

Reflecting on SPLUMA requirements and the implications thereof for municipalities in South Africa

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PREFACE

This research (or parts thereof) was made possible by the financial contribution of the NRF (National Research Foundation) South Africa. Any opinion and conclusions or recommendations expressed in this study are those of the author and therefore the NRF does not accept any accountability in regard thereto.

ABSTRACT

Land use management in South Africa can be traced back to the 1800s but achieved its notoriety status during the 1960s to 1980s due to its apartheid objectives. Since 1994, spatial planning instruments such as Spatial Development Frameworks introduced planning concepts and ideas aimed at rectifying South Africa's spatial disparities. Unfortunately, the legislative framework governing planning in South Africa has not kept pace with neither its new democratic status, nor any innovations in planning. In 1995, the constitutionality of the Development Facilitation Act was challenged in court, a case which heralded the new Spatial Planning and Land Use Management Act (SPLUMA) in 2013. SPLUMA specified a number of requirements for Municipal land use schemes and provided municipalities with a deadline of 2020 to align with these recommendations. While most Municipalities in South Africa manage land use in some or other way through a Town Planning Scheme, these existing instruments may not comply with all the new legislated requirements.

This study specifically investigated the extent to which current land use management instruments comply with the requirements of the new Act. The study considered case studies of the existing land use schemes of South African Municipalities and measured these against a compliance template developed based on the stated requirements for Schemes in SPLUMA, in an attempt to identify gaps. Interviews with a purposeful sample of experts, including Sector Departments as well as Traditional Authorities, provided insight to address some of these gaps.

The study concluded that, while an effective legislative framework, SPLUMA's requirements for land use schemes requires novel thinking and skills (specifically relating to informality and giving effect to policies and plans through the land use scheme). The study recommended a framework for training and skills development aimed at Municipal Planners and finally presented an approach which could assist with the introduction of Land Use Management in Traditional Authorities, conforming to the SPLUMA requirements.

Key words: Land use schemes, spatial planning, spatial development frameworks, SPLUMA,

OPSOMMING

Grondgebruikbestuur in Suid-Afrika het ontstaan in die 1800s. Gedurende die 1960s tot 1980s het beplanning berug geword as gevolg van die najaag van apartheid doelwitte. Sedert 1994 het ruimtelike beplanningsinstrumente (soos die Ruimtelike Ontwikkelingsraamwerk) nuwe konsepte en idees geïnkorporeer met die spesifieke doel om ruimtelike ongelykhede op te los. Ongelukkig het die wetlike raamwerk verantwoordelik vir beplanning nie tred gehou met Suid Afrika se nuwe demokratiese status nie en nog minder met enige innoverende idees in beplanning. In 1995 is die grondwetlikheid van die Wet op Ontwikkelings Fasilitering getoets in die hof, 'n saak wat uiteindelik gelei het tot die totstandkoming van die Wet op Ruimtelike Beplanning en Grondgebruik Bestuur (SPLUMA). Die wet het nuwe vereistes vir grondgebruikbestuur gestel en het aan Munisipaliteite 'n sperdatum van 2020 gestel om aan hierdie vereistes te voldoen.

Hierdie studie het spesifiek ondersoek in welke mate bestaande Munisipale Grondgebruik instrumente (soos byvoorbeeld Grondgebruik Skemas) voldoen aan die vereistes van die Wet. Verskeie gevalle studies van bestaande Grondgebruikbestuur Skemas is opgeweeg in terme van 'n telkaart wat saamgestel is uit SPLUMA vereistes vir Grondgebruikbeheer. Verskeie gapings is geïdentifiseer. Inligting oor hoe om moontlik hierdie gapings te vul is ingewin deur middel van onderhoude met 'n doelbewuste geselekteerde groep kenners van verskillende Departemente sowel as Tradisionele Owerhede.

Die studie het bevind dat SPLUMA wel 'n effektiewe wetlike raamwerk is, maar dat daar nuwe denke en kundigheid benodig word om te voldoen aan SPLUMA, spesifiek in terme van informele nedersettings, sowel as die wisselwerking tussen beleidsdokumente en die Grondgebruikbestuur Skemas. Die studie het 'n raamwerk voorgestel wat daarop gemik is om kundigheid en kennis te verbeter onder Munisipale Beplanners en het afgesluit om 'n metodologie om grondgebruikbestuur bekend te stel aan Tradisionele Owerhede, in lyn met die SPLUMA vereistes.

Kern woorde: Grondgebruikbestuur skemas, ruimtelike beplanning, ruimtelike ontwikkelings raamwerke.

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CHAPTER 1: INTRODUCTION

1.1 Points of departure

“Abundant evidence suggests that the world and its constituent landscapes are on an unsustainable trajectory” (Wu, 2011:1000). According to some commentators, sustainability has become the primary challenge and research focus of contemporary science (Mukoko, 1996). The same challenge is also on the agenda of cities and towns (Howler, 2016), as our cities and towns have grown in complexity during the last century “presenting planning and urban management with challenges that have never been faced before” (United Nations, 2009:24). Planning is seen as an activity where different sectors of society (e.g. the private sector, government as well as citizens of a country) interact to develop or shape communities that enrich people's lives (American Planning Association, 2017). This role of planners as “shapers” of sustainable communities has, however, come under attack in recent times. The United Nations (United Nations, 2009:3) argues that market forces often do a far better job of addressing urban problems than governments and suggests that the system of urban planning needs to be reviewed in order to adequately address issues in rapidly growing and poor cities. Closer to home, planning in South Africa has been blamed for creating the “apartheid” city during the period 1960-1980 (Charlton, 2008:6). The focus of town and regional planning was on the actual shape of cities and towns, designed using a “master planning” approach through the implementation of spatial frameworks (Todes, et al., 2010: 416).

In 2010, the constitutional court found sections of South Africa's only post-apartheid planning legislation (The Development Facilitation Act No. 67 of 1995) to be unconstitutional, and tasked Parliament with remedying the situation within 2 years (Hands, 2010). This led to the Spatial Planning and Land Use Management Act No 16 of 2013, which came into operation in 2015. In terms of this Act, the spatial planning system in South Africa (South Africa, 2013) has been formalised to include (1) spatial development frameworks (SDF); (2) development principles, norms and standards; (3) land development applications; and (4) *land use schemes (LUS)*. As such, the new Spatial Planning and Land Use Management Act (SPLUMA) provides municipalities with a 5-year deadline to compile and implement a single land use scheme for its entire area of jurisdiction (Nel, 2016). Although the compilation of spatial development frameworks became mandatory since 2000 when the Municipal Systems Act introduced it, few municipalities and municipal planners have experience in the compilation of land use schemes.

SPLUMA now sets further (specific) requirements for schemes, including:

- one land use scheme for the entire municipal area;
- provisions that permit the incremental introduction of land use management and regulation in areas under Traditional leadership, rural areas, informal settlements, slums and areas not previously subject to a land use scheme;
- provisions to promote the inclusion of affordable housing in residential land development;
- land use and development incentives to promote the effective implementation of the spatial development framework and other development policies,
- land use and development provisions specifically to promote the effective implementation of national and provincial policies, and
- specific requirements regarding any special zones identified to address the development priorities of the Municipality.

This study will reflect on the SPLUMA requirements for land use schemes and the implications thereof for municipalities in South Africa. It will explore the extent to which existing town planning schemes and planning approaches need to change to incorporate the additional requirements of SPLUMA. The aim is to identify themes of intervention, substantiated by a theoretical investigation, as well as local and international best practises to provide municipalities with guidance on how to adhere to the requirements set by SPLUMA.

1.2 Problem statement

Land use management in South Africa can be traced back to the 1800's (Maylam, 1995) but has achieved its notoriety status during the 1960s to 1980s due to its apartheid objectives (Charlton, 2008). Unfortunately, planning reform has not kept up with political reform since 1994 (Todes, 2008). While the Development Facilitation was promulgated in 1995, its constitutionality was challenged in 2010 (South African Cities Network, 2012). The enactment of the new Spatial Planning and Land Use Management Act in 2013 (SPLUMA) aimed specifically at providing uniform planning legislation. A deadline was set for all municipalities to comply with the requirements of the Act by 1 July 2020. This implies that the Traditional "Town Planning Scheme" which historically was the planning instrument for land-use management, had to change. These instruments once compiled were used to manage land uses for decades. Until 2014, town planning schemes as old as 71 years was still used in Ekurhuleni Metropolitan Municipality (The Benoni Town Planning Scheme, 1947). With little time left, South African Local Municipalities need to compile legal planning instruments, complying with new legislative requirements, while at the same time possessing little experience in the compilation of these instruments. This study

thus aims to consider the implications and the new SPLUMA requirements for municipalities in South Africa and identify themes of intervention to provide municipalities with guidance on how to adhere to the requirements set by SPLUMA.

1.3 Primary research question

The primary research question of this study is constructed as follows: “What are the implications of the new SPLUMA requirements for municipalities in South Africa?”

1.4 Aims and objectives of this study

As such, the study aims to:

Consider the implications of the new SPLUMA requirements for municipalities in South Africa and identify themes of intervention, substantiated by a theoretical investigation, as well best practises to provide municipalities with guidance on how to adhere to the requirements set by SPLUMA.

Accordingly, the objectives of this study are to:

- Investigate land use planning theory and the importance thereof as part of mainstream planning.
- Evaluate the legislative frameworks that impacts on land use management in South Africa.
- Identify the current gaps between existing town planning Scheme instruments and those that is required by SPLUMA.
- Identify additional requirements for land use schemes that municipalities should include when compiling new land use schemes, as a requirement set by SPLUMA.
- Identify examples and best practises from local and international case studies to guide land use planning in South Africa.
- Identify themes of intervention to guide municipal planning approaches towards the compilation of land use schemes in South Africa, according to the requirements set by SPLUMA.

1.5 Theoretical objective

Existing Town Planning Schemes could be adapted and extended in terms of scope to adhere to the requirements set by SPLUMA.

1.6 Methodology

1.6.1 Literature study

The literature review will investigate the following themes:

Theme 1: Understanding and defining boundaries within municipalities

Delineation of urban areas forms a critical part of land-use planning, guiding urban and rural development and the integration thereof. SPLUMA requires a “wall-to-wall” municipal land use scheme, and as such, place a new dimension on delineation of areas. This section considered earlier schemes and related urban boundaries, in context to the new requirements set by SPLUMA, and the planning of various land-uses (agriculture, conservation, mining and (in large parts of the country) Traditional villages on communal land) as part of new planning approaches for local municipalities.

Theme 2: Informality and its implications for land use schemes

The issue of informality is gaining importance within recent planning approaches. To date land use schemes viewed informal settlements as “temporary”, therefore not including such land uses, and in Traditional villages, no formal land use management (from a municipal perspective) takes place. SPLUMA now requires that informal settlements and areas under the management of Traditional leaders be incrementally” introduced to land use management and schemes. This section considered such local challenges and related international best practises linked to the inclusion of informal settlements in land use schemes, in order to capture approaches to align indigenous practices with municipal land use management.

Theme 3: Using the Scheme to give effect to policies and frameworks

A plethora of polices, frameworks and plans are developed by municipalities or other spheres of government. Often municipalities struggle to implement these policies, mainly because its town planning Scheme does not allow for it. SPLUMA requires that a land use scheme (LUS) must give effect to and be consistent with the municipal spatial development framework as well as other policies. This section explored the way in which this alignment can be achieved.

1.6.2 Methods of investigation

A qualitative research approach was employed as part of the empirical investigation, and included the following actions:

- A critical analysis of SPLUMA requirements was conducted to identify broad themes of intervention and issues to include in the current approach to land use management.
- A case study analyses was conducted to investigate an informative sample of 7 purposefully selected existing town planning schemes to identify the extent to which it addresses the requirements for land use schemes stipulated by SPLUMA and inform a gap-analysis of such.
- Input was received from the Department of Rural Development and Land reform in the form of its published “Guideline for Municipal Land Use Schemes”.
- Expert inputs were captured by means of semi-structured interviews with a sample of purposefully selected key sector departments (e.g. Department of Agriculture, The South African Chamber of Mines) to further identify broad themes of intervention to be included as part of land use management approaches.
- Stakeholder inputs were captured by means of semi-structured interviews with Traditional Authorities to identify and understand indigenous land use practises and identify broad categories of intervention that should be included and aligned with current land use management approaches. (Interviews were voluntary and arranged through the Office of the Speaker at selected municipalities).
- The research concluded with an approach towards future land use management, in line with SPLUMA requirements, based on the identified themes of intervention, substantiated by the theoretical investigation, case study analysis, expert inputs, stakeholder inputs, as well as the best practises to provide municipalities with guidance on how to integrate and implement such.

1.7 Delineation of the Study Area

The Study Area is limited to the borders of South Africa. The discipline of town and regional planning includes different aspects such as forward planning (in South Africa referred to as Spatial Development Frameworks) or land use management. This study focusses on land use management as a function of Local Government in South Africa.

1.8 Limitations of the research

The research is based on a sample of seven purposefully selected case studies. The sample is therefore neither a comprehensive sample nor is it representative, rather it is an informative sample which provides insight into the ability of South African Municipalities to adhere to

legislative requirements imposed on them by the new Spatial Planning and Land Use Management Act.

1.9 Structure of the dissertation

The following is a summary of the content of the remainder of the dissertation:

Chapter 2: Literature review - The notion of planning is investigated as well as how this transpires within the South African context (both the system within which it operates as well as the geographic boundaries that applies to different levels of government. Planning approaches in terms of dealing with informality as well as Traditional Authorities are explained and possible methods of linking different planning instruments (the land use scheme and the Spatial Development Framework) are investigated.

Chapter 3: Empirical results analysis - The land use schemes of seven Municipalities are used as base of the empirical investigation, analysing the extent to which these instruments comply with the requirements of SPLUMA and possible gaps that may exist. Expert interviews are further used to investigate possible ways of addressing these gaps.

Chapter 4: Conclusions – Findings are drawn focussing on the effectiveness of the legislative framework for planning as well gaps that would require attention by Municipalities in order to have legally compliant land use schemes.

Chapter 5: Recommendations – Planning solutions presented for providing the framework for capacity building and skills development as well as a possible approach to introducing land use schemes to Traditional Authorities. Reflecting on SPLUMA requirements and the implications thereof for municipalities in South Africa and providing a framework to build capacity and skills, also for Traditional authorities, in line with SPUMA requirements.

1.10 Definitions

The following are important definitions of applicable terminology that were used in this study.

Table 1.1: Glossary.

Enumeration area (EA)	“An enumeration area (EA) is the smallest geographical unit (piece of land) into which the country is divided for census or survey purposes. EAs typically contain between 100 and 250 households. Each EA is expected to have clearly defined boundaries” (Statistics South Africa, 2012:10).
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Informal Settlement	“An unplanned settlement on land which has not been surveyed or proclaimed as residential, consisting mainly of informal dwellings” (Statistics South Africa, 2012:14).
Integrated Development Plan (IDP)	“A single, inclusive and strategic plan for the development of the municipality which links, integrates and co-ordinates plans and considers proposals for the development of the municipality” (South Africa, 2000).
Land development management	“The control of development that occurs after the land use has been determined” (Ahmad & Bajwa, 2005:2).
Land use management	“refers to the officially recognized system that determines and regulates the use of land” (Charlton, 2008:3)
Land use scheme (LUS)	“Must give effect to and be consistent with the municipal spatial development framework and determine the use and development of land within the municipal area to which it relates to promote economic growth, social inclusion, efficient land development and minimal impact on public health, the environment and natural resources” (South Africa, 2013:36)
Rural area	“Any area that is not classified urban. Rural areas may comprise one or more of the followings: tribal areas, commercial farms and informal settlement” (Statistics South Africa, 2012:18).
Spatial Development Framework (SDF)	“A municipal spatial development framework (SDF) must contribute to and form part of the municipal integrated development plan; and assist in integrating, coordinating, aligning and expressing development policies and plans emanating from the various sectors of the spheres of government as they apply within the municipal area” (South Africa, 2013:26)
Spatial planning	Spatial planning focusses on the coordination and alignment of different strategies and policies affecting space and geography (United Nations, 2008).
Traditional Authorities or Traditional Leadership areas	Areas under Traditional Leadership South Africa have its origins in the concept of Bantustans in the apartheid era of South Africa. A bantustan was a territory set aside for black inhabitants of South Africa for the purpose of segregating the members of different ethnic groups (Westaway, 2010).
Town Planning Scheme	The same as Land Use Scheme but required under older era legislation. (Provincial Council of Transvaal, 1986).

