THE PLANNING CHALLENGES OF EXTENDED METROPOLITAN AREAS: ISSUES FROM SOUTH AFRICA

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Abstract: Territorial administrative restructuring and the redrawing of municipal boundaries was undertaken in South Africa to address the apartheid legacy of major social, economic and spatial inequalities. A significant consequence of territorial administrative restructuring was that the boundaries of certain South African metropolitan areas were expanded such that they incorporate vast rural geographies. These spaces pose particular challenges for metropolitan planning. The aim in this paper is to examine the resultant planning challenges which confront South Africa's extended metropolitan spaces. Among several consequences was the imperative for metropolitan authorities to build new competences in order to plan and manage these added rural spaces as well as the peri-urban spaces. The analysis is contextualised within an international literature on planning in extended metropolitan spaces and of peri-urban spaces.

Key words: extended metropolitan areas, peri-urban spaces, rural spaces, metropolitan planning, South Africa

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INTRODUCTION

In 1994 the new democratically elected government of South Africa inherited the legacy of over four decades of apartheid planning which had produced massive economic, social and spatial inequalities. One aspect of redressing the social and spatial distortions produced under apartheid has been through processes of territorial administrative restructuring and the redrawing of municipal boundaries in South Africa (Visser, 2001; Visser, 2003; Cameron, 2006). As observed by Ramutsindela (1998) the end of apartheid not only occasioned the restructuring of society but also necessitated the restructuring of territorial spaces. Boundary changes and spatial reorganisation of

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administrations was associated with the redistribution of power and resources. During the post-apartheid period several rounds of territorial restructuring and reforms have been undertaken and impacted all tiers of the urban hierarchy (Ramutsindela and Simon, 1999; Giraut and Maharaj, 2004; Cameron, 2006; Marais et al., 2016; Marais and Nel, 2019; Subramanyam and Marais, 2022). Arguably, however, the reforms and territorial restructuring have most deeply impacted the landscape and functioning of several of South Africa's metropolitan areas (Visser, 2001; Houghton, 2013; Sutherland et al., 2018). The process of the spatial reordering of local government boundaries was contested, conflictual and highly controversial as wealthy urban authorities were opposed to the geographical extension of their administrative boundaries because of the costs that would be incurred for provision of services and infrastructure to resource-constrained poorer marginal spaces (Giraut and Maharaj, 2004; Chirisa, 2010; Subramanyam and Marais, 2022).

The context for this investigation is that an important consequence of territorial administrative restructuring was that the boundaries of certain South African metropolitan areas were expanded such that they incorporate vast rural geographies. These spaces pose particular challenges for metropolitan planning. The core aim in this paper is to examine the resultant planning challenges which confront South Africa's extended metropolitan spaces. At the international scale it must be recognised that South African cities are not alone in the Global South in terms of having to govern and plan for changing rural spaces (Follmann, 2022). Indeed, many Asian, African as well as Latin American cities face similar challenges of planning and governance issues because of rapid processes of urbanization and change which are taking place there. Accelerating rates of urbanization are occurring at the rural-urban interface in 'peri-urban' areas of metropolises in the Global South. As shown in several recent works this is one of the critical issues of the past decades which has a range of physical, social, economic and environmental consequences for these areas (Dadashpoor and Ahani, 2019; Dadashpoor and Ahani, 2021; Dadashpoor and Malekzadeh, 2022).

The paper unfolds through three sections of material and discussion. The first focuses on conceptual issues and of the international record – or more particularly Global South experience – of planning challenges around extended metropolitan spaces. Attention then turns to overview the expanded metropolitan areas of South Africa and their planning challenges. The final section narrows to examine in greater detail the planning changes and directions initially followed within one South African metropolitan area as a consequence of administrative reform and territorial restructuring.

INTERNATIONAL LITERATURE CONTEXT
The works of McGregor et al. (2006) and Simon (2008) draw attention to the shortcomings of policy-makers continuing to undertake planning on the basis of a dichotomy between urban and rural areas. Implicit in the urban-rural dichotomization of space is "the idea that urban and rural areas were characterized by very different land-use patterns and human behaviors and that the boundaries between these spaces and places were easily discernible and clear-cut" (Simon, 2008, p. 167). The conventional view was of the 'urban' as dominated by manufacturing and service sector activities whereas the rural economy and livelihoods were based on agriculture (Allen, 2010). The dynamics and complexity of changes taking place at the rural-urban interface compelled a

re-assessment of the validity of this simple dichotomy between urban and rural spaces. Adell (1999) identifies the appearance of new conceptual landscapes in which rural-urban relationships are re-defined. As argued by Ortega (2022) there was a need to move beyond simple dichotomies such as the urban and rural binaries in the categorization of the complex spaces that are formed on the peri-urban fringe in the Global South.

A landmark investigation that challenged fundamentally the rural-urban dichotomy was produced by McGee (1991) and stemmed from his examination of the nature of rapid urbanization processes occurring in Java, Indonesia. McGee (1991, 2022) observed the appearance of what he termed 'extended metropolitan regions' or desakota regions of Asia. The term desakota was coined by McGee (1991) who identified these morphologies with the Bahasa Indonesian word desakota from the words for village (desa) and towns (kota). Desakota a term coined to describe the growth and features of areas with mixed urban and rural characteristics (McGee, 2022). The concept of desakota was grounded in the contextual realities of Java and "denotes a spatiality characterized by the interplay of rural and urban ways of living" (Ortega, 2020, p. 668). Through the neologism 'desakota' McGee (2022) signalled the appearance and consolidation of distinctive settlement system and a space economy transition that impacted large swathes of southeast Asia.

