologies, and solidify the concept that researchers could adopt, critique, and develop Pacific theoretical and methodological frameworks for researching Pacific issues.

The transposable point here is that local understandings of health and wellbeing should be considered in order to deliver effective health services and programmes in local communities. This argument has been advanced by a number of scholars in order to encourage the use of local health views to address health issues and illness in aboriginal communities. Good examples are provided by Sherwood and Edwards (2006), Smylie and Anderson (2006), and Stewart (2008). The main point that these scholars made in their research with Australian and Canadian Aboriginal people was the importance of local

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knowledge and worldview in the process of health promotion. The local understandings of these communities also included communal orientations to wellbeing, as is the case in the *Ola Lei* Conceptual Framework. The effectiveness of health development, or development in general, in communities is largely dependent on how projects or programmes are aligned with the local people's understandings, needs, and ways of working.

Secondly, the dimensions and practices of *ola lei* are interconnected. The relationship between education and health can stand as an example of this. Research demonstrates that improving the health of young children can improve children's attendance in schools and academic attainment (Healy, 2004; St Leger & Nutbeam, 2000). Conversely, the success of education depends on good health (Lee et al., 2003; Subramanian, Huijts & Avendano, 2010) because good health has a positive impact on the cognitive development of children (Jukes, 2005; Bloom & Canning, 2001). Moreover, quantitative work in New Zealand based on population studies also concluded that better-educated citizens are more likely to be healthy (Johnston, 2004). Other scholars such as Goesling (2007), Ross and Wu (1995), Mirowsky and Ross (2003), and McMahon (1999) also indicated the effects and significance of education for health and wellbeing. And the interconnections do not stop there. Rode et al. (2005) found that overall life satisfaction, which is an aspect of happiness and contentment, is linked to students' performance. A child that comes from a happy family which has sufficient resources is likely to be more successful in school because he or she is psychologically untroubled and can concentrate on his or her studies. We can see here that there are aspects of the *Ola Lei* Conceptual Framework that can be used systematically to improve health and education to help students achieve better in their studies and attain greater levels of wellbeing. It is to a more general discussion of the policy implications of the *Ola Lei* Conceptual Framework that I now turn.

7.4 Policy Implications

The empirical and theoretical contributions of *ola lei* as a conceptual framework lead to my discussion of policy implications. These policy implications flow from my suggestion that this framework be integrated into relevant government strategy and policy documents.

The first policy conclusion of this thesis is a suggestion for the *Ola Lei* Conceptual Framework to be considered and included in the Department of Health's policies and

health promotion agenda and in the Department of Education's policies and curricula. The New Zealand Ministry of Health, for example, has approved the integration and incorporation of the Māori concept of *Whānau Ora* as a way to improve health in New Zealand (NZ Ministry of Health: www.moh.govt.nz). The *Whānau Ora* approach empowers New Zealand *whānau* (families) to take control of their lives and enables them to live healthily. This demonstrates the respect that the New Zealand Ministry of Health shows toward the worldview and family and community orientation of the indigenous people.

I believe that the Tuvalu Department of Health and the Department of Education can do the same thing – that is, incorporate the *Ola Lei* Conceptual Framework in their strategies, policy documents, and curricula to address health-related issues. For example, the *Ola Lei* Conceptual Framework may enable and remind community people to realise the importance of having healthy families – not only through biomedical curative treatment and preventative programmes but also through peacefulness, happiness, and readiness, and other aspects of the *Ola Lei* Conceptual Framework. If *ola lei* is the way Tuvaluans conceptualise wellbeing, then it needs to be put into practice. One way to do this is for communities to maintain and promote communal activities that empower people to achieve *ola lei*. One example is maintaining activities such as *nafa* in communities.