Urban area	“A continuously built-up area with characteristics such as type of economic activity and land use” (Statistics South Africa, 2012:20).
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Source: Own construction (2018) based on various sources (each source listed above).

CHAPTER 2: LITERATURE REVIEW

2.1 The notion of planning

Planning refers to methods and approaches that are designed to order activities in geographic space or to remedy spatial problems (Korah, et al., 2017). Often this implies institutional arrangements between the government, the marketplace and society, focusing on resource allocation and redistribution, and between current and future costs and benefits (Zhang, 2006:25; Ahmad & Bajwa, 2005). Spatial planning uses land uses as the building blocks of a city, organising and re-organising these into a rational whole (United Nations, 2008). Originally planning was more focused on urban design and the actual layout of streets (e.g. Paris – 1852, Central Park – 1856). From these beginnings, planning evolved to a science that aimed to solve various problems found in cities and towns, for example, solving the problems created by the industrial city (separating noxious land uses), or in reaction to pestilence and plague (1879 Memphis Yellow fever outbreak) (Elliot, 2007:6). From there, planning started focusing on social issues such as the plight of the people living in poverty and slums (Elliot, 2007:7).

Planning became professional (and legally enforceable) in the early 1900s through various laws and zoning codes which originated in Manhattan (the first land use regulation) (Elliot, 2007). As more and more people flocked to cities, urban problems (and therefore the scope of planning) became more intricate. The concept of planning shifted from a type of planning that addresses only a specific section (for example the legality of a land use), to comprehensive planning (Ahmad & Bajwa, 2005:5). Planning as a profession evolved from a designing art in its earlier days to a management and social science today (Zhang, 2006:12), aiming to integrate different sectoral plans into a coherent whole capable of providing direction for the growth of cities and towns. With the urban environment under considerably more pressure due to increasing urbanisation, there is now a call for planning to become more pro-active focussing on sustainability and “making the connections between people, economic opportunity and the environment” (Farmer, et al., 2006:2).

Planning is becoming increasingly more complex. The initial stages of planning focussed more on the beautification of cities (or parts of them), then progressed to trying to remedy specific

problems, planning in the modern era have to deal with ever increasing complexities (Parker & Doak, 2012). The next section will specifically focus on the planning system in South Africa.

2.2 The spatial planning system in South Africa

2.2.1 The early history of South Africa Planning

Planning, or more specifically segregation of different land uses can be traced back to the 1850's (Hendler, 2015) which led to urban areas where business was conducted, living areas for the white employers and areas where black workers squatted. This phenomenon was further exacerbated by the influx of investment into mining towns such as Kimberley, with large numbers of people migrating from rural areas in response to the demand for labour, often staying in squatter camps (Mabin, 1992). This segregation was enforced through various municipal regulations including pass law regulations, thereby establishing the basis for formal segregation in South Africa (Hendler, 2015).

The period from 1913 to 1976 saw the economic role players (i.e. the state, agriculture and mining industries) working closely together to formally separate and segregate different race groups in South Africa. In 1921 the Transvaal Government introduced the Stallard principle through which people of colour (referred to as natives) could only enter cities and towns to look after and service the needs of its white occupants and then had to depart to separate living areas thereafter (Hendler, 2015). This period also saw the establishment of various laws such as the 1913 and 1936 Land Acts, as well as the Group Areas Act of 1950, all of which enforces racial segregation (McCarthy, 1992).

The period from 1976 to 1994 saw the gradual end to the draconian apartheid controls with regards to the use of land. Faced with resistance from black South Africans as well as economic pressure in the form of sanctions, Government attempted to reform apartheid cities through measures such as upgrading of township infrastructure and removing restrictions on the residential rights of minority groups (Hendler, 2015; McCarthy, 1992).

2.2.2 South African Planning in a democratic era

Prior to 1994, South Africa had separate planning laws and ordinances for each of the four different provinces and the black homelands. After 1994, despite reforms in government structures and high-level policy (e.g. the National Development Plan), existing land use planning laws and mechanisms remained largely unchanged (South African Cities Network, 2015:10). The different types of planning (cross-reference to section 2.1) also did not receive equal attention in

legislation. The processes and requirements of land use management was set out in detail in the different provincial ordinances while spatial planning was poorly defined. The Transvaal Town-Planning and Townships Ordinance No. 15 of 1986 (for example) dedicated almost 90 pages to land use management while the requirement for Spatial Planning was reduced to one line in the Municipal Systems Act 2000. During the 1980s planning was viewed as a technical activity concerned mainly with township layout. By the 1990s planners needed new conceptual skills to operate in an increasingly complex world (Robinson & Dayaram, 2015).

To compound the problem, the earlier planning laws (which, until SPLUMA came into operation in 2015) remained in force and were designed to form part of the apartheid Scheme for a racially segregated and unequal South Africa. The main aim of these laws was the efficient control of land use and land development. These laws were quite detailed in urban areas and implemented (and monitored) by capable municipalities. Outside of urban areas (or inside some of the townships), land use legislation was more relaxed (South African Cities Network, 2012:9)

Planning in South Africa now operates within a legal framework, which strives to ensure that municipalities deliver their developmental duties in terms of Section 153 of the Constitution, which is to provide an administration, finance and planning support in order to provide services and support economic (South Africa, 1996).

In South Africa, the profession of planning is defined by the South African Council for Planners (SACPLAN) as “areas of expertise which involve the initiation and management of change in the built and natural environment across a spectrum of areas, ranging from urban to rural and delineated at different geographic scales (region, subregion, city, town village, neighbourhood) in order to further human development and environmental sustainability.” (South Africa, 2002:4).

Planning in South Africa comprises of the following distinct, yet interrelated processes (Van Wyk, 2012:245):

- **Spatial planning**, which is the compilation of an initial plan or framework for future development. Known in South Africa as Spatial Development Frameworks, this type of planning is more concerned with the future shape of cities and towns. Planning is therefore not only involved with the management of change on a daily basis, but also dealing with the development direction (the future) of a municipality (Todes & Mngadi, 2007).
- **Land use management**, which is the administration as well as the management of changes in use of land (as opposed to the use determined originally in a document such as the Town Planning Scheme). This type of planning seeks to manage the legality (or legal status) of existing land uses and buildings through tools such as zoning, codes (also

referred to as town planning schemes, zoning schemes and land use schemes in other parts of the world). Land use management originated in the early 1900s (see section 2.1) in an attempt to separate land uses from each other - mostly to mitigate the harmful effects of living close to work (e.g. a noxious industry) (Elliot, 2008).

- **Land development management**, which is concerned with the management of any development that happens once a specific land use has been decided on, (Ahmad & Bajwa, 2005:2).

Although these three dimensions of planning are interrelated, this dissertation focus on land use management and the development of land use schemes. The next section will discuss the spatial planning system and application of planning in South Africa.

SPLUMA, for the first time, defined a comprehensive spatial planning system for South Africa that considered all dimensions of planning, consisting of the following components (South Africa, 2013:14):

- “**spatial development frameworks** to be prepared and adopted by national, provincial and municipal spheres of government”;
- “**development principles**, norms and standards that must guide spatial planning, land use management and land development” these principles are listed within SPLUMA (2013:18) as spatial justice, spatial sustainability, efficiency spatial resilience, good administration;
- “the management and facilitation of land use through the mechanism of **land use schemes**; and”
- “**procedures and processes** for the preparation, submission and consideration of land development applications and related processes”.

In addition to the above components of the spatial planning system, other guiding planning frameworks are still required, such as the Integrated Development Plan (IDP) (a requirement of the Municipal Systems Act of 2000). The Municipal Systems Act No 32 of 2000 – set out the requirements for the new Councils elected after the 2011 demarcation to prepare Integrated Development Plans. The Act also provides for the annual revision/update thereof. The IDP is required in terms of the act to include a spatial development framework, which must include the provision of basic guidelines for a land use system for the Municipality. Various levels of government and different planning spheres are involved in this spatial planning system. For

example, the establishment of planning norms, standards and principles to guide planning is currently the function of the Department of Rural Development and Land Reform (South Africa, 2013), while the compilation of Spatial Development Frameworks, land use schemes and Integrated Development Plans is the responsibility of Local Municipalities (South Africa, 2013). These planning instruments will be discussed accordingly as point of departure to understand the relationship between these different planning instruments.

2.2.3 Integrated Development Planning (IDP)

The IDP is an approach to planning that brings together the administration and the people living in the Municipality to find the best long-term solution for sustainable development. (Western Cape Government, 2014). An IDP provides an overall framework for development and must guide and inform all planning and developmental decisions the municipality embarks on (Van Wyk, 2012). The IDP furthermore tries to bring together work done by different departments within the municipality as well as other government departments into a single plan to improve the quality of life for all the people living in an area (Local Government: Municipal Systems Act No. 32, 2000:36). It should consider the existing conditions and problems and resources available for development. The IDP consider economic and social development of an areas, together with establishing a broad framework of how land should be used, what level of infrastructure should be provided, and which areas of the environment should be protected.

All municipalities must produce an Integrated Development Plan (IDP) (Van Wyk, 2012; South Africa, 2000). The Municipality is responsible for the co-ordination of the IDP (normally the responsibility of an IDP officer reporting directly to the municipal manager). Significant inputs and participation are required from stakeholders and citizens. Once the IDP is drawn up all municipal planning and projects should be conducted in terms of the IDP (Africa, et al., 2000). The annual council budget should be based on the IDP (Development, education and training unit for democracy and development, n.d.). Other sectors of Government working in the Municipality should take cognisance of the IDP and should try to align their own initiatives to the IDP. The IDP has a lifespan of 5 years that is linked directly to the term of office for local councillors. After every local government election, the new council must decide on the future of the IDP (South Africa, 2000). The council can adopt the existing IDP or develop a new IDP that takes into consideration existing plans.

2.2.4 Municipal Spatial Development Framework (MSDF)

An SDF is a document that seeks to manage and influence the spatial allocation and distribution of land uses within a Municipality. This is done in order to achieve the stated vision and

development objectives of the Municipal IDP (Department of Rural Development and Land Reform, 2011). The aims of a SDF are to achieve the desired spatial form of the municipality, to promote sustainable functional and integrated human settlements, maximise resource efficiency, and enhance regional identity and unique character of a place (Van Wyk, 2012). SDF's must also outline specific arrangements for prioritising, mobilising, sequencing and implementing public and private infrastructural and land development investment in the priority spatial structuring areas identified in spatial development frameworks. SPLUMA also requires that the SDF provide an indication of the quantity and location of engineering infrastructure that will be required by the municipality not only for the future, but also to accommodate the existing needs of communities (South Africa, 2013). This corresponds strongly with current international thinking of linking engineering and infrastructure planning (Todes, 2008). A municipal SDF must also determine the purpose, desired impact and structure of the **land use scheme** (LUS) to apply in that municipal area (South Africa, 2013).

2.2.5 Land use scheme (LUS)

SPLUMA specifies that “A **land use scheme** must give effect to and be consistent with the municipal SDF and determine the use and development of land within the municipal area to which it relates to promote economic growth, social inclusion, efficient land development and minimal impact on public health, the environment and natural resources” (South Africa, 2013:36). Internationally, land use is managed through the “zoning codes”. Historically in South Africa, municipalities used the term “Town planning Schemes” (Van Wyk, 2012). In certain parts of the country, mention is made of “zoning schemes” (e.g. Northern Cape) (Van Wyk, 2012: 284). The newest South African Planning Legislation (SPLUMA) coins the phrase “land use schemes” (South Africa, 2013:34). All the different terms mentioned refers to a similar concept:

A land use scheme is a planning tool that allows or restricts certain types of land uses to certain geographic areas and therefore exercises control over the spatial utilisation of the land (Van Wyk, 2012). Typically, one can find a spatial depiction of these geographic areas (typically called “zones” or “zonings”) as well as document (often called “Scheme regulations”) that sets out all procedures and conditions associated with the use of land in any of these zones (Parker & Doak, 2012). Property rights are managed through “zoning” as indicative rights of what land use can be exercised on a property. These property rights are assigned, managed and amended through the controls and mechanisms of a **land use scheme**. Schemes may be amended in the following manner:

- Land development applications which amends the Scheme by changing the rights applicable to properties (e.g. a rezoning from residential rights to business rights). These

amendments are decided by a municipal planning tribunal or a land development officer. This tribunal cannot decide on an amendment of a land use scheme (called a development application) that is inconsistent with a municipal spatial development framework (unless site specific circumstances justify such a departure) (South Africa, 2013).

- Changes to the Scheme that affects the regulations (which sets out the procedures and conditions relating to the use and development of land) may only be authorised by the Municipal Council (South Africa, 2013).

SPLUMA, as a framework Act provides for a South Africa Spatial Planning System. It furthermore also clearly defines the planning responsibilities of different spheres of Government. The next section considers the impact of SPLUMA in terms of municipal land use management, reflecting on the three key themes highlighted in section 1.6.1, namely 2.4) boundaries within municipalities, 2.5) informality and 2.6) giving effect to policies and frameworks, in relation to SPLUMA.

2.3 Status of land use management in South Africa

Leading up to SPLUMA, land use management in South Africa has been fragmented at best, with a plethora of legislation governing different provinces and even cities (until recently. Johannesburg had more than 10 land use schemes in operation) (Charlton, 2008). Most land use schemes in South Africa is based on the single use (or Euclidean) zoning (Nel, 2016). Earlier sections in this document pointed out that these “old” systems originated with the intent to separate noxious or incompatible land uses. This type of zoning has been criticized as leading to urban sprawl and unsustainable cities (Gorgens & Denoonstevens, 2013). In addition, land use management has not been applied or enforced in the same manner in different racial areas in South Africa. Land uses management in black areas, for example, has been less vociferously enforced than in white areas (Centre for Land Use Education, 2005). It has been argued that these separate and unequal forms of land use management was in fact the result of middle class and government working together to protect property values (Gorgens & Denoonstevens, 2013).

Gorgens and Denoonstevens (2013:5) ask the question why “are there still ‘multiple and unequal systems of urban land management’ in South Africa more than fifteen years into democracy, especially in the light of various political and policy pronouncements over the years”. Nel (2016) argues that zoning in its current form (while still a requirement of SPLUMA) would need to change to be applicable in South Africa. This could potentially be ascribed to the fact that zoning in its current form is impractical to implement in a developing world such as South. (United Nations, 2009) Zoning, in its traditional form, is neither desirable nor apposite in South Africa. Section 2.6.1 investigates alternative forms of zoning.

2.4 The concept of boundaries and the implications of SPLUMA

Boundaries have always been a part of civilisation. Political boundaries divide countries, provinces municipalities, cities etc. (National Geographic Society, n.d.) Maps and boundaries demarcated territory, and wars have been fought over these boundaries. A boundary's primary function is to demarcate areas and to manage the exchange between these areas (Richter and Peitgen, 1985:572) and different land-uses. From a South African planning perspective, boundaries are important as it separates different provinces and municipalities.