The desakota model describes the "unique structure of Asian urbanization" and challenges Western urban development models (Wu and Sui, 2016, p. 320). For Ortega (2022) the desakota are hybrid spaces (Ortega, 2020). These areas are characterized by rapid expansion and the spread of urban activities into rural areas (Ginsburg et al., 1991; McGee and Greenberg, 1992). Desakota therefore are "regions in between" and a descriptor for "closely interlinked rural/urban livelihoods, communication, transport and economic systems" (Moench and Gyawali, 2008, p. 2). For Xie et al. (2005) desakota represents a pattern of settlement characterized by an intensive mixture of agricultural and non-agricultural activities which is reflected in the close interlocking of villages and small towns, the patterns are neither urban or rural but exhibit aspects of both. Usually, the desakota regions comprise households in which working members may be engaged in both rural agriculture as well as jobs, services, retail and manufacturing activities "that have historically been seen as more 'urban' occupations" (Moench and Gyawali, 2008, p. 2).

Pelling and Mustafa (2010, p. 1) aver that the growing attention to the phenomenon of desakota is "a recognition that the classic conceptual, policy and functional distinction between urban and rural cultural, livelihood and technological complexes is no longer valid for most parts of the world". The desakota phenomenon has been observed in several fast-expanding metropolitan areas of Asia, including parts of Thailand, Philippines, Taiwan as well as Indonesia (McGee and Greenberg, 1992; Firman and Dhatmapatni, 1995; Sit, 1996; Ortega, 2012; Shih and Chi, 2012). Most recently, attention has turned to interrogate the Chinese experience of the mixing of agricultural and non-agricultural activities, which has been viewed as desakota regions (Sui and Zheng, 2001; Woltjer, 2014; Chen et al., 2017; Zhang, 2018; Veeck et al., 2021).

The desakota of Asia point more broadly to the need to understand the complex changes which are reshaping the urban periphery or peri-urban zones in many parts of the Global South. Among others Ortega (2020) points to rapid expansion taking place in the peri-urban fringes of the Global South. Leitner et

al. (2022, p. 1) argue that "peri-urbanization is transforming the urban-rural interface of metropolitan areas across the global south". Peri-urban communities exhibit a "dual urban-rural orientation" in social and economic terms and predominantly are undergoing rapid social change (Allen et al., 1999, p. 4). According to Carrilho and Trindade (2022, p. 1) research on peri-urbanization gained momentum "in the first quarter of the 20th century, due to the pace it acquired worldwide and the implication that urbanization and overall settlement patterns have on social sustainability and development". Growing academic attention to peri-urban spaces has been driven by "the recognition that there is no clear or neat division between the urban and the rural and has thus challenged the urban versus rural dichotomy in favour of a continuum approach" (Bartels et al., 2020, p. 1238).

Arguably, little agreement exists among scholars and policy-makers about basic aspects of the peri-urbanisation phenomenon and as a result of its complexity much of what is understood about the peri-urban concept is contested. Adell (1999) views the peri-urban interface as a dynamic zone of rapid change. Follmann (2022, p. 1) states that the term peri-urbanization is widely applied to describe a set of different processes that transform rural areas to a mix of rural and urban spaces. According to some scholars the peri-urban "is characterized by high and often increasing, population density, small landholdings, rich countryside homes, poor slums, diverse sources of income, a lack of regulation, contested land tenure rights, uncoordinated conversion of farmland to housing, pollution, environmental problems, intensified resource exploitation, considerable economic dynamism and a severe lack of service provision" (Marshall et al., 2009, p. 3). Simon (2008, p. 167) views peri-urban zones as transitional zones between distinctly urban and clearly rural areas and argues that their significance lies in the fact that "their dynamic mix of functions and land uses; increasing population densities; growing significance as sources of urban food, construction materials, and other resources; as urban waste disposal or treatment sites; and as recreational zones". For Wang et al. (2023, p. 1) the urban-rural interface is "the frontier space for rural-urban linkage" and the most intensive space for human-land conflicts. Leitner and Sheppard (2022) assert that distinct peri-urban landscapes are emerging shaped by differences in the social ecology of land and local governance and planning regimes. The role of land property speculators is considered to be critical in moulding the evolution of peri-urban landscapes.

Adell (1999) pinpoints several critical themes in early writings about the peri-urban interface. These include the importance of peri-urban agriculture, the critical role of the informal economy in peri-urban spaces as well as conflicts over land and property ownership. More recently, Follmann (2022) sees peri-urban areas as marked by complex transformations with land conversion and change, high rates of population growth, shifting economic activities and restructuring of resource flows all of which contribute to competing claims on the same space and resources. For McGregor et al. (2006) these peri-urban spaces, home to millions of people globally, confront unique and acute problems and require distinctive innovative planning approaches and solutions to their complex challenges. Indeed, there is broad agreement that peri-urban landscapes present a major challenge for planners. Peri-urban areas are "plagued by land conflicts" and require effective management measures to address these conflicts (Ahani and Dadashpoor, 2021a, p. 1909). One of the core

dilemmas of peri-urban areas relates to poor infrastructure and inadequate service provision which has a negative consequence for living conditions which often deteriorate with population pressure (Mondal, 2021).

Ahani and Dadashpoor (2021b) highlight the need for evolving a special growth framework for the growth guidance and control of peri-urbanization. The peri-urban space is distinctive for the multiple challenges it poses for planning and governance because of its ecological features, socio-economic heterogeneity and fragmented institutional context (McGregor et al., 2006). In socio-economic terms the interface is mixed, fluid and subject to rapid change with the potential co-existence of informal households, industrial entrepreneurs, and new migrants all with different and competing interests/perceptions within an institutional context of the absence of structures capable of addressing the linkages between so-termed urban and rural activities (Allen et al., 2006; Allen, 2010). Agriculture is a vital source of livelihood at the peri-urban interface across the global South (Simon, 2008; Torres-Lima et al., 2010). Peri-urban agriculturalists face several challenges in adapting their production systems to a context of land degradation and environmental deterioration.