Nafa is a communal competition that occurs every year on Vaitupu Island. Like all the other villages, the village on Vaitupu is divided into two sides. The sides are an important aspect of social organisation in Tuvalu, for example in relation to community work and *fatele*. For the *nafa* competition these sides are subdivided into two smaller sides, which compete with each other. It is a fun competition, and the only price is honour and fun. Almost every man from one team is paired up with another man from the rival team. These partners compete for who will have the bigger or heavier *taro/pulaka* crops and chickens/pigs (Figures 7.1 and 7.2). The men who take part in the *nafa* have to grow at least five taro plants and feed three chickens. The wives, or the whole family, of the men who take part in the *nafa* are often responsible for feeding the chickens and pigs to ensure that the chickens and pigs are fat and heavy.

Figure 7.1: Taro crops of one rival pair were weighed on a wooden balance. The heavier bundle of taro would give one point to the team.

Figure 7.2: Chicken weighing time! Competitors preferred roosters to hens, as roosters are heavier than hens. One point is rewarded to the competitor with the heavier chickens.

Nafa is a cultural activity that creates happiness, coheres the relationships between community people (Figure 7.3), and encourages community people to grow *taro* and

pulaka plantations and farm chickens and pigs, not only for *nafa*, but also for their family's consumption. At the end of the competition, the partners exchange their valuables and take them home for household consumption. This structured competition is a key way to mobilise Tuvaluans and it has great potential for health promotion.

Figure 7.3: It is often the women of the winning team who celebrate the victory. Emotions often run high, and women of the winning team would dance and call out teasing words to the losing team. Members of the losing team were painted with black charcoal and made to parade around the village, before being sent to swim in the sea.

This cultural activity is a good way to promote *ola lei*, as it encourages families to maintain food abundance or food security (a feature of *ola lei*) in the community. Being ready – another feature of *ola lei* – in terms of crops and animals is also enhanced by this community activity. The lesson here is that the Department of Health, NGOs, and communities need to encourage cultural activities, such as *nafa*, in their policies because these community activities guide people to promote community health. This is in contrast to the usual biomedical framing which concentrates on individuals, even when providing health education. It is worth noting that this successful activity involves humour, fun, competition, taking sides, and a lot of hard work.

This example of the potential value for increasing health and wellbeing utilising already-familiar Tuvaluan ways of doing things can be broadened. Building and recognising a more complementary relationship at both the policy and practical levels

between the traditional healing sector and the biomedical stream is another initiative that many community people, nearly all the healers spoken to, and some of the Department of Health staff thought would enhance health and wellbeing by integrating disease prevention and curative measures. This might make people more willing to disclose their use of medicines from both practitioners, thereby enhancing patient safety. All the traditional healers I interviewed said that they tend to send their patients to hospital to get further examination and treatment. This indicates that there is already an interaction between traditional healing and formal processes, particularly from the direction of traditional healers to biomedicine, although, as noted above, it also works in the other direction in some instances, such as for dislocations and psychological disturbances. Tuvaluans continue to use the services provided by traditional healers, although biomedicine is available and accessible. There is no doubt that both have contributed to health in communities. For example, the Cook Islands significantly reduced its TB cases to almost zero because of the quality of commitment of various partnerships between Cook Islands' medical personnel, who included biomedically-trained and traditional healers, community people, and regional and international organisations (Futter-Puati et al., 2014). An important message is that incorporating all the various groups and organisations that are involved in achieving health and wellbeing, such as community people, traditional healers, medical personnel, and global organisations in constructive relationships will assist improving health in communities.

I am not suggesting that these two sectors – the Department of Health and traditional healers – have to be officially and formally merged, because there are aspects within these sectors' practices that are extremely different. However, I suggest that communication and trust between traditional healers and medical professionals could be improved, possibly through workshops[64]. These workshops would enable *tufuga* and medical doctors to learn and appreciate the knowledge that they have gained or inherited, and how they can help patients in one way or the other, so that both sorts of practitioners gain from the process. They would learn what kind of service each could provide, their strengths and limitations, and could establish referral protocols. For example, on the outer islands, people with dislocated joints will definitely go to a traditional bone masseur before or after attending a clinic, as there is no orthopaedic surgeon or physiotherapist on the island. Formalising this kind of informal cross-referral practice should be appreciated and

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[64] See, for example, http://www.health.govt.nz/our-work/populations/maori-health/maori-health-models.

commended by medical professionals, traditional healers, and community people because it is contributing to health (*ola lei*).