The Constitution of South Africa (Constitution of the Republic of South Africa No. 108 of 1996, 1996:44) demarcated three sets of boundaries for South Africa, namely:

- National Government with its authority vested in Parliament;
- Provincial Government with its authority vested in Provincial Legislatures; and
- Local Government with its authority vested in Municipal Councils.

Within Local Government Boundaries, different settlement types can occur. StatsSA, the national custodian of South African Statistics, differentiates between three basic settlement types or land uses, referring to urban areas, rural areas and tribal areas, as explained in Table 2.1:

Table 2.1: South African settlement types

Urban area	"A continuously built-up area with characteristics such as type of economic activity and land use. Cities, towns, townships, suburbs, etc. are typical urban areas. An urban area is one which was proclaimed as such (i.e. in an urban Municipality under the old demarcation) or classified as such during census demarcation by the Geography department of Stats SA, based on their observation of the aerial photographs or on other information" (Statistics South Africa, 2012: 20).
Rural area	"Any area that is not classified urban. Rural areas may comprise one or more of the followings: tribal areas, commercial farms and informal settlement" (Statistics South Africa, 2012: 18).
Tribal area	"The appearance and organisation of villages in tribal areas varies in different parts of the country. Tribal settlements are found in areas that are legally proclaimed to be under tribal authorities" (Statistics South Africa, 2012: 20).

Source: Statistics South Africa (2012)

Boundaries played an intrinsic role in managing land uses within these settlement types and allocated jurisdiction, especially following 1994, where the focus of spatial planning shifted towards the integration of spatially distorted urban forms, in attempt to alleviate poverty through better economic growth, and environmentally sustainable development (Horn, 2009:55). The enactment of SPLUMA redefined the application of boundaries within the local context as SPLUMA (2013:34) stated that a Municipality must, after necessary public participation adopt and approve a single land use scheme for its entire area within five years from 2015 (the commencement of the Act). This implied that a land use scheme should now apply to a municipal boundary, not to a province or a region; and that such a land use scheme must apply to the entirety of the Municipality.

SPLUMA differ from older spatial planning legislation (Town Planning and Townships Ordinance no. 15 of 1986) by making the compilation of a Scheme compulsory (as opposed to the optionality thereof in previous legislation), while also stipulating that the Scheme should apply to the entire area of jurisdiction, in contrast to previous legislation where it only applied to certain areas of a Municipality (see table below).

Table 2.2: Comparison between 1986 and 2013 Town Planning Legislation

Town-Planning and Townships Ordinance No. 15 of 1986	Spatial Planning and Land Use Management Act No. 16 of 2013
<p>“A local authority may of its own accord or shall if directed to do so by the Administrator, prepare a town-planning Scheme in respect of all or any land situated within its area of jurisdiction.” (Provincial Council of Transvaal, 1986:9).</p>	<p>“A Municipality must, after necessary public participation adopt and approve a single land use scheme for its entire area within five years” (South Africa, 2013:34)</p>

Source: Own construction (2018)

While spatial development frameworks can be compiled on various scales (National, Provincial, Regional and Municipal), the function of land use management, through the instrument of a land use scheme is a legislative requirement assigned to Municipalities. Boundaries changed along with jurisdiction, and had various land-use implications, as evident from the following figure illustrating the revised boundaries in the same Municipality, named Potgietersrus TLC in 1996 (refer to red line) and renamed Mogalakwena Local Municipality in 2001 (refer to blue line).

arcmmap

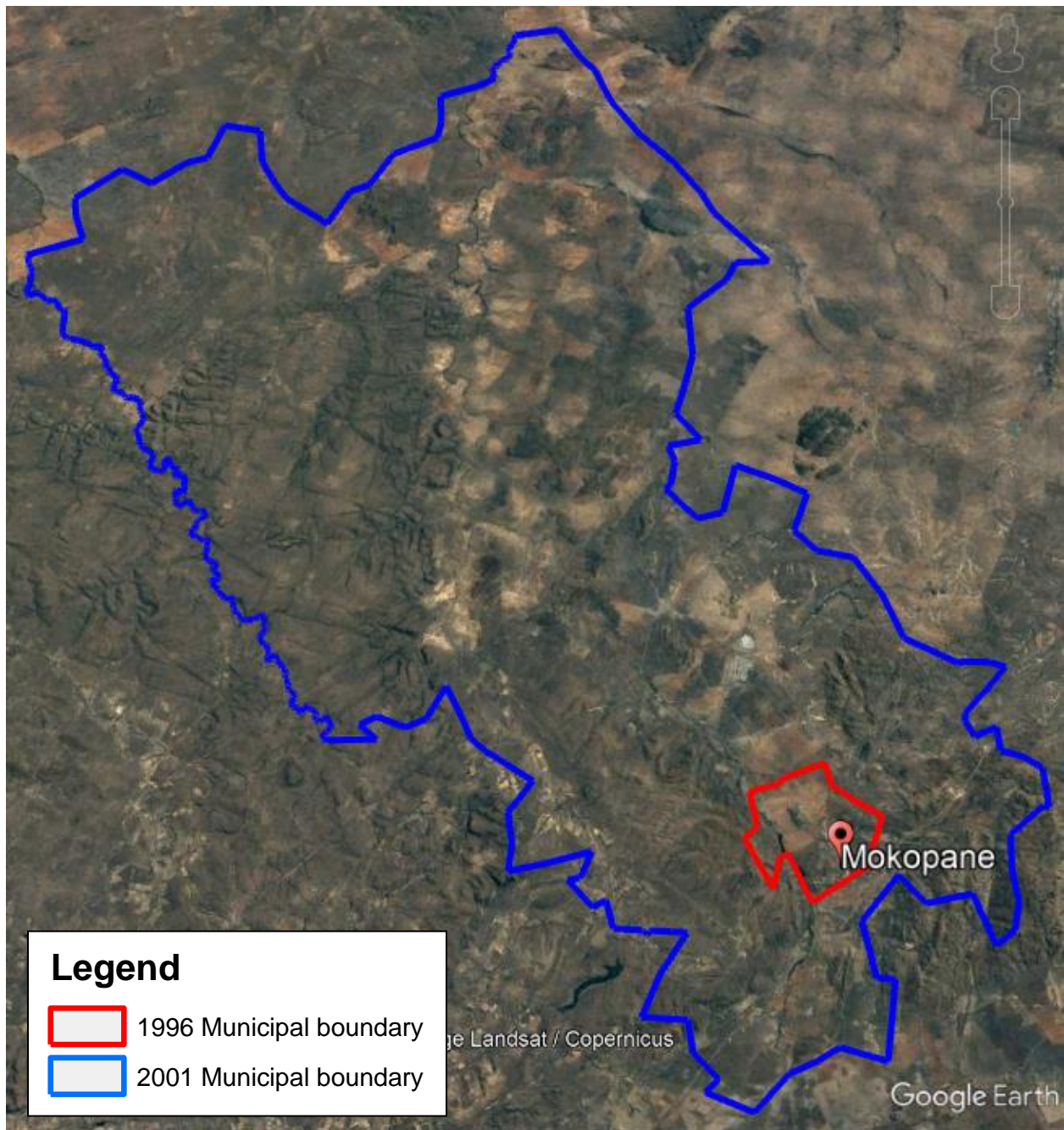


Figure 2.1: 1996 vs 2001 Municipal Demarcation

Source: Own construction using Google Earth (2018).

The obvious difference between the two areas of jurisdiction is the extent of the geographic area covered 12 246 hectares in 1996, versus the 616 630 hectares in 2001. Therefore, while the two different pieces of legislation (both the old and the new) imply that a land use scheme need to cover the Municipality, the municipal re-demarcation of 2011 created wall-to-wall municipalities, that implied much bigger areas of jurisdiction. This had the following implications for land use schemes:

- The old “town planning” schemes covered (at best) the extent of the smaller 1996 boundaries and therefore, do by no means covered the bigger extent of the wall-to-wall Municipality.
- The old “town planning” schemes (due to the much narrower earlier demarcation) focussed primarily on urban land uses and neglected rural areas from a spatial perspective.

In terms of the land-uses differentiated by StatsSA, Mogalakwena Local Municipality in Limpopo, would have comprised of urban, tribal and farm (rural) land, as illustrated in the following figure.

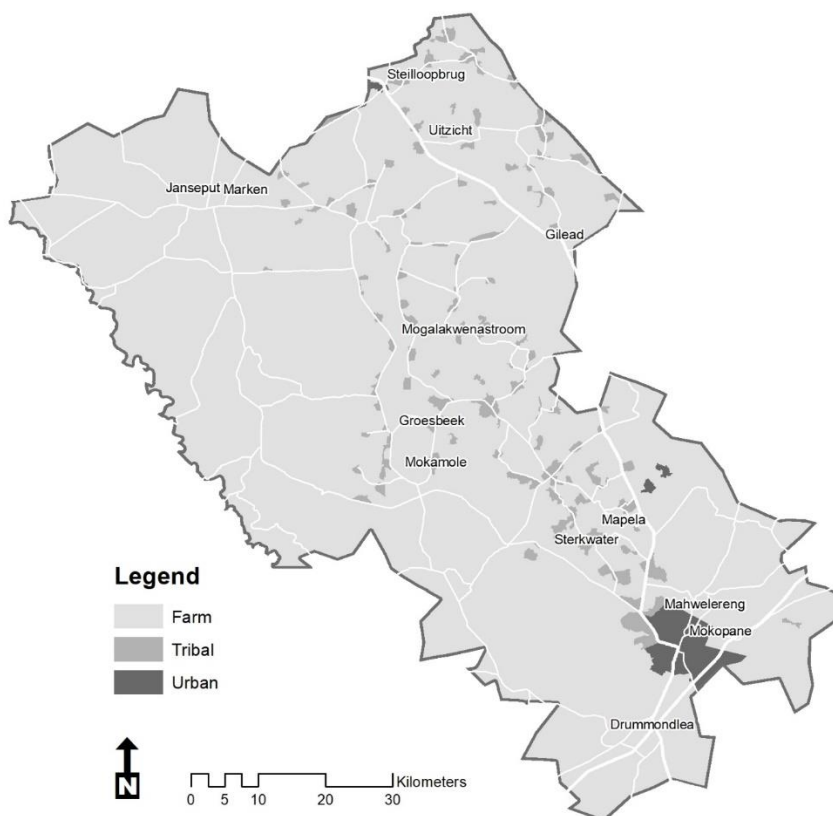


Figure 2.2: Settlement types - Mogalakwena Local Municipality

Source: Own construction using data available from Statistics South Africa and the Demarcation Board of South Africa (2018)

The Mogalakwena Local Municipality case study visually illustrates how boundaries have changed after the re-demarcation process of 2001. The ‘urban’ area of Figure 2.2 corresponding with the demarcated area in Figure 2.1 according to old legislation, and thus the only area subjected to a land use scheme. Prior to the SPLUMA requirement of a “Single land use scheme”

for the municipal area, only 29% of households and only 2% of land area was in fact subject to land use management in the form of a Town Planning Scheme. Land uses that were typically excluded from older Schemes related to those in the rural spaces of municipalities include mining, agriculture and forestry, conservation areas, environmentally sensitive areas and Traditional Authorities. Table 2.3 below contextualises the data employed in the creation of Figure 2.2 and percentage of land-uses that was excluded prior to SPLUMA.

Table 2.3: Urban and rural areas in Mogalakwena Local Municipality

Urban / Rural	Settlement Type	Households		Area	
		Total Households	% of Total	Total Hectare	% of Total
Rural	Farm	2 076	3%	583 388	95%
	Tribal	54 366	68%	23 656	4%
Urban	Urban	22 957	29%	9 586	2%
Grand Total		79 399	100%	616 630	100%

Source: (Statistics South Africa, 2016)

2.5 Informality in context of SPLUMA

SPLUMA (South Africa, 2013:36) specifically called for informality to be addressed in land use schemes by requiring the “incremental” introduction of land use management in Traditional authorities and informal settlements or slums. The act now requires that “land use management systems must include all areas of a Municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, *informal settlements* and *former homeland areas*” (South Africa, 2013:18).

Until recently, the typical approach (as far as the land use management was concerned) to deal with informal settlements, was to keep them as informal settlement until such a time as the can be formalised (Silva & Farrall, 2016). Often this was not due to any negligence of the planning department of the Municipality but rather a view that informal settlements are “temporary” in nature and because informality was not comprehensively defined in planning policies and frameworks. On the other hand, some authors suggest that informal settlers fear that the process of formalisation will in fact negate many of the “advantages” of living in an informal settlement, such as cheap and easy access to cities and employment, greater level of choice and independence (Marx & Royston, 2007). Unfortunately, while the immediate needs of informal dwellers are met (basic shelter etc.), their exclusion from formal planning frameworks further enhances their unequal status as citizens of a municipality (Gorgens & Denoonstevens, 2013).

The Housing Development Agency (“HDA”) highlighted the fact that most definitions of informal settlements referred to the characteristics of a temporary dwelling type as well as the ownership of the land on which these structures were built (The Housing Development Agency, 2013). Table 2.4 below captures some of these definitions:

Table 2.4: Defining informal settlements

Source	Definition of Informal Settlement
Statistics South Africa	“An unplanned settlement on land which has not been surveyed or proclaimed as residential, consisting mainly of informal dwellings (shacks)”. Informal dwellings are defined as “a makeshift structure not approved by a local authority and not intended as a permanent dwelling” (Statistics South Africa, 2012:14).
Department of Human Settlements	The Housing Code highlights the fact that informal settles typically lack legal recognition due the unlawful occupation and/or illegal construction of houses upon land. These settlements are also typified by the absence of formal planning (Department of Human Settlements, 2009:26)
City of Johannesburg Metropolitan Municipality	An informal settlement comprises “an impoverished group of households who have illegally or without authority taken occupation of a parcel of land (with the land owned by the Council in the majority of cases) and who have created a shanty town of impoverished illegal residential structures built mostly from scrap material without provision made for essential services and which may or may not have a layout that is more or less formal in nature.”

Source: Own construction based on various sources listed above (2018)

The overall interpretation was that informal settlements are considered an entry point into the city, a result of people migrating to cities mainly for employment and providing the migrant with a relative affordable, albeit temporary form of accommodation (Misselhorn & Zack, 2012:7). In this regard the specific planning approaches to dealing with informal settlements included either in-situ upgrading or (in exceptional circumstances) re-location of the settlement to a greenfields type of development (Department of Human Settlements, 2009:9). In order to provide security of tenure to informal dwellers, land would then be surveyed and registered through the process of some form of township establishment (in line with planning legislation). In both instances each

registered property would be allocated a zoning and therefore be part of the town planning Scheme (or land use scheme of the Municipality).

Both from the definition of informal settlements, as well as the existing planning approaches, it is evident that an informal settlement is seen as temporary and will therefore only be subject to land use management once it has been formalised. This could be problematic in light of the timely process linked to formalisation. To substantiate such, the figures below depict the Angelo informal settlement (City of Ekurhuleni) in 2002 and 2017. This time series satellite imagery clearly show that the settlement was already established in 2002 and that nothing has changed 15 years later, suggesting that while informal settlements are viewed as “temporary”, it may be decades before these settlements are formalised and included in the formal land use management system.