EXTENDED METROPOLITAN SPACES IN SOUTH AFRICA

The international debates taking place around planning and governance responses to the challenges of peri-urban interface are highly relevant for the setting of post-apartheid South Africa (Rogerson, 2023). Within the reorganization of local government which occurred after democratic transition there was the designation of eight metropolitan areas in South Africa. These are Cape Town in Western Cape, Johannesburg, Ekurhuleni and Tshwane in South Africa's economic heartland of Gauteng, eThekwini in KwaZulu-Natal, Nelson Mandela Bay and Buffalo City in Eastern Cape and Mangaung in Free State. The location of these eight metropolitan areas is shown on Figure 1.

A central aspect of the process of restructuring local government in the post-apartheid transition was "spatial reorganization through boundary delimitation" (Giraut and Maharaj, 2002, p. 39). One outcome was territorial contestation in particular over the incorporation of rural areas under traditional leadership into urban areas. Of immediate concern was whether metropolitan municipalities could practically supply services to these incorporated areas given sometimes their remoteness and relative inaccessibility as well as questions about the willingness or ability to pay for services of poor communities (Sutherland et al., 2014). In addition, "traditional leaders believed that their territorial jurisdiction and authority were being undermined as the administrative geography was radically redefined by the Municipal Demarcation Board" (Giraut and Maharaj, 2002, p. 46). Further concern was expressed by the metropolitan authorities that national government was using the demarcation system of restructuring as a guise for 'dumping' mismanaged municipalities upon the metropolitan areas.

Several metropolitan areas include extensive so-called 'rural spaces' as a result of the restructuring of local government and of territorial boundaries following the democratic transition. Indeed, the redrawing of boundaries produced a situation that at least four metropolitan authorities in South Africa – eThekwini, Tshwane, Mangaung and Buffalo City – confront multiple governance challenges of planning for an extended metropolitan region which includes expansive rural geographies. It is observed, for example, that eThekwini's spatial

footprint is at least 60 percent 'rural' (Roberts and O'Donoghue, 2013). This area spans 1500 square kilometres with a population of at least 600 000 poses a set of highly distinct challenges for "urban" planning (Sutherland et al., 2014).
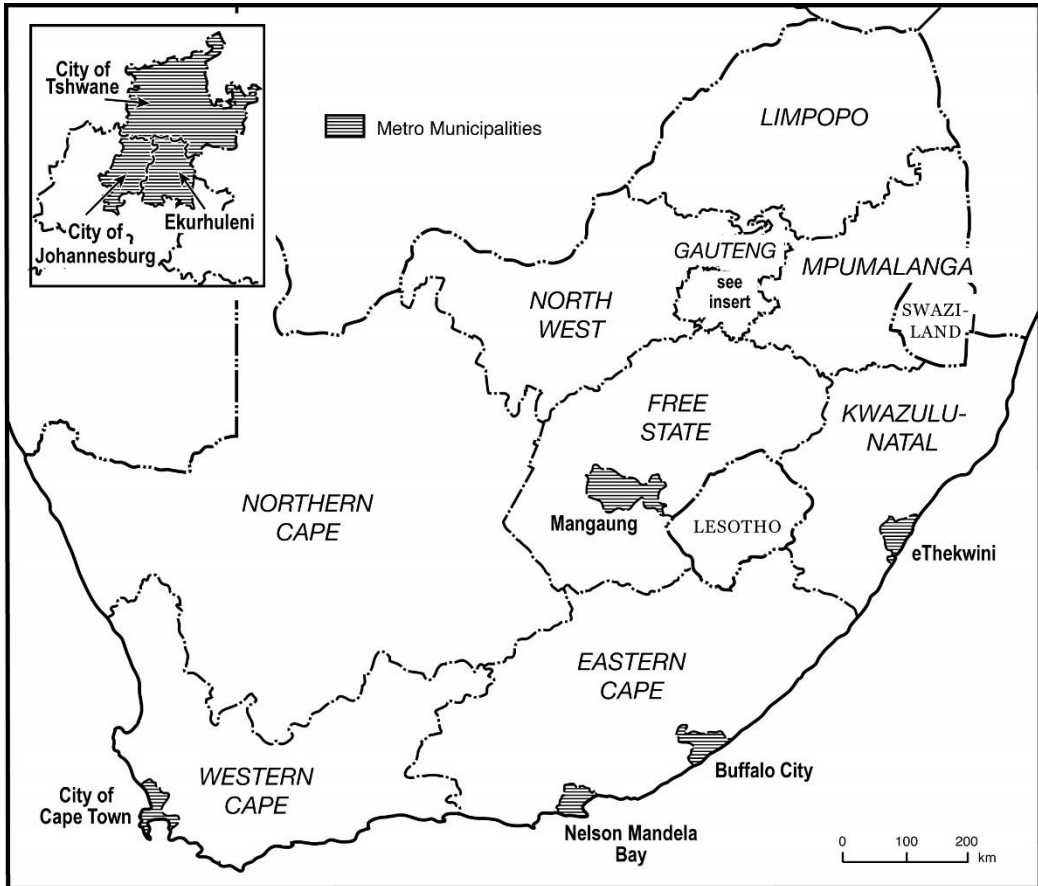

Figure 1. The Location of South Africa's Eight Metropolitan Municipal Areas

The cases of Tshwane and Buffalo City are two other South African metropolitan areas that incorporate extended rural spaces. In the example of Tshwane, which centres on South Africa's capital city of Pretoria, approximately 35 percent of its land area is considered as rural. At Buffalo City (with East London the major centre) in Eastern Cape it is estimated by metropolitan stakeholders that almost two-thirds of its spatial area is rural in character. It is within this context of territorial restructuring of administrative spaces in South Africa that the planning challenges of peri-urban spaces are highly significant. Moreover, Smith (2022) maintains that poverty in South Africa increasingly is being geographically relocated from urban townships and (former) rural Bantustans to peri-urban spaces. The production of new peri-urban landscapes is therefore a critical factor in shaping new patterns of uneven development in post-apartheid South Africa.