The Department of Health, *tufuga,* and communities need to have an approach to health and wellbeing that will involve making an open and carefully maintained space for traditional healing and biomedical approaches. Adjustments at the Ministry, hospital, and practitioner levels will be needed accommodate the more holistic and communally-oriented perspective of *ola lei*. Of course, the Department of Health has already accepted other useful models, such as the 1946 WHO definition of health; however, the WHO perception of health does not directly match the way ordinary Tuvaluans see health as *ola lei*. Nevertheless, this WHO basic definition is a good starting point and it would be possible to add the *ola lei* perspective of health and wellbeing as comprising many more interrelationships to the WHO framework. The more difficult part will be going beyond the individual orientation of the initial WHO definition and embedding the communal orientation. But even here there are precedents from the WHO and its health promotion arm, such as the Ottawa Charter and the Bangkok Charter which I introduced in Chapter 2. By updating the 1946 WHO definition of health and including the Bangkok Charter in its policies, the Department of Health would provide a good foundation for the incorporation of the specific Tuvaluan approach of *ola lei.*

Thirdly, a more practical integration of the education and health sectors would assist the development of health or *ola lei* in communities, including schools. The two sectors need to recognise the interdependence of one sector on the other and how they link to the general development of Tuvalu. For example, health promotion in communities, and the willingness of people who live in them to promote health, are closely related. However, there are Tuvaluans who do not easily acquiesce to western biomedical practices, thus they refuse to modify their diets or take prescribed pills. In order to promote health in communities, and to convince people to understand and practise health, education is important. This relationship can be improved by having more effective cross-sectoral meetings between senior officials with concrete outcomes that enable the sectors to collaborate more and strategise ways that they both can, collaboratively or separately, help improve health and education in communities and schools. This would involve collaboratively developing curricula for use within schools, and cooperation in developing health promotion and education programmes in the community.

Improvement in the delivery of health science as a separate subject in schools is one way to strengthen the interaction between education and health. The students and

teachers admitted that the Health Science subject is too valuable to be ignored in the school curriculum. Instead of including health-related concepts only in other subjects such as Social Science and Home Economics, the Departments of Education and Health need to collaboratively formulate a Health Science syllabus which is attuned to the local situation. This subject should be part of the core curriculum up to Year 10, before it becomes an optional subject in Years 11, 12, and 13. This will definitely help students to learn more about specific health issues and interventions, which will assist them to recognise the health impacts of practices such as smoking on their wellbeing. For example, from my interviews, students admitted that a thorough quality health science lesson, or any health talk, that includes visual aids about the biological impacts of smoking on one's internal organs would be an effective way of convincing the students to think twice before smoking.

The health and education sectors are dependent on external agencies and donors to help them in quite a number of areas. However, when donors give money, there is always a possibility that the donors' priorities will predominate. So what I suggest is that there needs to be full and forthright discussions between donors and the ministries or NGOs so that the workplan for that money is mutually agreed upon. This may involve further education of the donor about community and national needs and priorities. In this way, the aid projects that are delivered to communities and schools will be relevant to community people's desires and needs.

Last but not least, I suggest that an effective strategy for improvement will be to enable community people assess and evaluate the Departments of Health and Education structure, plans, and practices. This is because the community people are the actual users of these government services. Students could carry out research in communities and analyse them as part of their geography or health science projects. Or, otherwise unemployed school leavers, with the supervision of a government statistician, could do these surveys and evaluation processes on a casual contract. In this way, the public views of the health and education sectors' services and programmes will be collected and evaluated. The results could be used for community and government discussions to improve the structure and services provided by these sectors.