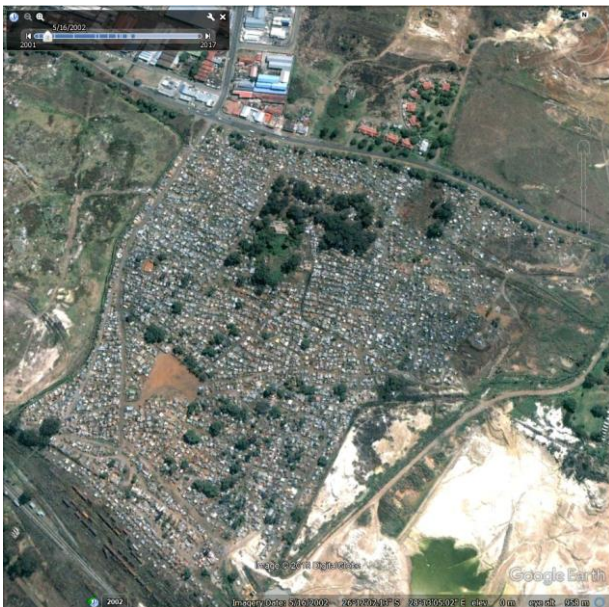


Figure 2.3: Angelo settlement 2002

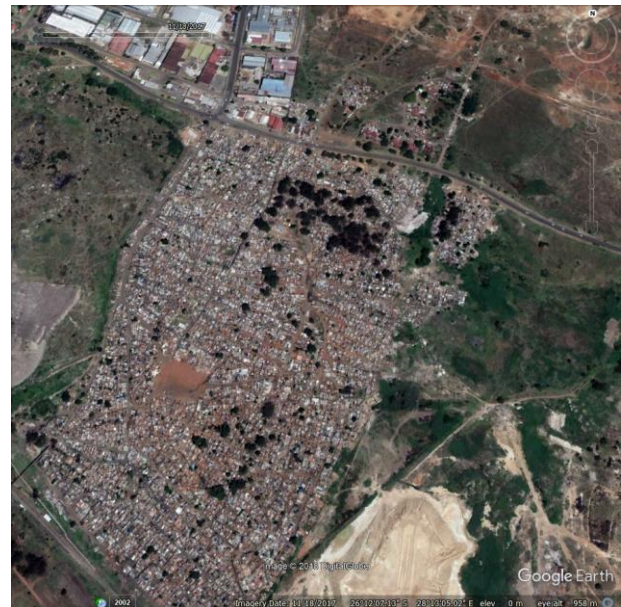


Figure 2.4: Angelo settlement 2017

Source: Google Earth (2018)

São Paulo in Brazil provides an interesting solution on introducing land use management practices in informal settlements (known as favelas or slums in Brazil) (Brown, 2015). Almost a third of the cities' population reside in informal settlements. Historically, Brazils' approach to dealing with informal settlements was to “eradicate” these areas by bulldozing these areas. This policy has progressed radically from the 1960s to a policy of recognising informal settlements and including these areas in to a legal framework (Brown, 2015) . One of the most useful tools is letting cities create "zones of special interest" for disorganized slums, formally recognising their existence and qualifying them for social services (Bueno & Sedeh, 2011). An alternative approach followed in the Brazilian city of Recife included providing informal residents security of tenure by recognising the communities' claim to the land (without providing title deed however) (Gardner,

2011). These settlements were included into the land use scheme of the city by limiting the height of any building to two storeys and the maximum size of a property to 150m² (Gardner, 2011).

SPLUMA recognizes the fact that informal settlements and traditional authorities (discussed later) in this chapter have in the past not been adequately integrated formal systems of urban planning and land use schemes (South Africa, 2013:3) and suggests as remedy that these areas be “incrementally incorporated into land use schemes (South Africa, 2013:36). Such novel approaches should also be considered in the local South African context to include informality within the new SPLUMA reality. This is especially important in terms of traditional leadership areas, as explained accordingly.

2.5.1 Traditional leadership areas in context of SPLUMA

Areas under Traditional leadership in South Africa have its origins in the concept of “Bantustans” in the apartheid era of South Africa (Khunou, 2010). A “bantustan” was a territory set aside for black inhabitants of South Africa for the purpose of segregating the “members of designated ethnic groups”, therefore reducing different ethnic groups to geographic areas that exhibit the same characteristics (Westaway, 2010). Recent data from Statistics South Africa illustrate the significance of this form of settlement type (refer to the table below) with approximately 11% of South Africa’s land area (around 140 000km²) currently accommodates approximately 27% of all households in South Africa

Table 2.5: Traditional Council areas in South Africa

Province	Traditional Area (km ²)	Total Area (km ²)	% Area	Households in Traditional areas	Total House Holds	% Traditional Households
Eastern Cape	38 819	169 311	23.0%	771 983	1 686 635	46.0%
Free State	1 318	130 012	1.0%	73 912	823 155	9.0%
Gauteng	41	18 182	0.0%	38 485	3 908 771	1.0%
KwaZulu Natal	32 536	94 467	34.0%	951 067	2 539 218	37.0%
Limpopo	32 602	130 171	25.0%	1 055 043	1 417 717	74.0%
Mpumalanga	6 542	76 584	9.0%	490 911	1 075 276	46.0%
North West	18 806	106 502	18.0%	477 129	1 061 869	45.0%
Northern Cape	9 847	378 355	3.0%	51 438	301 261	17.0%
Western Cape	-	131 522	0.0%	-	1 633 860	-
Total	140 511	1 235 106	11.0%	3 909 968	14 447 762	27.0%

Source: Own construction using information available from Statistics South Africa (2018)

In tribal or Traditional areas, land does not belong to individuals but to the “tribe” or “community” as a whole, in other words a group of people bound together through shared rules and beliefs (Anim & Van Schalkwyk, 1996).

Even though 27% of households reside in Traditional authority areas, these areas have been excluded from formal land use management practises. The role of Traditional authorities is spelled out in the Communal Land Rights Act, 2004. This Act deals mainly with land rights by providing for the transfer of communal land to communities (South Africa, 2004). Section 19 (2) of the Act does make provision for some form of management in the sense that community rules should determine the administration and use of communal land within the framework of law governing spatial planning and local government. It can therefore be said that while some form of land use management is taking place through community rules in Traditional Authorities, there are, however, many questions regarding the role that Traditional leaders and communities should play within the framework of land use schemes provided for by SPLUMA (Bikam & Chakwizira, 2014). Traditional authority areas have unique characteristics which impacts on land use management, as described below.

2.5.1.1 Traditional areas are not homogenous

In trying to manage land uses, there is tendency to approach land uses as homogenous. For example, an industrial type land use (although the definition may vary slightly) would be handled in a similar manner in Gauteng and the Western Cape. A Traditional area is not a land use, but rather a collection of land uses practised in a specific setting. Some of these land uses may be similar in nature to that practised in urban areas, but other may differ enormously, or may in fact be unique to Traditional Areas. It is important to realise that the spatial form and function of Traditional Areas differ and accommodate such differences in planning approaches.

In North West, Limpopo and Mpumalanga, Traditional villages are arranged in a similar fashion from a spatial perspective (refer to Figure 2.5). Most of the land is flat and the homesteads are organised in a grid pattern (which includes a garden). Each plot or stand contains a fence around it made of various materials (can include wire or brick but also natural plants such as reeds). It is typical to find more than one house per stand. Each stand normally also keep livestock on the property (hence the need for a fence).

In KwaZulu-Natal, Traditional villages look totally different (refer to Figure 2.5). This may be due to the very hilly landscape. A dwelling unit could consist of more than one hut built close together with a ‘kraal’ in the centre of the cluster for the cattle to be kept at night. Occasionally (but not necessarily), the houses are close together to form a village. On the other hand, there could be

homesteads spread out all over the Traditional Area. Each homestead will be surrounded by agricultural activities such as grazing as well as a patch of cultivated land.

In the Eastern Cape (former Transkei and Ciskei), a dwelling unit could consist of more than one hut built close together with a 'kraal' in the centre of the cluster for the cattle to be kept at night. Houses are usually close together to form a very distinct village with communal land stretching to the edge of the administrative area.

The figure below illustrates the difference in built form within Traditional villages in these four provinces.

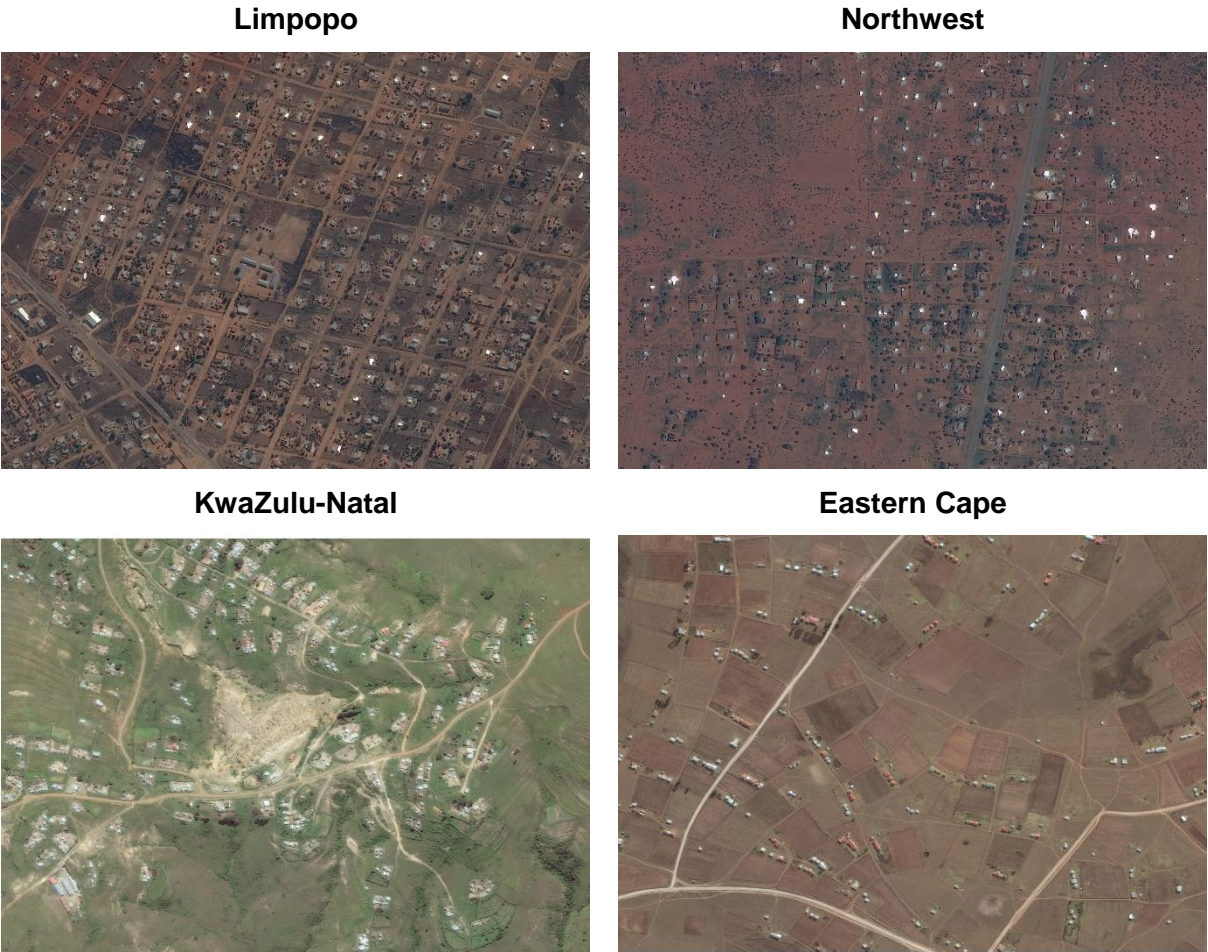


Figure 2.5: Built form of Traditional villages across South Africa

Source: Google Earth (2018)

2.5.1.2 Surveyed land with title

The typical Town Planning Schemes allocated a zoning to a surveyed portion of land registered to an owner. In most instances a single land use is exercised on the property. In the case where

more than land use is found, a “split zoning” or “special” zoning dictates which land uses may be exercised on such property. Zoning and development controls applicable to the erf, lot, holding or farm portion, are included in the Scheme. Tribal villages are in most cases, either located on farm portions or in some instances on land that has not surveyed) (Nel, 2016:4). Individual inhabitants also do not have title to the land (Ainslie & Kepe, 2016), thereby not conforming to the approach followed in typical Town Planning Schemes which allocate a zoning to a surveyed, registered land parcel. Figure 2.6 is an example of how traditional areas boundaries can differ from farm portions.

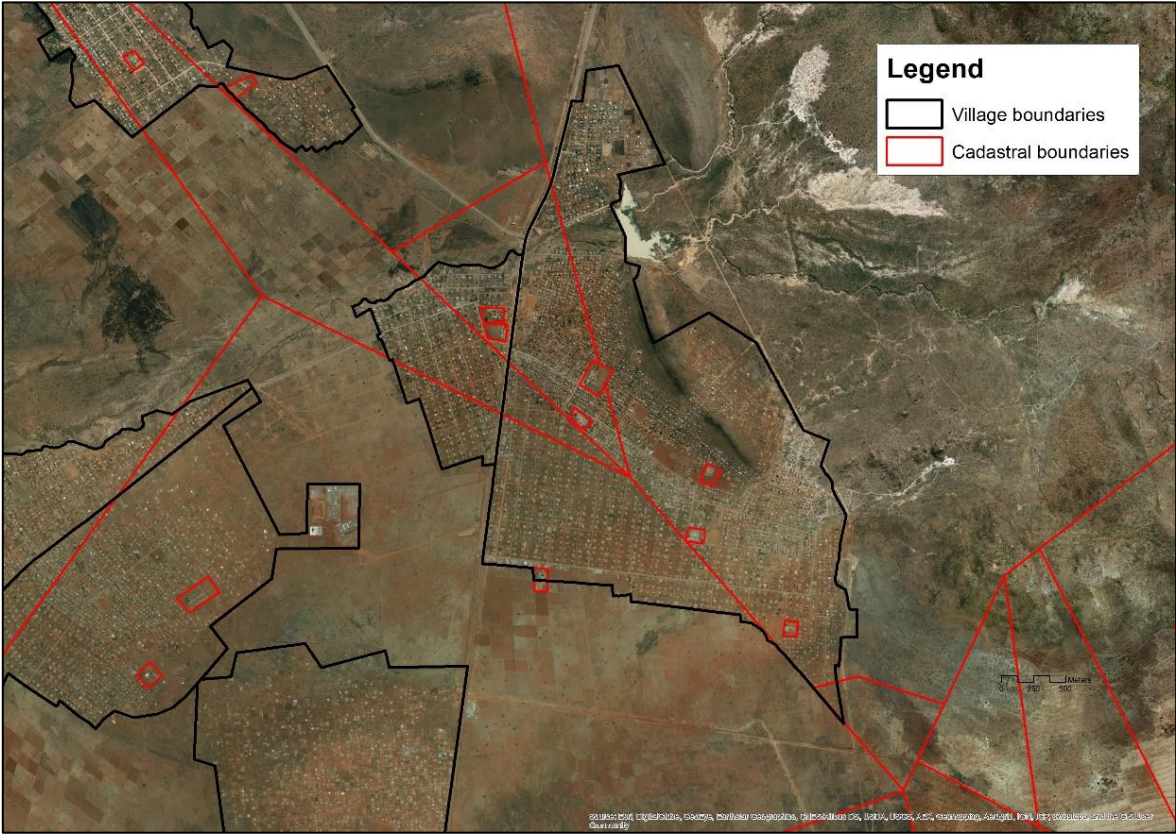


Figure 2.6: Traditional Village Located on Farm Portions

Source: Own construction using spatial data from the Surveyor General and Google Earth imagery (2018).