Notwithstanding the existence of extensive rural spaces in a number of South African metropolitan areas there is so far limited academic writing on

these issues by local planners or urban geographers. Best documented is Mangaung with the recent work by Subramanyam and Marais (2022). This section provides an overview of available research and debates focused on Tshwane, Buffalo City and eThekwini drawing from the handful of published research studies which cover issues around urban-rural interdependencies in these regions and, most importantly from three unpublished reports which were commissioned by the South African Cities Network (SACN) on Tshwane, Buffalo City and eThekwini and mainly deal with infrastructural issues around water and electricity provision. As Abrahams (2016) points out since its establishment in 2002 the SACN has evolved as an organization which plays a significant role in defining and framing the urban policy agenda in South Africa.

The SACN research reports were targeted specifically at identifying and analysing potential challenges relating to the provision of electricity and water from a governance perspective as well as the broader governance issues as they relate to rural and agricultural development. The analysis was based upon a total of 11 detailed interviews which were conducted with senior management in the three metropolitan areas of eThekwini, Buffalo City and Tshwane (Figure 1). Special attention was accorded to the provision of water and electricity services albeit it was acknowledged that local development relating to 'rural spaces' is much broader in scope than simply the provision of these two sets of infrastructural services. This said an important finding in the research is that the so-termed rural-urban divide is undergoing fundamental change as a result of dynamic change occurring at the peri-urban interface. The research investigations disclosed several key issues relating to planning and governance in these three municipalities.

It was disclosed in the case studies that, as a result of the incorporation of rural spaces, the metropolitan authorities necessarily had to establish new departments, and develop skills capacity in areas never previously required in metropolitan municipalities. These include rural development, rural road maintenance, rural fire prevention, rural planning, rural local economic development and most importantly agricultural development. Indeed, a critical challenge is for the metropolitan areas to gain capacity and an understanding of rural and agricultural development, albeit that this was not a traditional skill set found in municipal management. The research revealed that the governance landscape within municipalities is complex. The metropolitan municipalities have to cope with geographic areas that are expanded from time to time by the demarcation board and often include the incorporation of poorly performing municipalities. This situation results in the metropolitan authorities facing ever-growing maintenance and new infrastructure backlogs. The financial implications of these backlogs are of sufficient quantum as to impact the management of the assets under their control.

The metropolitan governments are also faced with insufficient funding and an inability to raise additional capital due to legislative constraints. National and provincial government offer a number of funding opportunities from a variety of sources both within and external to government. Each creates different demands on these municipalities, and correspondingly may complicate the governance issues surrounding municipal finance. Overall, what emerged from the three SACN case studies is that the municipalities can be at times overwhelmed by the complex governance environment within which they are required to operate. In particular the research revealed a number of issues

relating to water provision which need addressing. Some of those issues are unique to each metro while others hold true across all of them. The effective, sustainable, and equitable provision of water and electricity by the metropolitan governments is of paramount importance and forms a priority objective. All three metropolitan authorities include water and sanitation within the same department. It was observed that the service delivery issues related to water and sanitation are more acute as in the case of electricity in respect of rural communities, the responsibility falls to Eskom, South Africa's (mis-managed) national provider of electricity.

It was evidenced that there exists a lack of conformity between municipalities. Although this has both positive and negative connotations, importantly it makes it difficult to undertake impact assessments and carry out benchmarking across municipalities and thereby to identify elements of good practice. Overall, it was shown that despite the complex governance environment and the challenges they face, the three metropolitan municipalities are each carving out their own pathway through the governance jungle and succeeding in certain respects. This said, it is clear that there is still a fair amount of room for interpretation by the management teams. This in itself is not necessarily a bad thing as it allows for innovation. However, when standards are required, it is important that a national standard be set.

One interesting experiment in governance is that of the eThekwini metropolitan government which is centred on the coastal city of Durban. In this extended metropolitan region 40% of the area is considered urban and 60% is rural. Here, the so-termed rural areas include both residential small holdings and commercial farming; importantly of the 60% land which is considered as rural, 51% is tribal owned land. In eThekwini the European Union (EU) became aware of this situation and piloted a new approach to managing the rural component of the eThekwini Metro for an initial three year period which was later extended by a further two years. The new approach, supported by the EU, was the establishment of Area Based Management (ABM) teams. Essentially the ABM teams were to function as local development agencies established for each region. The purpose and key desired outcomes for the ABMs related to the delivery of basic services and the promotion of local economic development (McIntosh Xaba and Associates, 2007, p. 3).

Administrative problems emerged as the ABMs did not fit into the standard metro organogram and as a consequence confusion arose with a lack of certainty as to the exact role which they were meant to play. One unfortunate consequence was this led to little effort being made by line departments to cooperate with the ABMs. A mixed evaluation is offered of the governance experiment of ABMs. The research revealed that in certain respects the experience of the ABMs in eThekwini is considered positively. Further, it was disclosed that ABMs were viewed successful in the rural areas in which they operated and made a significant impact on these communities. The ABMs commissioned their own research which disclosed the need for assistance to be provided to the agricultural sector. As a result, this led to the preparation and establishment of a Metropolitan Agricultural Policy and the consequent launch of support to the agricultural sector. This included agricultural extension services to the agricultural community in the metropolitan area. The ABMs used a variety of Department of Environmental Affairs programmes and associated funding to assist the rural and agricultural areas. The ABMs also established a

pilot Farmers Support Centre (Agric-Hub). The Rural ABM established a Rural Agricultural Policy which later became the eThekwini Agricultural Policy when it incorporated the urban areas to deal with urban agriculture. In addition, a separate Rural Development Framework Plan was established at the inception of the rural ABM which guided all interventions by the rural ABM. The ABMs thus emerged as a source of many new ideas and innovation.