7.5. Reflections

Let me reflect on the importance of the research. This research gave me an opportunity to think and learn more about the possibility of how to analyse and use the

different features and dimensions of the *Ola Lei* Conceptual Framework to work toward a situation that is going to be helpful for generating *ola lei*. The research opened my eyes to the fact that local worldviews actually incorporate global as well as local ideas. For example, ideas such as hygiene and fitness are now part of the *Ola Lei* Conceptual Framework. These local worldviews will be more effective if we incorporate them into curricula, health practices, development policies, and other areas. For example, integrating the *Ola Lei* Conceptual Framework into the school curriculum will be an effective way to guide students to choose practices that create *ola lei* in their communities. Education and health will better align if they both incorporate the *Ola Lei* Conceptual Framework.

Doing this research has changed the way I think about the association of education to health, and how both link to development. As a teacher for more than a decade, I tended to look only to education as the foundation of all things. Now, as this research led me to explore other areas such as health and development more deeply, I began to see the meaningful associations and relationships between education and other things such as health, foreign aid, and local worldviews. The tunnel-vision that led me to focus on education only is a result of the structural organisation of government. This is not a personal problem, but is a more general problem and barrier to intersectoral communication and cooperation. Sharing the *Ola Lei* Conceptual Framework will help promote interaction between departments, but this will be very challenging. Among its many advantages, however, it will make better use of scarce resources such as skilled personnel.

The application of the *Ola Lei* Conceptual Framework is another challenge to everyday life in Tuvalu since the different practices of the *Ola Lei* Conceptual Framework need to be balanced and in harmony. For instance, happiness and contentment is key part of *ola lei*, but this is not the same type of gratification as eating a large meal or riding around the island in a motorbike. The *Ola Lei* Conceptual Framework requires people to be happy in the long term, and this happiness involves the community not just the individual. Discussion of *ola lei* can provide a way to a more genuine health orientation. For example, when a family member justifies eating a large meal by saying that makes him or her happy even though it makes their diabetes worse, working with the *Ola Lei* Conceptual Framework we can see that this short-term happiness needs to be balanced with the long-term implications for happiness and survival of that person in the context of his family. The family will be grieved and worried if one of the family becomes sick and dies. In some cases, some of the features of our worldview are conflict with other values. Hence, this

research gave me an opportunity to step back and think of the ways in which the *Ola Lei* Conceptual Framework can address health related issues. So, for future study, it is important to look at how we can develop the *Ola Lei* Conceptual Framework so that it can actually deal with the health issues such as diabetes, shorter life expectancy, and other issues. We can question, for example, whether short-term happiness from eating a lot of food or riding a bike is a genuine part of *ola lei,* when measured against longer-term contentment and the other values and practices which constitute the framework. I see the importance of this thesis here as it provides a starting point where we may ask: How can we hold onto the good parts of our cultural frameworks, but within that develop new ways of thinking so that the health of our families is maintained?

Furthermore, it will be significant to do future research around the implications of *ola lei* in terms of, for example, transnationalism and youth development. Does *ola lei* dominate the worldview of all Tuvaluan people? What are the implications for transnationalism and the young people who move? Future research involving the *Ola Lei* Conceptual Framework could be carried out in the context of the translational lives of many Tuvaluans. How is *ola lei* maintained and transformed in different contexts? This also applies to the other islands where I did not carry out my research. I suspect that different emphasis and possibly dimensions or practices might be revealed. As an educationalist, I am interested to youth development which is another area for more intensive exploration.

Now, as I recall the afternoon that I sat on the community water cistern and worried about the future health of my community – as was narrated in the beginning of this thesis – I am encouraged to use the *Ola Lei* Conceptual Framework to improve and develop health in communities, including schools. This *Ola Lei* Conceptual Framework can be transmitted to schools by integrating it into the curricula, and encouraging communities (including schools) to promote culturally-enjoyable activities such as fishing, paddling, and playing local games and *nafa* that may guide people to live healthier lives. Who knows how the *Ola Lei* Conceptual Framework may help to improve health in communities? As one Tuvaluan saying goes, *'Mea katoa ko te aasi!'* which means, in association with the *Ola Lei* Conceptual Framework,* 'Although there are many other ways to improve health [in Tuvalu communities], let us give this *Ola Lei* Conceptual Framework a go.'

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