2.5.1.3 Traditional leadership allocates land

Although the land in a Traditional village is communally owned, the use of that land is not necessarily decided by and individual or the community. Land is managed by the chief, on behalf of the community, and allocated to heads of household by a hierarchy of Traditional leaders (Bikam & Chakwizira, 2014). The normal process of obtaining permission to use land in Traditional townships in Kwazulu-Natal involves the following (KwaZulu-Natal Planning and Development Commission, 2010):

- The Induna (a tribal councillor or headman), Amakhosi (tribal leader); or the Ingonyama Trust Board is approached by the supplicant seeking permission for a specific use;
- In some instances, the Amakhosi takes a decision, whilst in other instances the Induna facilitates dialogue with the Traditional leadership and affected neighbours before a decision is made;
- The applicant must then pay a fee to the Tribal Chief at the tribal office. The office issues a letter of approval to the applicant.
- Note that the above applies to local inhabitants only. Should an “outsider” apply, the process is more elaborate.
- Another important note is that in the case of the Ingonyama Trust, no decision is taken without the involvement of the Municipality.

The issue with regards to land use management in Traditional areas is not necessarily that the allocation is done by the Traditional leadership, but that is done outside of the planning instruments such as the SDF or the land use scheme. As a result, undesirable land uses occur, for example a tavern located near a school. In some instances, the right of a person to exercise a land use is recorded through the Permission to Occupy (or PTO) system. A PTO is a permit for occupation of unregistered state or trust communal land for a specific purpose, for either residential or arable purposes. Unlike freehold title it is a land right attached to the person, not the parcel of land. The PTO is issued to a head of household, it is free, issued for life, and is not transferable, inheritable, or usable for financial security. Although official regulations, in the form of land use schemes and conditions set out in the PTOs, have been in place to act as a hindrance to renting of properties as well as commercial/business use, these were mostly ignored. The land managers, originally the state and the Indunas and later the local councillors, were also lax in the enforcement of the rules, and most households used their properties as they deemed fit (Rubin & Royston, 2008). The following two figures provides a generic process for land use applications (both for residential and business sites) in Traditional areas (note that these may differ for different provinces).

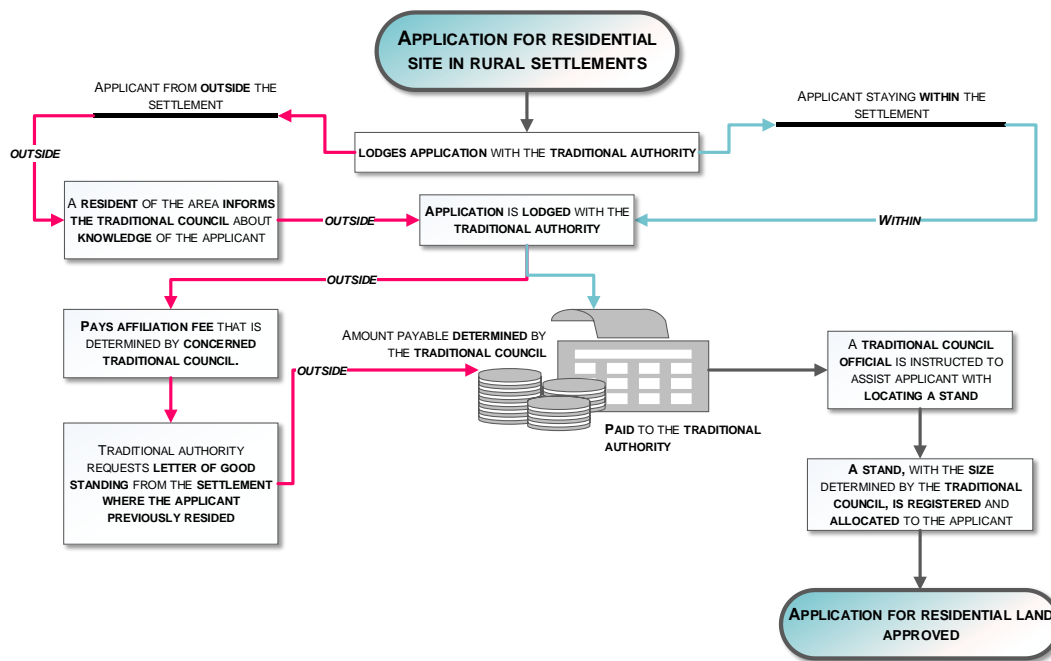


Figure 2.7: Application for residential site in Traditional Village

Source: Own construction based on unstructured interviews with Traditional Leader and headmen in Shongoane Village (Lephalale) (9 September 2017).

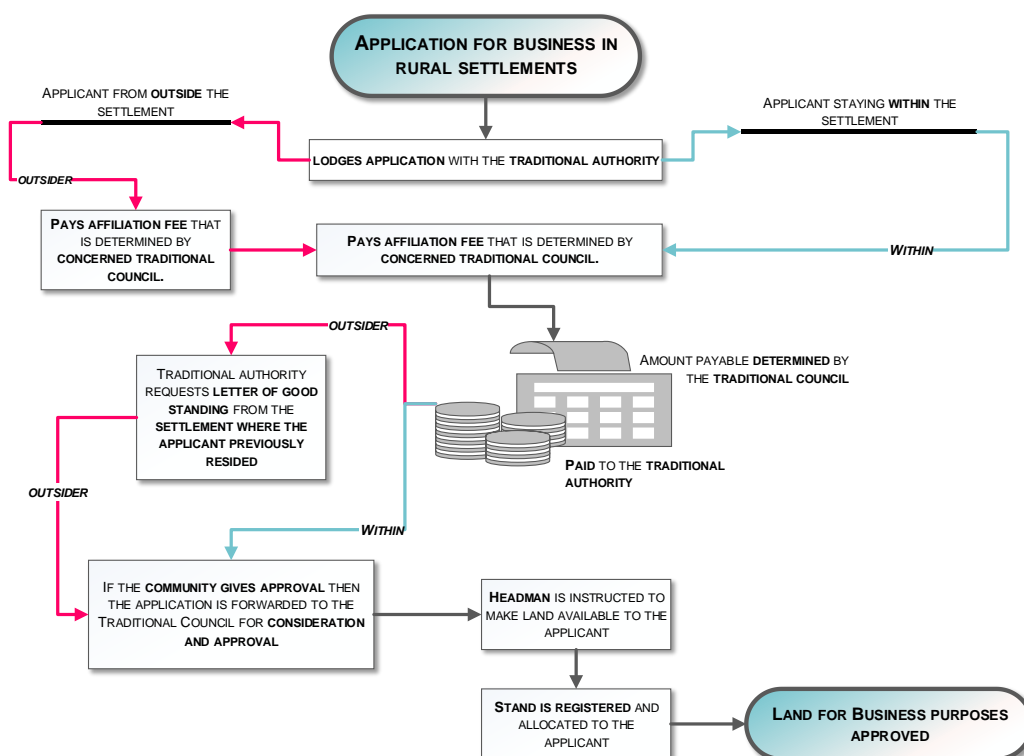


Figure 2.8: Application for business site in Traditional Village

Source: Own construction based on unstructured interviews with Traditional Leader and headmen in Shongoane Village (Lephalale) (9 September 2017).

2.5.1.4 Land uses in Traditional Areas differ from those in formal suburbs

With the recent emphasis on wall-to-wall land use schemes, land use practitioners are tempted to either directly apply existing land use schemes to its entire area of jurisdiction, or to formulate a one-size fits all approach to land use management. The question remains as to what land use management Scheme and systems will be suitable for the management of land in rural and Traditional areas. The correlation between urban and rural or Traditional areas cannot be captured in a single definition which will be suitable to all areas. In other words, duplicating an urban land use definition or classification for a land use scheme in a rural or Traditional area will lead to misguided and ineffective land management (Dubazane & Nel, 2016:230).

For example, in Traditional areas, the term “residential” include activities such as Traditional slaughter of animals (KwaZulu-Natal Planning and Development Commission, 2010) (refer to Figure 2.9) or night rituals by religious groups. In urban areas, such activities will never be allowed within any residential zoning. One of the major problems therefore facing land use management by municipalities in Traditional areas remains the limited knowledge of the specific indigenous activities and the way these activities can be defined by municipalities. The new SPLUMA reality thus calls for land use surveys specifically focused on rural and Traditional areas, as well as surveying land that has never been surveyed before.



Figure 2.9: Ritual slaughter of a cow on a residential stand - Shongoane, Lephalale
Source: Own creation (2018)

2.6 Giving effect to policies and frameworks

Six years after the 1994 elections saw the formal introduction of Spatial Development Frameworks to the planning toolbox of Municipal Planners (Van Wyk, 2012) (prior to 1994, this form of planning was referred to as “master planning”). Todes (2008:1) states that the SDF was a reaction to earlier forms of planning. While there are many criticisms against SDF’s (Todes, 2008), this study focused only on the ability of the land use scheme to give effect to the SDF. Charlton (2008:10) stated that land use management practises in South Africa remained “untransformed” and that land use schemes were not aligned with strategic planning approaches included in the SDFs, referring to such as “a significant gap between strategic visions and conditions on the ground”. The linkage between SDF’s and land use schemes was, in the past, a difficult task, and the time frames of the two instruments also varied dramatically in the past. SDFs were reviewed every 5 years, while land use schemes which was promulgated, were rarely reviewed. The Scheme was “amended” through development applications (such as rezoning’s, consent uses, departures etc., but that only affected individual properties and property rights.

SPLUMA, for the first time, linked the content and time frames of a municipal Spatial Development Framework and a Municipal land use scheme by requiring that a SDF:

- determined the purpose, desired impact and structure of the Land Use Management Scheme to apply in that municipal area; and
- included an implementation plan that includes (among other) necessary amendments to a land use scheme.

The first example of how the SDF and the land use scheme was linked in South African planning approaches, came from the KZN LUMS Guidelines (Department Cooperative Governance and Traditional Affairs Province of Kwazulu-Natal, 2011:12). The guidelines proposed a linking document which include a map or spatial depiction of the municipality that indicates (among other):

- Geographic areas where a more relaxed or flexible land use policy should be in place;
- Areas where more rigid regulation should be composed;
- Areas that require detail plans;
- Environmentally sensitive areas or areas exhibiting high agricultural potential;
- A dictionary of land use zones to be used in the Municipality;
- Appropriate quantification of broader SDF proposals

- The detailing of principles suggested in the SDF to guide the preparation of the Scheme and decision-making on applications for land use change.

The approach described above introduces a non-statutory document referred to as a Land Use Management Framework to link the SDF and the LUS (Gorgens & Denoonstevens, 2013). This framework acts as a guide for the future location of different land uses and identification of areas that are experiencing development pressure and requires detailed level of controls.

A local example of overcoming this can be found in the Govan Mbeki land use scheme (Govan Mbeki Local Municipality, 2010). Whereas typical land use schemes divided the Municipal area into zones (each zone indicating the existing land use rights on a property) the Govan Mbeki Scheme used a database to record existing land use rights. The actual zones on the scheme map is in fact a depiction of the desirable future development of the area, a refinement of the SDF proposals.

The misalignment between typical land use schemes and SDFs was also partly inflated by the predominant use of “single-use” zonings in South African Schemes. This type of zoning (also referred to as Euclidean), refers to a zoning where every day uses were separated from each other and where land uses of the same type were grouped together (Elliot, 2008). Single use zoning attracted much criticism as the main cause of urban sprawl and associated costs such as loss of farm land and segregation of the population (Hall, 2006). SPLUMA calls for alignment between the SDF and the LUS, the next section explores possible alternative types of zoning that could be used to achieve this alignment.

2.6.1 Alternative forms of zoning

Various SDFs and planning instruments now propose mixed use development, where single-use zonings cannot be employed effectively (Hall, 2006). Alternative forms of zoning could be considered in light of the new SPLUMA requirements and international accepted practices could be considered, in this regard, including amongst others:

- **Performance zoning** or "effects-based planning" where certain criteria are imposed in order to establish parameters that can be used to evaluate developmental projects (Nashua Regional Planning Commission, 2011). This type of zoning is more concerned with the effects of the use than the actual land use itself (Nel, 2016). Performance zoning establishes specific standards and other criteria for determining the appropriate uses and site design requirements (Chester County Planning Commission, 2018). These criteria ensure the compatibility of land uses and ensures that certain land uses will not have an adverse effect on others. In its purest form, performance zoning may allow all possible

uses and establish a uniform system of performance standards throughout a city. For example, a property owner in a Municipality would have the right to develop a property up to a specific trip-generation standard, whilst the adjoining property owner may have the right not to be subjected to noise above a certain level (Nashua Regional Planning Commission, 2011). Performance zoning is intended to provide flexibility, rationality, transparency and accountability. A major disadvantage of this type of zoning is that it may be difficult to administer (Goldstein, 2004:8) and enforce the specific standards.

- **Incentive zoning** rewards development that meets certain goals established by the Municipality. Typically, this type of zoning establishes a basic set of development constraints (e.g. a certain density or height), and then rewards developers by relaxing the constraints should a specific goal be achieved. (City of Seattle, 2015). Incentive zoning allows a high degree of flexibility but can be difficult to administer. This form of zoning provides for give and take compromises on zoning restrictions, allowing for more flexibility to provide environmental protection (Cook, 2011). Incentive zoning allows a developer to exceed a land use scheme's limitation if the developer agrees to fulfil conditions specified in the zoning Scheme. For example, should a developer achieve a specific development goal of the municipality (e.g. to introduce integrated rainwater harvesting in all buildings), he could be rewarded by allowing him to build a 6 story building (instead of 5 storeys).
- **Inclusionary zoning** is an effective tool that can be used by municipalities to ensure adequate affordable housing (Australian Housing and Urban Research Institute, 2017) is included in the normal course of housing development. This may very well take the form of "Inclusionary Housing" where every commercial development includes housing developments that are not directed at low income earners, spends some minimum percentage of project value on the construction of affordable housing (Armstrong et al., 2008). In practice, an inclusionary zoning may include some flexibility to its mandatory provisions. For example, bylaws may only apply to certain types of development, such as new construction or substantial expansion of building footprint. Inclusionary zoning bylaws may include "in-lieu-of" payment or construction alternatives providing developers the option of paying a fee per unit, building affordable units off-site, or rehabilitating units elsewhere in place of constructing affordable units within the proposed development.
- **Form-based zoning** offers considerably more flexibility in building uses than do single-use zoning. Form-based zoning does not regulate the type of land use, but rather the form that that land use may take (Chicago Metropolitan Agency for Planning, 2013). For instance, form-based zoning in a dense area may insist on high density and pedestrian accessibility. This type of zoning was developed in response to conventional zoning's

inability to define and create character as well as mixed use communities. Form-based zoning divides a city into districts where regulations vary by physical design characteristics, rather than by use (Duany, et al., 2010). This type of zoning is particularly effective for the redevelopment of urban communities such as Central Business Districts where typical land use management systems hamper these regeneration strategies. It directly addresses design and gives property owners flexibility in how to best use their property (Walters & Read, 2014). It is, however, unfamiliar to administrations used to single-use zoning and can be complex to administer.

- **Modified conventional zoning** combines basic use and other development controls with overlay zones or floating zones that supplement the basic regulations. This form of zoning revises the basic zoning regulations by using special districts or geographic areas such as planned development districts, mixed use districts and introduce a specific set of regulation for that district that aims to meet specific objectives (Centre for Land Use Education, 2005). Its major advantages lie in the fact that it is familiar to land use practitioners, but it can still be more effective than Traditional or conventional zoning. A major disadvantage can be that all the additional requirements may in fact protract the development application process.
- **Simplified zoning system.** Nel (2016:11) argues for a simple zoning system similar t the Prussian or French system which have one a limited number of zones (including mixed zones). Only activities or uses that are deemed to be noxious (or nuisance) and not compatible with other uses are excluded. She furthermore suggests a differentiated level of control, arguing that small towns may for example have a single “urban” zoning that permits most activities normally associated with a small town.