Overall, the interviews confirmed that the ABMs were a success in terms of making a large impact both on rural communities and the metro itself. Much of their success is attributed to their flexible organizational structure which was outside of normal municipal operational procedures. A key ingredient in the success of the ABMs was their independence in decision-making and their ability to essentially by-pass lengthy procurement processes. This enabled them to respond quickly to needs detected in the rural and agricultural communities. This ability to 'fast track' was a key factor in their initial success. The ABMs, however, did not 'fit' into a traditional municipal organisational structure. They addressed all the non-standard issues that arose within the rural areas in a non-standard manner. They were also structured around a small team of professionals in a flat organisational structure, again unlike any municipal entity. No effort was made to find a way to integrate these different organisational structures. The fact that they were also largely financially independent added a further dimension of difficulty in respect of integrating the two structures. The research considered that these local development agencies effectively functioned in the manner of a private sector business which allowed them to be flexible and to respond immediately with action. This flexibility and nimbleness in terms of policy action is viewed as difficult to attain within the conventional structures of municipal administration.

The ending of the five year period of support for the ABMs exposed a set of issues about the sustainability of municipal attempts to assist and support rural and agricultural development. After 5 years, once EU funding dried up the eTthekwini Metro allowed the ABMs to collapse as it standardized Departments. The Deputy City Managers (DCM) to whom the ABMs reported were faced with managing two different budgets; the first was their traditional budgets and the second a separate smaller ABM budget, which was more complex in sourcing and utilization. The DCMs forced traditional municipal standards onto the ABMs which caused their demise. Subsequently, the ABMs were absorbed into the Project Management Unit which manages the Metro's Extended Public Works Programmes and the agricultural projects. ABMs subsequently shifted to a maintenance role or closed down. Correspondingly, several initiatives launched through ABMs either stalled or closed down after the re-organization and reincorporation of the activities of ABMs within the existing municipal administrative structures. For example, it was revealed that forestry efforts collapsed with the demise of ABMs. Moreover, since the closure of ABMs, the agriculture mandate has been divided between two departments. These developments underscore the governance issues for a metropolitan authority in handling issues relating to agriculture. Above all, the research disclosed that agriculture had no formal role in municipal structures and capacity shortages exist for qualified and experienced personnel necessary to manage the agricultural component within the municipality.

In the case of Tshwane different governance trajectories are observed. The Tshwane metropolitan region is distinctive as it was a cross-boundary

municipality, with parts of the city located in North-West Province and other parts in Gauteng. The Tshwane metropolitan area thus has an extraordinarily complex inter-governmental legislative, financial and service delivery situation to manage. One aspect of the new institutional arrangements was the introduction of the 'regional services model' through which the city aimed to bring government closer to the people and to enhance service delivery throughout the different regions. The adoption of the regionalisation model resulted in seven regions and functions devolved to the regional service centres including Agriculture and Rural Development. This said, only four of the seven regions have a rural component. It was this mix of rural and urban that became the rationale for establishing the Agriculture and Rural Development division. The original Agricultural Division was initiated in 2008 and established the Integrated Agricultural Strategy Policy and Implementation Plan. As part of this structure, Tshwane developed four agricultural centres termed Sustainable Agricultural Villages. Further, in Tshwane a comprehensive rural development programme was established and based upon the Gauteng provincial rural development programme. The focus of this programme is the development of economic opportunities. The Tshwane metropolitan area is further distinguished by the establishment within its boundaries of a 'big five' game reserve within its extended metropolitan region. The evolution of the Dinokeng Game Reserve and its contribution to the urban tourism economy is traced by Burton et al. (2020).

In terms of governance as a whole it was disclosed that rural spaces present several specific sets of problems. First, rural communities expect the same services as urban areas. A problem emerges, however, that in order for those services to be delivered in a sustainable way necessarily they have to be at a lower level than that of urban services. For example, in Buffalo City it was revealed that access to waterborne sewerage is limited to the formal settlements in the urban centres and to some of the larger peri-urban settlements. Here the metropolitan authority separates rural and urban areas in their Spatial Development Framework with the 'dividing line' known as the rural-urban divide. Rural communities either have access to a basic sanitation service (limited coverage), a sub-basic service, or no service at all. Another set of issues surrounded the agricultural communities which overlap across the urban-rural boundaries into the urban and peri urban areas and had different sets of support needs. Finally, particular issues arose in circumstances where land was held under customary forms of tenure. In particular, the role of traditional leaders was viewed as problematic in terms of requests for accessing land for developmental purposes.

RESPONSES IN ETHEKWINI

This section turns to examine in greater depth the immediate response to the establishment of an extended metropolitan area in eThekwini in KwaZulu-Natal. The discussion draws upon detailed (unpublished) planning and consultancy reports which were prepared for the municipality and interviews with key municipal stakeholders. The approach is historical as it is confined essentially to the first decade response to the creation of an extended metropolitan space. The validity of using historical approaches to inform present-day planning, however, is stressed by many authors (Saarinen et al, 2017). The research was conducted in the pre-COVID-19 era.