These alternative zonings could be considered in Schemes to give effect to policies and frameworks within the new SPLUMA reality.

2.7 Conclusion

Prior to SPLUMA, different pieces of legislation required various planning tools for different levels of Government. SPLUMA, for the first time provided a national spatial planning system applicable to the entire country and legislated uniform planning instruments and planning authorities. The SPLUMA requirement that a land use scheme must apply to the entirety of the Municipality implies that all land (and land uses) in South Africa should be subject to a land use scheme. This includes land uses that previously were not necessarily subjected to a land use scheme such as

agriculture, mining, conservation areas etc. New geographic areas to be covered also include Traditional authority areas (inclusive of all the land uses inside these areas).

Almost 13% of all South African households live in informal settlements (Statistics South Africa, 2016). In addition, 27% of households reside in Traditional Authority Areas. With literature indicating that these areas have never been subject to a Municipal land use scheme (Nel, 2016) it implies that that 40% of all households in South Africa are currently excluded from land use schemes. With SPLUMA specifically stating that these areas must be included in a wall-to-wall Scheme, Municipalities will have to ensure that both informal settlements and Traditional Authority areas are included in a land use scheme by the year 2020. Or risk not complying with the Act.

Although both the SDF and the land use schemes have been used as planning instruments for decades, in many instances these two instruments are seen as separate entities. SPLUMA requires the land use scheme to be consistent to and give effect to the Spatial Development framework of the Municipality. South African land use management instruments mostly use single-use zoning to manage property rights. This type of zoning (by default) separates land uses. With mixed use development and higher density increasingly becoming necessary planning concepts used in the SDF, Municipalities will have to consider using alternative approaches to zoning in order to achieve alignment between the land use scheme and the Spatial Development Framework.

The following chapter will conduct an empirical analysis of existing Municipal land use schemes.

CHAPTER 3: EMPIRICAL RESULTS ANALYSIS

3.1 Introduction

The previous chapter highlighted the new spatial planning system of South Africa which includes land use schemes as in instrument to manage land uses within a Municipality. This chapter will expand on the new requirements (introduced by SPLUMA) for land use schemes. The chapter will furthermore analyse several purposefully selected land use schemes in order to assess the extent to which these existing schemes comply with the requirements of SPLUMA.

3.2 Methodology

The empirical investigation was based on a critical analysis of SPLUMA requirements (refer to section 3.3) as point of departure, in an attempt to identify broad themes of intervention and issues to include in the approach to land use management.

This study draws primarily on qualitative research in the case studies of seven Local and Metropolitan Municipalities. The study employed a self-evaluation assessment to determine the extent to identify the extent to which they addressed the requirements for land use schemes stipulated by SPLUMA. The investigation informed a collective gap-analysis between the current reality and requirements of SPLUMA.

To find solutions in addressing the gaps, expert inputs (refer to section 3.5) were captured by means of semi-structured interviews with key sector departments (e.g. Department of Agriculture, The South African Chamber of Mines and selected Traditional Authorities) which further identified broad themes of intervention to be included as part of future land use management approaches. Interviews were voluntary and followed the ethical guidelines of the North-West University. Interviews were arranged through the Office of the Speaker at selected municipalities.

The empirical research ultimately informed an approach towards future land use management, in line with SPLUMA requirements, based on the identified themes of intervention, case study analysis, expert inputs, stakeholder inputs, as well as the best practises to provide municipalities with guidance on how to comply to the SPLUMA requirements.

3.3 Thematic, self-evaluation: critical analysis of SPLUMA requirements

The study applies a thematic self-evaluation assessment of the new Spatial Planning and Land Use Management Act's requirements for land use schemes. The contents of a land use schemes are specified in section 24 of SPLUMA. The specified content is compulsory (the specific wording in the act reads "a land use scheme **must**" (South Africa, 2013:34). These requirements for land use schemes were constructed into a compliance template (own creation) which was used in this empirical investigation to evaluate several purposefully selected municipal land use schemes, in order to determine whether these existing land use schemes comply with the act. Note that for each requirement there can be only three answers, comply, do not comply or partially comply. The template is reflected below.

Table 3.1: Compliance template to evaluate land use schemes against the requirements of SPLUMA

#	SPLUMA Requirement	Details	SPLUMA Reference
1	"Does the LUS cover the entire municipal area?"	See section 2.4 of this study.	Section 24(2)(a)
2	"Does the LUS include appropriate categories of land use zonings, also for those areas not previously subject to a land use scheme?"	The term "appropriate" is interpreted to mean land use zoning categories that is appropriate for the actual land use. For instance, if mining occurs in the Municipality, is there a land use zoning appropriate for mining?	Section 24(2)(a)
3	"Does the LUS take cognisance of any environmental management instrument adopted by the relevant environmental management authority?"	In many instances, a Municipality (or District Municipalities) adopts an Environmental Management Framework. This question will determine if there is alignment with the land use scheme and such an instrument.	Section 24(2)(b)

4	“Does the LUS include provisions that permits the incremental introduction of land use management in areas under Traditional leadership?”	See section 2.5.1 of this study.	Section 24(2)(c)
5	“Does the LUS include provisions that permits the incremental introduction of land use management in informal settlements?”	See section 2.5 of this study.	Section 24(2)(c)
6	“Does the LUS include provisions to promote the inclusion of affordable housing in residential land development?”	A new requirement of SPLUMA specifically aimed at addressing spatial imbalances of the past.	Section 24(2)(d)
7	“Does the LUS align with or give effect to the Municipal SDF?”	See section 2.5 of this study.	Sections 24(2)(e) and (g)
8	“Does the LUS include land use and development incentives designed to give effect to policies such as the SDF or any other policies adopted by the Municipality”	See section 2.5 of this study.	Section 24(2)(e)
9	“Does the LUS include provisions relating to the use and development of land only with the written consent of the Municipality?”	Note that this is not a compulsory requirement.	Section 24(3)(a)
10	“Does the LUS include Scheme regulations setting out the procedures and conditions relating to the use and development of land in any zone?”	This requirement can also be found in earlier legislation.	Section 25(2)(a)
11	“Does the LUS include a map or maps indicating the zoning of the municipal area into land use zones?”	One of the key components of the land use scheme. The Scheme consists of both a document (Scheme Clauses) and a map.	Section 25(2)(b)

Source: Own creation based on the requirements for land use schemes in SPLUMA (2018).

Accordingly, this compliance template was employed within 7 purposefully selected case studies to inform on the compliance of the respective Schemes in relation to SPLUMA requirements.

3.4 Case study analysis of 7 land use schemes

Seven South African Municipalities were purposefully selected as informative case studies to reflect on the compliance to SPLUMA requirements. The selected municipalities suggested of a good national representation across South Africa. Each of these municipalities' land use scheme were analysed according to the compliance template highlighted in the previous section. Three of the selected municipalities include Traditional authorities, namely Matatiele, Polokwane and Umdoni. Three of the selected municipalities are metropolitan municipalities, which by its nature attracts urbanisation and informal settlements. The selected municipalities are shown in Table 3.2 below.

Table 3.2: Municipalities selected for empirical analysis

Name of Municipality	Province	Before / After SPLUMA
City of Cape Town Metropolitan Municipality	Western Cape	Before
City of Johannesburg Metropolitan Municipality	Gauteng	After
Ekurhuleni Metropolitan Municipality	Gauteng	After
Matatiele Local Municipality	Eastern Cape	Before
Polokwane Local Municipality	Limpopo	After
Sol Plaatjie Local Municipality	Northern Cape	Before
Umdoni Local Municipality	Kwazulu Natal	After

Source: Own construction (2018)

In South Africa there are a total of 257 municipalities (Municipal Demarcation Board, 2019). Of these 44 are District Municipalities not tasked with land use management. It should therefore be noted that the seven selected municipalities only represent a 3.29% sample and may therefore not be representative of all municipalities in South Africa.

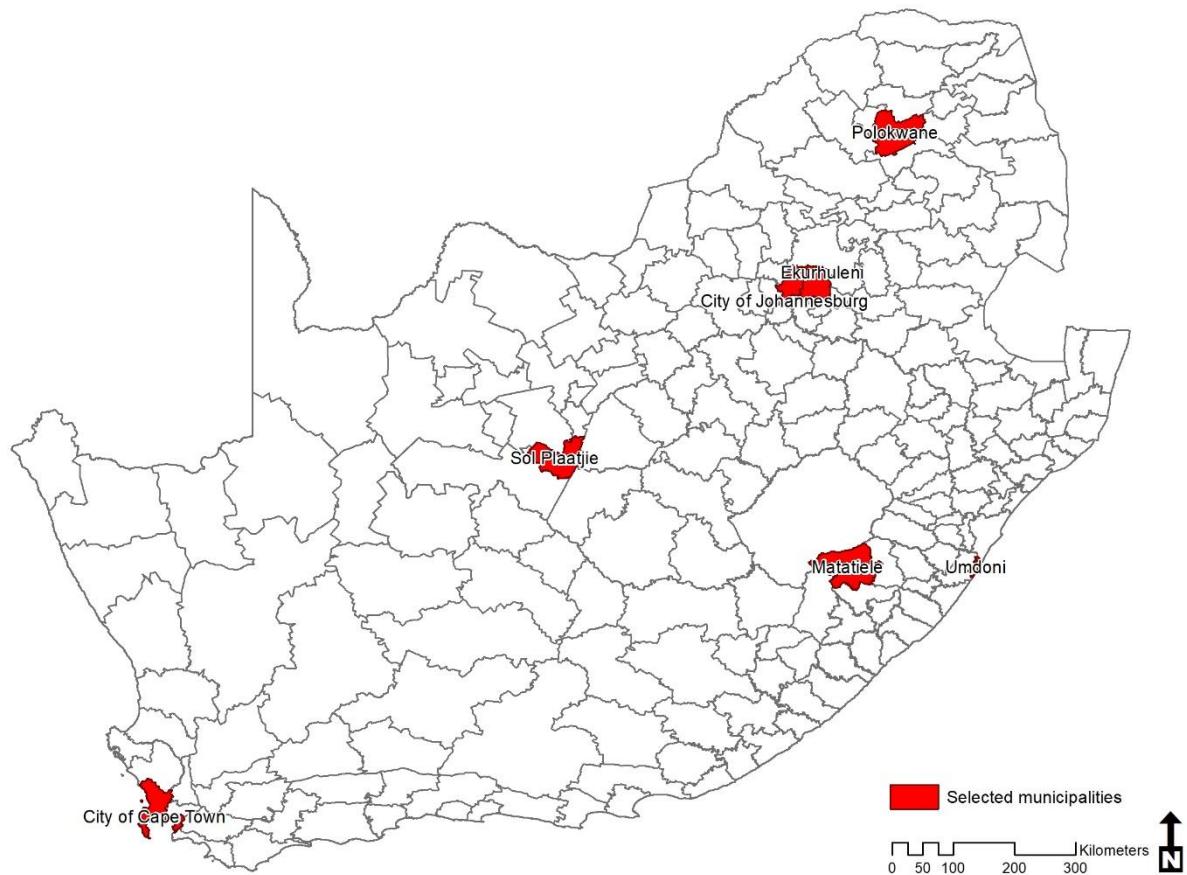


Figure 3.1: Municipalities selected for empirical analysis

Source: Own compilation using GIS data from the Demarcation Board of South Africa (2018)

Accordingly, the analysis of each of the selected municipalities' land use schemes are presented, based on the SPLUMA compliance template described previously.

3.4.1 City of Cape Town Metropolitan Municipality

The City of Cape Town Zoning Scheme Regulations were adopted in 2012. The City has a population of more than 4 004 793 people (Statistics South Africa, 2016).

Table 3.3: SPLUMA land use scheme compliance template – City of Cape Town Metropolitan Municipality

#	SPLUMA Requirement	Note	Comply
1	“Does the LUS cover the entire municipal area?”	The zoning Scheme covers the entire municipal area of the City of Cape Town (City of Cape Town Metropolitan Municipality, 2012).	Yes

2	<p>“Does the LUS include appropriate categories of land use zonings, also for those areas not previously subject to a land use scheme?”</p>	<p>The City’s Scheme clauses make provisions for additional geographic areas not typically covered in old style town planning schemes in the following manner:</p> <p>Open Space Zone 1: Environmental Conservation (OS1). This zone provides primarily for the conservation of environmental resources, although cultural heritage resources may also be included. Provision is made for limited, low-impact uses associated with conservation, such as environmental education, associated infrastructure and facilities for tourists and visitors with the approval of Council (City of Cape Town, 2012:64)</p> <p>Agricultural Zone (AG). The AG zone promotes and protects agriculture on farms as an important economic, environmental and cultural resource. Limited provision is made for non-agricultural uses to provide owners with an opportunity to increase the economic potential of their properties, without causing a significant negative impact on the primary agricultural resource (City of Cape Town, 2012:67).</p> <p>Rural Zone (RU). The RU zone accommodates smaller rural properties that may be used for agriculture, but which may also be occupied as places of residence by people who seek a country lifestyle, and who view agriculture as a secondary reason for occupying their property. Such properties may occur inside or outside a recognised urban edge (City of Cape Town, 2012:69).</p> <p>Mining activities, which do occur in the Municipality is not specifically catered for in the Zoning Scheme Regulations of City of Cape Town. This is particularly interesting as the City of Cape Town was successful in a court case (2014) specifically since a mine did not have the necessary zoning authorisation.</p>	<p>Partial</p>
3	<p>“Does the LUS take cognisance of any environmental management instrument adopted by the relevant environmental management authority?”</p>	<p>The Scheme makes provision for land subject to the National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003). In addition, the Scheme also provides for an Environmental Management Overlay Zone (EMO) and Scenic Drive Overlay Zone (SDO). These zones align with the Municipality’s Environmental Management Framework in order to protect environmentally sensitive areas as well as the natural and cultural landscape.</p>	<p>Yes</p>
4	<p>“Does the LUS include provisions that permits the incremental</p>	<p>There are no Traditional authorities in the Western Cape.</p>	<p>Not applicable</p>

	introduction of land use management in areas under Traditional leadership?"		
5	"Does the LUS include provisions that permits the incremental introduction of land use management in informal settlements?"	Note that there are no Traditional authority areas in the City. In 2016, 222 920 households lived in informal dwellings (Statistics South Africa, 2016). The City's response to dealing with informality was to include a new type of zoning "Single residential Zone 2: incremental Housing (SR2)". "The SR2 zone facilitates upgrading and incremental housing from an informal settlement to a formal settlement" (City of Cape Town Metropolitan Municipality, 2012:34). The Scheme considers the temporal nature of informal settlements by stating that the settlement may in time be converted to Single Residential 1 Zone. This zone introduces basic development rules to the informal settlement to manage land uses. In general dwelling houses, roads and utilities are allowed. However, unlike normal single residential zoning urban agriculture is also included as a primary use. Other concessions to the informal nature of these settlements include general development rules stating that "no activities shall be carried out which constitute or are likely to constitute a source of nuisance" (City of Cape Town, 2012:34).	Yes
6	"Does the LUS include provisions to promote the inclusion of affordable housing in residential land development?"	No provisions are included in the Scheme that promotes the inclusion of affordable housing in residential development.	No
7	"Does the LUS align with or give effect to the Municipal SDF?"	The City of Cape Town's Scheme clauses makes provision for overlay zones. An overlay zone is a tool that allows for special management of a specific area and is applied in addition to the base zoning of the property (Miskowiak & Stoll, 2006). These overlay zones can be restrictive and used to protect e.g. sensitive environmental features, or it could be used to give effect to certain development policies of the Municipality (American Planning Association, 2007). Importantly, the City's Scheme clauses (City of Cape Town, 2012: 74) specifically states that the principles contained in the Spatial Development Framework informs the formulation of overlay zones. Specific zones provided for include: Incentive Overlay Zone (ICO). This zone allows for development incentive to stimulate growth in areas identified in the Council's Integrated development Plan and Spatial Development Framework.	Yes

		<p>Density Overlay Zone (DO). This zone provides a mechanism for achieving certain density objectives as may be identified in the IDP or SDF.</p> <p>Heritage Protection Overlay Zone (HPO). This zone makes provision for the protection of certain places with a specific heritage status, as determined by heritage legislation.</p> <p>Urban Edge Overlay Zone (UEO). “The UEO zone guides development at the urban edge area in order to achieve a sensitive transition between urban and rural or conservation areas, to contain urban sprawl and to protect valuable natural and agricultural resources adjacent to urban development” (City of Cape Town, 2012:83)</p> <p>Local Area Overlay Zone (LAO). This zone considers specific local circumstances and provide the Municipality with a tool to encourage development in support of the local economy. This can also include detail urban design guidelines.</p>	
8	<p>“Does the LUS include land use and development incentives designed to give effect to policies such as the SDF or any other policies adopted by the Municipality?”</p>	<p>Incentive Overlay Zone (ICO). This zone allows for development incentive to stimulate growth in areas identified in the Council’s Integrated development Plan and Spatial Development Framework</p>	Yes
9	<p>“Does the LUS include provisions relating to the use and development of land only with the written consent of the Municipality?”</p>	<p>In each land use zoning category, provision is made for several land uses which could be obtained through a consent use application.</p>	Yes
10	<p>“Does the LUS include Scheme regulations setting out the procedures and conditions relating to the use and development of land in any zone”</p>	<p>The Scheme provides for procedures and conditions for 22 land use zones.</p>	Yes

11	“Does the LUS include a map or maps indicating the zoning of the municipal area into land use zones?”	The Scheme is accompanied by a set of zoning maps.	Yes
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Source: Own construction (2018)

3.4.2 City of Johannesburg Metropolitan Municipality

The City of Johannesburg have a population of almost 4 949 347 people (Statistics South Africa, 2016). While the Consolidated Johannesburg Town Planning Scheme of 2011 is still in operation, the metro published its draft land use scheme for comments in 2017. This new draft was compiled in line with SPLUMA and will therefore be used in this analysis.

Table 3.4: SPLUMA land use scheme compliance template – City of Johannesburg Metropolitan Municipality

#	SPLUMA Requirement	Note	Comply
1	“Does the LUS cover the entire municipal area?”	The draft Scheme applies to all properties in the Municipality.	Yes
2	“Does the LUS include appropriate categories of land use zonings, also for those areas not previously subject to a land use scheme?”	The draft Scheme clauses identify thirty-seven distinct zonings or use zones. Of these, the following are typically on the periphery of the City or can be seen as use zones not typically catered for in older age town planning schemes: <ul style="list-style-type: none"> • Agricultural. This zoning allows for agricultural purposes, urban agriculture and dwelling houses as primary rights. • Mining, allowing for mining purposes. 	Yes
3	“Does the LUS take cognisance of any environmental management instrument adopted by the relevant environmental management authority?”	There is no mention in the Scheme of the Environmental Management Frame work of the Municipality. The Scheme does allow for “environmental control areas” but contains no detail Scheme clauses related to these areas. The “Public Open Space” use zone also makes provision for protected areas and ecological open space.	Partial

4	<p>“Does the LUS include provisions that permits the incremental introduction of land use management in areas under Traditional leadership?”</p>	<p>The City does not have any Traditional Authority Areas.</p>	<p>Not applicable</p>
5	<p>“Does the LUS include provisions that permits the incremental introduction of land use management in informal settlements?”</p>	<p>The City of Johannesburg had 333 570 households living in informal dwellings in 2016 (Statistics South Africa, 2016). Unlike the City of Cape Town, the Scheme does not directly address informal settlements through a specific use zone or overlay zone. The Scheme does however list “transitional residential settlement area” (City of Johannesburg Metropolitan Municipality, 2017) in its set of definitions which means land on which informal settlements are established. The clauses make mention of the fact that these settlement areas are regulated by an applicable annexure although no further mention is made in the rest of the document. It can therefore be surmised that the City created this as a “placeholder” for when a specific policy can be developed, which will then be an annexure to the Scheme.</p> <p>Further literature (Dan Smit Development Capacity, 2009) on this matter suggests that City of Johannesburg adopted and “informal settlement formalisation and upgrading programme”. Unlike formalisation of informal settlement, this approach allows for the regularisation of informal settlements. “The approach uses the Town Planning Scheme to declare certain informal settlements as ‘Transitional Residential Settlement Areas’ thereby granting them a legal status which allows the city, the residents and private sector to invest, upgrade services, plan and manage the settlement. Additionally, it allows residents to have secure occupation rights and become recorded and integrated in municipal systems. It is an incremental approach which allows for continuing improvement of tenure, services, structures and land use management during that period between settlement and township establishment.” (Dan Smit Development Capacity, 2009:6). This approach acknowledges the time between the inception of an informal settlement and actual formalisation.</p>	<p>Yes</p>
6	<p>“Does the LUS include provisions to promote the inclusion of affordable housing in residential land development?”</p>	<p>The draft Scheme clauses further makes provision for inclusionary housing as proposed in the Spatial Development Framework of the Municipality. This type of housing advocates that a proportion of any new housing development should be allocated to low income households to overcome South Africa Cities’ legacy of segregation (Western Cape Department of Environmental Affairs and Development Planning, 2009).</p>	<p>Yes</p>

7	“Does the LUS align with or give effect to the Municipal SDF?”	The draft Scheme clauses make provision for a mechanism “Special Development Zone”. This zone must be subjected to public participation and ultimately approved by the Council, but effective functions the same as an overlay zone. The zone will have a specific function and include development tools to achieve certain objectives (Draft City of Johannesburg land use scheme, 2017:66).	Yes
8	“Does the LUS include land use and development incentives designed to give effect to policies such as the SDF or any other policies adopted by the Municipality?”	The Special Development Zones highlighted above makes provision for “special development tools”. The Scheme mentions that these tools can be either incentives or disincentives (Draft City of Johannesburg land use scheme, 2017:66).	Yes
9	“Does the LUS include provisions relating to the use and development of land only with the written consent of the Municipality?”	The draft Scheme Clauses allows for procedures whereby an applicant can apply for consent from the municipality to exercise a land use right other than the primary right allowed.	Yes
10	“Does the LUS include Scheme regulations setting out the procedures and conditions relating to the use and development of land in any zone?”	The draft Scheme clauses identify thirty-seven distinct zonings or use zones and provides various procedures and conditions regarding the development within each of these zones.	Yes
11	“Does the LUS include a map or maps indicating the zoning of the municipal area into land use zones?”	The scheme is accompanied by a set of zoning maps.	Yes

Source: Own construction (2018)

3.4.3 City of Ekurhuleni Metropolitan Municipality

The Ekurhuleni Metropolitan Municipality land use scheme of 2014 was promulgated in 2015. The City have a population of 3 379 104 people (Statistics South Africa, 2016).

Table 3.5: SPLUMA land use scheme compliance template – City of Ekurhuleni Metropolitan Municipality

#	SPLUMA Requirement	Note	Comply
1	"Does the LUS cover the entire municipal area?"	The Scheme covers the entirety of the Municipality and is an amalgamation 18 older town planning schemes (City of Ekurhuleni Metropolitan Municipality, 2014).	Yes
2	"Does the LUS include appropriate categories of land use zonings, also for those areas not previously subject to a land use scheme?"	<p>The Scheme makes provision for the following zones that in terms of earlier sections, can be considered as "new" areas to be covered by SPLUMA:</p> <ul style="list-style-type: none"> • Agriculture, providing for uses such as Agricultural Uses, Plant Nurseries, Dwelling House, Agricultural Outbuildings, Cultivation Sheds, Conservation Areas. • Mining, defined as the actual land area which is used for operations and activities for the purposes of searching for and extracting any material on, in or under the earth, water or any residual deposit, whether by underground, or open working, or otherwise and includes any operation, or activity incidental thereto, as defined and granted, in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), or related and succeeding legislation. (City of Ekurhuleni Metropolitan Municipality, 2014). 	Partial
3	"Does the LUS take cognisance of any environmental management instrument adopted by the relevant environmental management authority?"	There is no mention in the Scheme of the Environmental Management Framework of the Municipality. Conservation areas are not specifically allocated a use zone, but is covered under uses zones such as Recreation, Private and Public Open Space. Note however that environmental areas with no specific "conservation" status is not covered in any form in the scheme.	Partial
4	"Does the LUS include provisions that permits the incremental introduction of land	The City does not have any Traditional Authority Areas.	Not applicable

	use management in areas under Traditional leadership?"		
5	"Does the LUS include provisions that permits the incremental introduction of land use management in informal settlements?"	No mention is made in the Ekurhuleni Scheme of "informal settlements" in any way. This is despite the 242 499 households living in informal settlements in 2016 (Statistics South Africa, 2016)	No
6	"Does the LUS include provisions to promote the inclusion of affordable housing in residential land development?"	The Scheme does not contain any provisions regarding inclusionary housing.	No
7	"Does the LUS align with or give effect to the Municipal SDF?"	The Scheme includes a section that references all spatial development frameworks (local or regional) developed by the Municipality and lists the geographic area which apply to these policies. Except for this annexure the acronym "LSDF" only appears once in the scheme clauses (listed under density). There is however no section of the scheme clauses that refers to detail of the different SDFs or to proposals contained in the SDFs.	No
8	"Does the LUS include land use and development incentives designed to give effect to policies such as the SDF or any other policies adopted by the Municipality?"	The Scheme includes a section that references all policies developed by the Municipality and lists the geographic area which apply to these policies. There is however no instrument that is designed to give effect to any specific policy or framework in the Scheme clauses. In addition, no mention is made of any incentives in the scheme.	No
9	"Does the LUS include provisions relating to the use and development of land only with the written consent of the Municipality?"	The Scheme Clauses allows for the consent, in writing, by the Municipality for any activity on, or use of land or buildings for which an application, in terms of the Scheme or the relevant legislation is required.	Yes

10	“Does the LUS include Scheme regulations setting out the procedures and conditions relating to the use and development of land in any zone?”	The draft Scheme clauses identify 22 distinct zonings or use zones and provides various procedures and conditions regarding the development within each of these zones.	Yes
11	“Does the LUS include a map or maps indicating the zoning of the municipal area into land use zones?”	The scheme is accompanied by a set of zoning maps.	Yes

Source: Own construction (2018)

3.4.4 Matatiele Local Municipality

The Municipality is located in the Eastern Cape Province and have a population of 219 477 people, with 52% of all households residing in Traditional Authority areas (Statistics South Africa, 2016). The land use scheme is dated 2013.

Table 3.6: SPLUMA land use scheme compliance template – Matatiele Local Municipality

#	SPLUMA Requirement	Note	Comply
1	“Does the LUS cover the entire municipal area?”	The land use management system (LUMS) covers the area of jurisdiction of the Matatiele Local Municipality. However, in chapter 1 of the LUMS, is clearly states that the Scheme applies to existing towns of Matatiele, Cedarville and Maluti.	No
2	“Does the LUS include appropriate categories of land use zonings, also for those areas not previously subject to a land use scheme?”	The following land use zones are included in the Scheme (which can be included as “areas not previously subject to a land use scheme): <ul style="list-style-type: none"> • Extractive industry (Quarrying and mining). A zone which provides appropriately located land to allow the extraction of minerals and raw materials and associated business operations (Matatiele Local Municipality, 2013). 	Partial

		<ul style="list-style-type: none"> • Agricultural zone. This zone provides for uses of an agricultural nature as well as residential development at a low-density (typical of farms in a rural setting). • Conservation is addressed in a “reservation of land” table in the LUMS. Provision is made for “protected land” as well as “Nature reserves” with the intention of protecting these areas or at least limiting development. 	
3	“Does the LUS take cognisance of any environmental management instrument adopted by the relevant environmental management authority?”	There is no mention in the Scheme of the Environmental Management Framework of the Municipality.	No
4	“Does the LUS include provisions that permits the incremental introduction of land use management in areas under Traditional leadership?”	The Scheme specifically excludes Traditional Authority Areas even though more than 50% of all households reside in these areas.	No
5	“Does the LUS include provisions that permits the incremental introduction of land use management in informal settlements?”	No mention is made in Scheme of “informal settlements” in any way. 1 841 households lived in informal settlements in 2016 (Statistics South Africa, 2016)	No
6	“Does the LUS include provisions to promote the inclusion of affordable housing in residential land development?”	The Scheme does not contain any provisions regarding inclusionary housing.	No
7	“Does the LUS align with or give effect to the Municipal SDF?”	The Scheme does not contain any provisions regarding the Municipal SDF.	No

8	“Does the LUS include land use and development incentives designed to give effect to policies such as the SDF or any other policies adopted by the Municipality?”	The Scheme does not contain any provisions regarding incentives.	No
9	“Does the LUS include provisions relating to the use and development of land only with the written consent of the Municipality?”	The Scheme Clauses allows for the consent use applications.	Yes
10	“Does the LUS include Scheme regulations setting out the procedures and conditions relating to the use and development of land in any zone?”	The Scheme clauses identify 12 distinct zonings or use zones and provides various procedures and conditions regarding the development within each of these zones.	Yes
11	“Does the LUS include a map or maps indicating the zoning of the municipal area into land use zones?”	The scheme is accompanied by a set of zoning maps.	Yes

Source: Own construction

3.4.5 Sol Plaatjie Local Municipality

For the purposes of this study, the Sol Plaatjie Municipality Draft Land Use Management Scheme of 2008 was considered. The municipality is located in the Northern Cape and has a population of 255 351 (Statistics South Africa, 2016).

Table 3.7: SPLUMA land use scheme compliance template – Sol Plaatjie Local Municipality

#	SPLUMA Requirement	Note	Comply
1	“Does the LUS cover the entire municipal area?”	The Scheme covers the municipal area	Yes
2	“Does the LUS include appropriate categories of land use zonings, also for those areas not previously subject to a land use scheme?”	The Scheme includes use zones for Mining and Agriculture. No use zones are provided for protected areas, conservation areas environmentally sensitive areas.	Partial
3	“Does the LUS take cognisance of any environmental management instrument adopted by the relevant environmental management authority?”	There is no mention in the Scheme of the Environmental Management Framework of the Municipality.	No
4	“Does the LUS include provisions that permits the incremental introduction of land use management in areas under Traditional leadership?”	There are no Traditional Authority areas in the Municipality.	Not applicable
5	“Does the LUS include provisions that permits the incremental introduction of land use management in informal settlements?”	As one of the biggest towns in the Northern Province, however, the Municipality have more than 9 828 households living in informal settlements (Statistics South Africa, 2016). Informal settlements are not dealt with in the Sol Plaatjie Land Use Management Scheme.	No
6	“Does the LUS include provisions to promote the	The Scheme does not contain any provisions regarding inclusionary housing.	No

	inclusion of affordable housing in residential land development?"		
7	"Does the LUS align with or give effect to the Municipal SDF?"	The Scheme does not contain any provisions regarding the Municipal SDF.	No
8	"Does the LUS include land use and development incentives designed to give effect to policies such as the SDF or any other policies adopted by the Municipality?"	The Scheme does not contain any provisions regarding incentives.	No
9	"Does the LUS include provisions relating to the use and development of land only with the written consent of the Municipality?"	The Scheme Clauses allows for the consent use applications.	Yes
10	"Does the LUS include Scheme regulations setting out the procedures and conditions relating to the use and development of land in any zone?"	The Scheme clauses identify 24 distinct zonings or use zones and provides various procedures and conditions regarding the development within each of these zones.	Yes
11	"Does the LUS include a map or maps indicating the zoning of the municipal area into land use zones?"	The scheme is accompanied by a set of zoning maps.	Yes

Source: Own construction (2018)

3.4.6 City of Polokwane Local Municipality

The Polokwane/Perskebult Town Planning Scheme of 2016 constitutes a revision of the Polokwane/Perskebult Town Planning Scheme of 2007. The Scheme came into effect in 2017. The Municipality has a population of approximately 700 000 people (Statistics South Africa, 2016).