For eThekwini the administrative restructuring which occurred in 2000 resulted in the addition of 67 percent more land to the city "most of which consisted of underdeveloped rural; and peri-urban areas under Traditional Authority" (Sutherland et al., 2014, p. 476). In total it is estimated that the reconfiguration of municipal boundaries resulted in the addition to the city of 75 000 rural households of which 60 000 did not have access to basic services (Sutherland et al., 2014). The changing boundaries and expansion of the eThekwini metropolitan area is given on Figure 2. It shows the extension of the metropolitan boundary after 2000 which resulted in the inclusion into the metropolitan area of peri-urban zones as well as an extensive rural hinterland (Sutherland et al., 2018). The incorporation into the eThekwini metropolitan municipality of land areas of adjacent local municipalities occurred on both the city's northern and southern periphery.
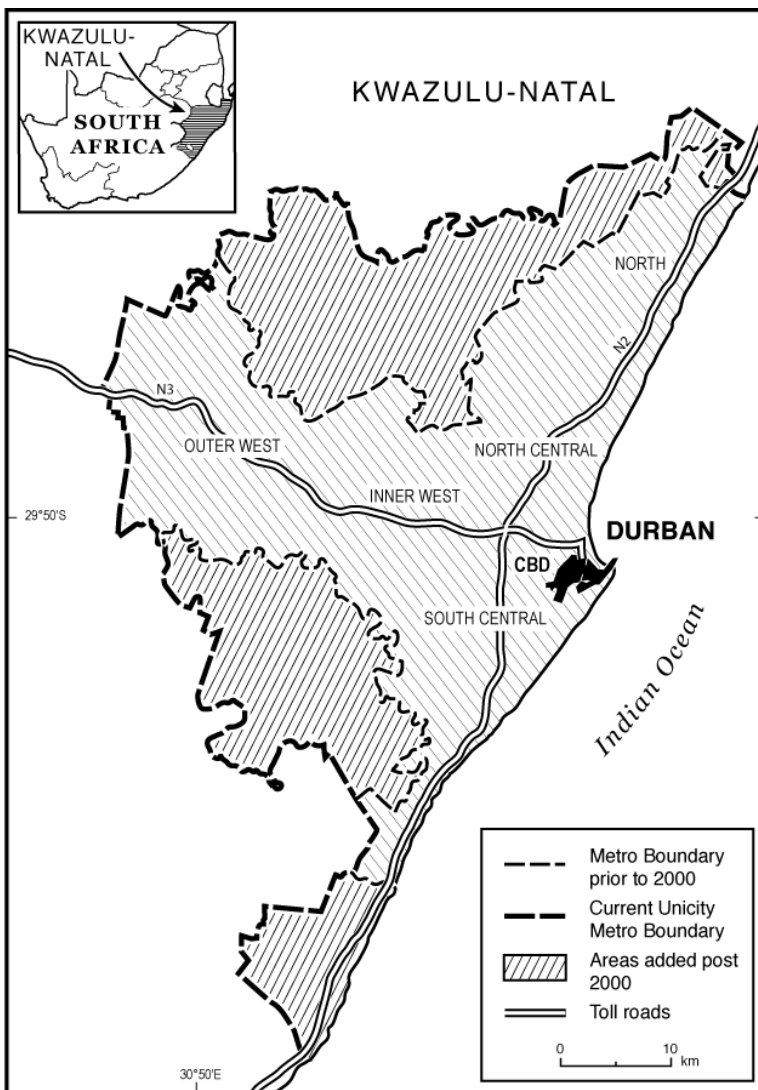

Figure 2. The Post-2000 Expansion of the eThekwini Metropolitan Region

The character of the newly incorporated areas was described variously as 'semi-rural' and 'rural' with significant portions consisting of areas of traditional settlement areas (Sutherland et al., 2014). Importantly it was recognized that the inclusion of these rural spaces into eThekwini "poses a serious challenge to the Municipality that has a history and expertise limited to the management and development of urban areas" and thereby requiring that "skills and expertise relating to rural development still need to be developed within the council" (Linda Masinga Iyer Rothaug Project Team, 2003, p. 108). The municipality recognized the immediate need to establish a better knowledge base of these areas and produced the Rural Development Framework which provided the essential framework which guided planning in these areas (Linda Masinga Iyer Rothaug Project Team, 2003).

The baseline document acknowledged the key immediate issues of limited access to physical and economic services and the minimal level of economic development. These themes are reiterated in other planning documentation. It was recognized, for example, that distinguishing features of these areas are that much land falls under traditional authorities with the consequence that it is characterized by dual systems of governance – both traditional and democratic. Other issues are the high disease burden, paucity of basic services (roads, water, electricity), fragmented service delivery by different spheres of government, and overall chronic poverty as a result of limited economic opportunities with high levels of dependence by households on social grants (McIntosh Xaba and Associates, 2007, p. 3). In one studied area of the cohort population of working age (15 to 64 years) only 22.1 percent were formally employed, 35.2 percent were unemployed and the rest were not working (Institute of Natural Resources & Iyer Rothaug Collaborative, 2005, p. 20). Poverty levels are extreme with only 26 percent of households recorded as obtaining a basic income sufficient for "an average family to maintain a reasonable level of health and hygiene" (Institute of Natural Resources & Iyer Rothaug Collaborative, 2005, p. 20). Agricultural livelihoods were typical but in some areas such as the Southern region where the largest share of formal employment was outside agriculture and recorded in manufacturing as well as wholesale and retail trade (Institute of Natural Resources & Iyer Rothaug Collaborative, 2005, p. 21). This finding indicates significantly that the rural geographies of metropolitan areas incorporate a diverse mix of economic activities beyond agriculture.

A critical issue for municipal planning remains the inadequacy of the knowledge base concerning these 'rural spaces'. It was admitted clearly in the Rural Development Framework that a "limited understanding exists of the economic situation of the people residing in the rural and peri-urban areas of eThekwini" (Linda Masinga Iyer Rothaug Project Team, 2003, p. 33). Further, it was conceded that this poor knowledge base "includes a lack of understanding of the sources of income and the migration patterns of rural people, both issues which substantially impact on future economic development strategies to be adopted" (Linda Masinga Iyer Rothaug Project Team, 2003, p. 29). The major early planning challenges relate to a cluster of poverty-related issues around the provision of basic services, the promotion of local economic development opportunities and the need to address environmental management concerns because of the degradation of the natural environment. The problems of a deteriorating environmental base and threats to sustainability were flagged as far back as the early 2000s. It was recognized that in terms of ecosystem services

that the "declining status of natural resources in rural areas is generating undesirable effects, and constrains the potential to achieve equity, efficiency and sustainability" (Linda Masinga Iyer Rothaug Project Team, 2003, p. 146).

Essentially these three clusters of poverty-related issues moved to dominate the policy agenda in eThekwini. Agriculture development is one core and obvious focus for policymakers in these rural spaces as household survival is often dependent on agricultural production (Institute of Natural Resources & Iyer Rothaug Collaborative, 2004). Within the Rural Development Framework, however, it was observed that "the Municipality has no specific programme to promote agricultural development as an income generator for communities" (Linda Masinga Iyer Rothaug Project Team, 2003, p. 29). Indeed, problems relating to municipal planning for agriculture have been a consistent policy challenge. Policy development has occurred for agricultural development with proposals for supporting in particular the emerging agricultural economy which ranges "from subsistence farming to commercial production" (Institute of Natural Resources & Iyer Rothaug Collaborative, 2004, p. 2). In particular the policy focus in agricultural development policy was weighted towards "previously disadvantaged communities" often mainly living in traditional settlement areas with customary forms of tenure (Institute of Natural Resources & Iyer Rothaug Collaborative, 2005, p. 50). Promoting food security was another strong policy focus (eThekwini Municipality, 2010; McIntosh Xaba and Associates, 2010).

Among select key planning issues are, inter alia, issues of land redistribution, the development of agricultural support services, the establishment of rural agricultural service or marketing hubs, promoting organized farmers groups, enhancing access to credit for emerging farmers and building the potential of special events such as farmers days for promoting awareness of agricultural opportunities (Institute of Natural Resources & Iyer Rothaug Collaborative, 2004, 2005; Institute of Natural Resources et al., 2007). Other critical support measures relate to improving agricultural-specific infrastructure such as soil conservation works, storm water drainage, provision of storage facilities, irrigation and agricultural roads to assist in expanding access opportunities to markets (Institute of Natural Resources & Iyer Rothaug Collaborative, 2005; Gabhisa Planning and Investments, 2012). The issue of building market linkages was of special importance for existing and potential commercial rather than subsistence producers (Institute of Natural Resources & Iyer Rothaug Collaborative, 2005). Overall, it was argued that in a metropolitan area such as eThekwini agriculture had an important role to fulfil in the development of the municipality as a whole not least for rural livelihoods, economic development and food security (Institute of Natural Resources & Iyer Rothaug Collaborative, 2004).

As is the case in the experience of peri-urbanization in other parts of the world (Leitner and Sheppard, 2022; Leitner et al., 2022), land conversion represented a major challenge for maximizing the opportunities for economic development. It was conceded that there is continued erosion of the agricultural potential within eThekwini "due to the conversion of agricultural land to primarily, higher income residential estates and other urban uses" (Institute of Natural Resources & Iyer Rothaug Collaborative, 2004, p. 1). It was observed "large tracts of high potential agricultural land are lost on a daily basis to alternative uses (most notably upmarket residential development, commercial development, industrial development and leisure developments serving a

particular sector of society) (Institute of Natural Resources & Iyer Rothaug Collaborative, 2004, p. 5). In addition, in other of these rural spaces the absence of land use and planning guidelines results in housing developments occurring within environmentally sensitive areas (Gabhisa Planning and Investments, 2012, p. 3). Indeed, it was apparent that unplanned dense settlement caused problems for infrastructure provision with the consequence that hygiene and sanitation issues become another key planning challenge (Gabhisa Planning and Investments, 2012, p. 4).

The mixed character of livelihoods in these areas raises the issue of the dichotomization between urban versus rural spaces. It was acknowledged by key municipal officials that "we always had definitional issues with these areas" (Interview, Senior Project Manager, Economic Development Unit, eThekwini Municipality). A particular problem exists with the classification of these rural spaces in terms of funding for upgrading and improvement. It was observed that eThekwini's rural areas are ineligible for grants "that are designated as urban" (McIntosh Xaba and Associates, 2007, p. 15). Moreover, "neither are they eligible for rural grants through the Integrated Sustainable Development Programme or the Department of Environmental Affairs and Tourism because these programmes and departments classify eThekwini's rural areas as metropolitan" (McIntosh Xaba and Associates, 2007, p. 15). Accordingly, it remains that eThekwini's rural areas are "in a limbo when it comes to access to funding", including even from development assistance agencies (McIntosh Xaba and Associates, 2007, p. 15). Overall, there is a policy dilemma with respect to funding for projects as these rural spaces "are classified as neither rural nor urban either by Government Departments or other donors and agencies" (McIntosh Xaba and Associates, 2007, p. 16). Once again, this situation underlines the problematic nature of the dichotomization of space simply between the urban and the rural.

It is evident that planning for these 'rural spaces' was not confined simply to issues relating to the natural environment and to agricultural planning in particular. The Rural Development Framework made clear that planning necessarily had to encompass other economic sectors. For example, tourism promotion was identified as a potential significant issue and that "establishing linkages between rural tourism opportunities and established tourism attractions/activities in the urban core must receive priority" (Linda Masinga Iyer Rothaug Project Team, 2003, p. 35). The coastal city of Durban is historically South Africa's leading domestic tourism destination (Rogerson, 2015; Rogerson and Rogerson, 2014; Rogerson and Rogerson, 2017; Rogerson and Rogerson, 2020; Rogerson and Rogerson, 2021a). The strategy was seeking to leverage new opportunities to spread tourism benefits away from the coastal zone into the rural hinterland areas, which are essentially 'in-between' rural tourism spaces (Rogerson and Rogerson, 2021b). The territory of these rural areas formed part of the former Bantustan of KwaZulu which was a creation of apartheid planning (Rogerson and Rogerson, 2023). As a traditional labour reservoir the existing tourism base of these rural spaces would be dominated not by leisure travel but instead only by visits from friends and relatives who were working in other parts of South Africa (Rogerson, 2017; Rogerson and Rogerson, 2021a).

Beyond rural tourism other sectors under scrutiny for diversifying the economic base include services with the view that "the development of commercial nodes in close proximity to the rural population should be

encouraged and promoted" (Linda Masinga Iyer Rothaug Project Team, 2003, p. 35). Construction was flagged as another sector of potential opportunity for diversifying the local economic base. Finally, it was acknowledged that manufacturing was a critical activity which impacted upon these rural spaces as a large percentage of the rural workforce was active in this sector. Indeed, whilst it was maintained that key resources for economic development in these ostensible rural spaces relate to land and natural environment, a consistent planning focus has been upon seeking to secure the active diversification of local economies beyond natural resource-based activities (Linda Masinga Iyer Rothaug Project Team, 2003).

This shift towards planning for economic diversification beyond a natural resource-based economy found expression also in the planning proposals for a revised rural economic development strategy (McIntosh Xaba and Associates, 2010). The goal of this strategy was "to provide a set of approaches aimed at encouraging the development of the rural economy and improving the quality of life and economic prospects of the communities in the rural areas" (McIntosh Xaba and Associates, 2010, p. iii). This particular document was a response to a situation analysis that had isolated the following development challenges that needed to be addressed:

- Dual systems of governance;
- Pressure on land for settlement/urban development;
- Pressure on land for property development;
- Threats to commercial agriculture;
- Underutilisation of good agricultural land in communal areas;
- Economic leakages;
- Reliance on government investment;
- Dependence on social transfers/grants;
- Poverty and inequality; and
- Absence of a coordinated approach to development and service delivery.

The strategy document was a response to these multiple challenges. In addition, it sought to align the municipal strategy with that of national government's Comprehensive Rural Development Programme which sought to combat poverty, hunger, unemployment and the absence of development in the country's rural areas (McIntosh Xaba and Associates, 2010). Among its recommendations were that the essential comparative advantage of the rural areas lay within tourism and agriculture. Proposed projects were to extend tourism potential through developing new tourism products and linking rural tourism assets to those in Durban; to encourage commercial agriculture and agro-processing through a stepped approach by supporting value-added activities; and to enhance food security (through community gardens) in areas of lesser agricultural potential. Other potential economic development opportunities related to outsourcing from close by manufacturing activities and stimulating local small enterprises in construction and housing in order to maximize opportunities around new public investment in infrastructure.

Complex issues of governance necessarily had to be addressed by the eThekwini authorities following the incorporation of the new rural spaces most of which were dominated by traditional leaders. The rural development strategy accorded particular significance to resolving tensions in governance and to "encourage constructive communication between ward councilors and traditional leadership" (McIntosh Xaba and Associates, 2010, p. 31). It

acknowledged that a major hindrance to the progress of rural economic development has been the "breakdown of communication and a conflict in priorities between the traditional leadership and ward councillors" (McIntosh Xaba and Associates, 2010, p. 31). It was observed that initial relationships were characterized by suspicion and trust and little evidence exists that "either previous or current structures have helped to improve communication between the incumbents of the formal and traditional systems of governance" (McIntosh Xaba and Associates, 2010, p. 31).

In addressing this critical governance issue it was proposed to move towards an agreed institution for joint decision-making. Such an institution or platform would be geared to enhancing communication and encouraging stakeholders to engage freely with one another in a constructive manner. The essential purposes were as follows: (1) to enhance communication between the traditional leadership, ward councilors and other key local stakeholders; (2) to enable stakeholders to engage with each other so as to strive for consensus about ways of improving communication; and (3) to search for ways of enabling the current traditional authority structures (clerks and traditional councils) to assume a more meaningful role in communication and participatory development (McIntosh Xaba and Associates, 2010). Further the objective was to "facilitate participatory planning with ward councilors and traditional leadership" with the long-term goal "to ensure that the AmaKhosi (Zulu traditional clan chiefs) and ward councilors engage with Municipal line departments in achieving service delivery goals" (McIntosh Xaba and Associates, 2010, p. 32). The rationale for an institution of engagement was "the need for the AmaKhosi to play a more focused role in driving socio-economic development" by drawing them into the formal planning ambit (McIntosh Xaba and Associates, 2010, p. 32).

CONCLUSION

One contemporary trend observed in parts of sub-Saharan Africa is for the restructuring of the boundaries of local governments in order to better address the development challenges associated with accelerating urbanization (Resnick, 2021; Subramanyam and Marais, 2022). This paper has examined one of the outcomes of territorial restructuring in South Africa, namely the planning challenges which have emerged with the creation of an extended metropolitan region incorporating significant rural geographies. Among several consequences was the imperative for metropolitan authorities to build new competences in order to plan and manage these added rural spaces as well as the peri-urban spaces.

Arguably, the international literature reveals the validity of the terminology of the peri-urban interface as a useful starting point for unpacking the dynamics of change in the 'transitional' spaces where urban and rural features are interwoven. The peri-urban interface is distinctive for the multiple challenges that it offers to planners because of its rapid pace of change, ecological and socio-economic features and usually fragmented institutional context. The planning of peri-urban zones requires a regional approach in order to address complex poverty and environmental challenges especially within the context of objectives of sustainability and a search for social justice. In understanding the complexities of peri-urban spaces in South Africa there is an obvious need to transcend the urban-rural dichotomy which is clearly

inadequate for interpreting and planning the dynamics of change in the country's extended metropolitan areas.

The available descriptions of the planning challenges facing the 'rural' spaces in South Africa's extended metropolitan areas appear to exhibit close parallels to those described as peri-urban in the international scholarship (Ortega, 2020; Follmann, 2022). Accordingly, in starting a dialogue on planning and governance issues for South Africa's extended metropolitan spaces it is useful to learn from the scholarship about peri-urbanisation and the challenges of the peri-urban interface as has been documented in several Asian, Latin American and African contexts. This said, what is observed is that the initial planning responses and documentation which has informed policy development for 'rural development' in South African metropolitan areas makes no reference at all to policy and practices of planning in any other part of the world. Breaking out of this isolated and blinkered view of planning and governance by drawing upon international debates (if not best practice) can be an important start point for evolving fresh planning insights. In addition, in planning scholarship these areas are relatively neglected in extant literature on South Africa which points to the urgent need for comprehensive research investigations to comprehend the dynamics of change in these areas.

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