Table 3.8: SPLUMA land use scheme compliance template – City of Polokwane Local Municipality

#	SPLUMA Requirement	Note	Comply
1	“Does the LUS cover the entire municipal area?”	Note that the Scheme applies only to land and buildings within a specific area – not the entire Municipality (City of Polokwane Local Municipality, 2016). This is despite the SPLUMA requirement that municipalities should have one land use scheme for the entire municipal area (South Africa, 2013).	No
2	“Does the LUS include appropriate categories of land use zonings, also for those areas not previously subject to a land use scheme?”	The Scheme makes provision for an “agricultural” use zone. In addition to agricultural relate uses, this use zone also accommodates nature reserves and nature conservation areas. No provision is made for mining in the use zones.	Partial
3	“Does the LUS take cognisance of any environmental management instrument adopted by the relevant environmental management authority?”	There is no mention in the Scheme of the Environmental Management Framework of the Municipality.	No
4	“Does the LUS include provisions that permits the incremental introduction of land use management in areas under Traditional leadership?”	The Scheme does not address Traditional Authorities at all, despite the more than 14 000 households living in these areas.	No

5	“Does the LUS include provisions that permits the incremental introduction of land use management in informal settlements?”	Informality is not addressed in any way in the Polokwane/Perskebult Town Planning Scheme of 2016. The City of Polokwane has more than 7 700 informal households (Statistics South Africa, 2016).	No
6	“Does the LUS include provisions to promote the inclusion of affordable housing in residential land development?”	The Scheme does not contain any provisions regarding inclusionary housing.	No
7	“Does the LUS align with or give effect to the Municipal SDF?”	The Scheme does not contain any provisions regarding the Municipal SDF except stating that the Municipal SDF should be considered when deciding on the merits of a land development application.	No
8	“Does the LUS include land use and development incentives designed to give effect to policies such as the SDF or any other policies adopted by the Municipality?”	The Scheme does not contain any provisions regarding incentives.	No
9	“Does the LUS include provisions relating to the use and development of land only with the written consent of the Municipality?”	The Scheme Clauses allows for the consent use applications.	Yes
10	“Does the LUS include Scheme regulations setting out the procedures and conditions relating to the use	The Scheme clauses identify 22 distinct zonings or use zones and provides various procedures and conditions regarding the development within each of these zones.	Yes

	and development of land in any zone?"		
11	"Does the LUS include a map or maps indicating the zoning of the municipal area into land use zones?"	The scheme is accompanied by a set of zoning maps.	Yes

Source: Own construction (2018)

3.4.7 Umdoni Local Municipality

In 2008, Umdoni Local Municipality (located in Kwazulu-Natal) managed land use through a single Scheme. In 2015, the Municipality promulgated two land use instruments, the Umdoni Urban land use scheme as well as the Umdoni Rural Scheme Policy. 92 100 people reside in the Municipality (Statistics South Africa, 2016).

Table 3.9: SPLUMA land use scheme compliance template – Umdoni Local Municipality

#	SPLUMA Requirement	Note	Comply
1	"Does the LUS cover the entire municipal area?"	Urban areas (mainly existing proclaimed townships) are managed through the Umdoni Urban land use scheme. Rural areas, which include Traditional authority land, are managed through the Umdoni Rural Scheme Policy. These two instruments together manage all land uses throughout the jurisdiction of the Municipality.	Yes
2	"Does the LUS include appropriate categories of land use zonings, also for those areas not previously subject to a land use scheme?"	Specific use zones and instruments that accommodate geographic areas not covered before the implementation of SPLUMA are listed below: <ul style="list-style-type: none"> Reservation and zoning of land – environmental considerations: This section of the Scheme reserves environmentally sensitive land as well as land with a conservation status exclusively for that purpose. Specific consideration is also given to wetlands and land close to watercourses to protect sensitive environmental areas (Umdoni Urban land use scheme: Clauses, 2015:37). The Scheme also provides for a "river reserve" in order to protect the status of the watercourse and to minimise pollution of the 	Yes

		<p>river itself. Conservation areas and land natural land should be conserved are protected by the introduction of a “Conservation Zone” (this also includes private conservation areas). Land which has been identified in the “provincial green wedges policy” is zoned “eco-agri recreation zone”. These portions of land separate Traditional urban areas and is reserved for land uses of an agricultural, tourist and recreation nature. In the Rural Scheme policy, provision is also made for an Environmental Overlay which uses information from the Umdoni Strategic Environmental Assessment.</p> <ul style="list-style-type: none"> • Agriculture. Provision is made for two Urban Agriculture use zones. These zones are close to urban development – with the intention hat over the short to medium terms, these areas will still be used for agricultural purposes. Over the longer term these areas will transition to urban land uses (Umdoni Urban land use scheme: Clauses, 2015:78). The Umdoni Rural Scheme Policy makes provision for two agricultural zones that applies to land outside the urban areas. The “agricultural zone” protect land with agricultural potential, while the “restricted agriculture zone” focusses more on the protection and conservation of the natural environment (Umdoni Local Municipality, 2015). • Quarrying and Mining. This land use, that typically manifests in the rural hinterland is provided for in the Umdoni Rural Scheme Policy through the introduction of a “Quarrying and mining” use zone. “This zone provides for “appropriate land for the extraction of minerals and stone in a manner that is compatible with sustainable development and the relevant national, provincial and local requirements and guidelines related to this activity” (Umdoni Rural Scheme Policy, 2015:33). 	
3	<p>“Does the LUS take cognisance of any environmental management instrument adopted by the relevant environmental management authority?”</p>	<p>Reservation and zoning of land – environmental considerations: This section of the Scheme reserves environmentally sensitive land as well as land with a conservation status exclusively for that purpose. Specific consideration is also given to wetlands and land close to watercourses to protect sensitive environmental areas</p>	<p>Yes</p>

4	“Does the LUS include provisions that permits the incremental introduction of land use management in areas under Traditional leadership?”	The Umdoni Rural Scheme Policy acknowledges Traditional settlements through the introduction of a “High intensity Traditional settlement” as well as a “low intensity Traditional settlement”. The main objective of these two zones is to demarcate or indicate areas where Traditional settlements occur and to ensure that future settlement occur in the right location without consuming agricultural resources or impacting negative on sensitive environmental areas. Land uses in these zones include Traditional residential areas as well as uses that support human settlement such as business and educational facilities, but also considers land uses not typically found in an urban setting, e.g. customary harvesting, fish farming, farm stalls, subsistence agriculture and culture-based tourism (Umdoni Rural Scheme Policy, 2015:30).	Yes
5	“Does the LUS include provisions that permits the incremental introduction of land use management in informal settlements?”	Informality is not addressed in any way in the Umdoni Urban land use scheme Clauses.	No
6	“Does the LUS include provisions to promote the inclusion of affordable housing in residential land development?”	The Scheme does not contain any provisions regarding inclusionary housing.	No
7	“Does the LUS align with or give effect to the Municipal SDF?”	The Scheme does not contain any provisions regarding the Municipal SDF.	No
8	“Does the LUS include land use and development incentives designed to give effect to policies such as the SDF or any other policies adopted by the Municipality?”	No specific mention of policies or frameworks (excluding the strategic environmental assessment) can be found in either of the two documents. There are, however, several “special zones” in the Urban Scheme that has specific development requirements for specific geographic areas. Unlike typical town planning schemes, the Umdoni Scheme identifies several use zones. Specifically designed for “mixed uses” (e.g. the Medium impact mixed use zone). This is a departure from typical single use zones and considered an innovation in land use management.	Partial
9	“Does the LUS include provisions relating to the use and development of	The Scheme Clauses allows for the consent use applications.	Yes

	land only with the written consent of the Municipality?"		
10	"Does the LUS include Scheme regulations setting out the procedures and conditions relating to the use and development of land in any zone?"	The Scheme clauses identify 40 distinct zonings or use zones (excluding special zones) and provides various procedures and conditions regarding the development within each of these zones.	Yes
11	"Does the LUS include a map or maps indicating the zoning of the municipal area into land use zones?"	The scheme is accompanied by a set of zoning maps.	Yes

Source: Own construction (2018)

3.4.8 Summary of case study analysis

This section summarises the findings after analysing the land use schemes of seven Municipality using a compliance template informed by the requirements imposed for Municipal land use schemes by the Spatial Planning and Land Use Management Act of 2013.

Table 3.10: Summary of case study analysis

#	SPLUMA Requirement	City of Cape Town Metropolitan Municipality (2012)	City of Johannesburg Metropolitan Municipality (2017)	City of Ekurhuleni Metropolitan Municipality (2015)	Matatiele Local Municipality (2013)	Sol Plaatjie Local Municipality (2008)	Polokwane Local Municipality (2017)	Umdoni Local Municipality (2015)
1	LUS covers entire Municipality.	Y	Y	Y	N	Y	N	Y
2	Includes appropriate categories of land use zonings.	P	Y	P	P	P	P	Y
3	Takes cognisance of any environmental management instrument.	Y	P	P	N	N	N	Y
4	Accommodates areas under Traditional leadership.	NA	NA	NA	N	NA	N	Y
5	Accommodates informality	Y	Y	N	N	N	N	N
6	Promotes the inclusion of affordable housing.	N	Y	N	N	N	N	N
7	Aligns with or give effect to the Municipal SDF.	Y	Y	N	N	N	N	N
8	Include land use and development incentives.	Y	Y	N	N	N	N	P
9	Includes provisions relating to the use land with the written consent of the Municipality.	Y	Y	Y	Y	Y	Y	Y
10	Includes regulations relating to the use and development of land in any zone.	Y	Y	Y	Y	Y	Y	Y
11	Includes zoning maps.	Y	Y	Y	Y	Y	Y	Y

Comply	Y	Partially comply	P	Do not comply	N	Not applicable	NA
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Source: Own construction (2018)

3.4.8.1 Interpretation of case study analysis: SPLUMA requirements for land use schemes that municipalities comply with

Five out of seven Municipalities have covered their entire area of jurisdiction in their respective land use schemes. This could possibly be attributed to the formulation of wall-to-wall municipalities in 2001. In most cases (with the notable exception of City of Cape Town) mining, which often occurs on the periphery of the Municipality is accommodated in some form of zoning. This land use has in the past been excluded from many town planning schemes and will furthermore be discussed in a later section. All land use schemes that were reviewed did include what is considered the basic components of a Scheme; regulations relating to the use and development of land in any zone as well as a zoning map.

3.4.8.2 Interpretation of case study analysis: SPLUMA requirements for land use schemes that Municipalities do NOT comply with

While the majority of land use schemes analysed cover the entire municipal area, areas outside of the immediate urban fabric are not always adequately addressed in terms of appropriate land use zones. In general, it would seem as is rural areas are zoned “agriculture” or “conservation”. The “agricultural” zoning includes large areas of land, irrespective of whether these areas could be used for agricultural purposes. This may be a legacy of the Subdivision of Agricultural Land Act, 1970, (Act 70 of 1970) (which has not been repealed by SPLUMA). It would furthermore seem as if land zoned “conservation” only applies to formally declared conservation areas or protected areas. Environmentally sensitive or important land without this status is most often included under the “agricultural” zone. In most cases the Environmental Management instruments of the local or district Municipality do not find itself reflected in the land use scheme. Traditional Authorities seems to be ignored in most schemes (except in Umdoni). With almost 27% of all South African households residing in Traditional Authority Areas, this seems to be one of the most important aspects to address in post-SPLUMA land use schemes. In only two cases have informality been addressed in land use schemes. This omission includes one of the largest Metropolitan Municipalities (with significant planning capacity). Almost none of the land use schemes analysed includes any mention of inclusionary housing policies. The exception is City of Johannesburg which, while mentioned in the scheme, furthermore, stipulates that such a policy should still be formulated. Few land use schemes align or give effect to the Municipal Spatial Development Framework or incentives designed to give effect to similar policies. Many town planners view these two instruments as completely separate. Land use schemes are considered “law” (in the sense that it can be legally enforced) while Spatial Development Frameworks are seen as “policy instruments”. This lack of alignment may also be due to the fact that (before SPLUMA) land use schemes were rarely updated or reviewed, while SDFs are reviewed and

updated every five years. Consider, for example, the Ekurhuleni land use scheme of 2014. Before this scheme was promulgated, the Benoni Town Planning Scheme of 1947 was still in operation – at the same time as the Ekurhuleni Spatial Development Framework of 2013. The City of Johannesburg is the only Municipality (which has been assessed in the case study analysis) to address “affordable housing” in its land use scheme. An inclusionary housing programme requires private developers to allocate a certain percentage of any new residential development to low- and middle-income households at an affordable price. The City of Johannesburg (as part of their land use scheme) in a reaction to the requirements of SPLUMA published a draft Inclusionary Housing Policy for public comment in 2018 (City of Johannesburg Metropolitan Municipality, 2018). The purpose of this document was to define incentives, mechanisms and regulations for this type of housing in the City. As a result, twenty percent of all housing units (for any development of more than ten units) had to be allocated to households earning less than R7000 per month. In return, the City considered an incentive of allowing the developer to build more units than initially provided for in the land use scheme.

Based on these identified gaps derived from the case study analysis, expert interviews were conducted in an attempt to seek solutions and a way forward for land use planning within the local context.

3.5 Expert interviews

Based on the analysis of the compliance of land use schemes of 7 municipalities with the requirements of SPLUMA, it was evident that not one scheme complied a 100 percent with the new requirements for Schemes introduced when SPLUMA came into operation in 2015. Importantly, SPLUMA provided municipalities with a 5-year deadline to ensure that Schemes comply with requirements, implying that these shortcomings should be addressed within the next 12 to 18 months. Expert interviews were thus conducted to consider these gaps and find possible solutions to address the shortcomings in post-SPLUMA schemes. The expert interviews and findings are accordingly reported per expert-group considered, along with the findings and solutions to steer land use planning going forward. Unstructured interviews were held with role-players using the following questions to guide the discussions:

- Within your industry (with specific reference to land use management), explain the possible impact of the new Spatial Planning and Land Use Management Act?
- How will SPLUMA impact on existing land uses?
- How will SPLUMA impact on future land uses?

- Given the fact that Municipalities have to compile land use schemes covering its entire area of jurisdiction, do you have any data/ advice / assistance that may assist these municipalities?
- Do you have any existing processes regarding land use management that may play a role or impact on Municipal Land Use Schemes?

3.5.1 Expert inputs from the Chamber of Mines

An unstructured interview was conducted with a member of the Chamber of Mines (recently renamed to the Minerals Council of South Africa) (Strydom & Le Roux, 2017) on the 5th of May 2017 in Pretoria. The Chamber of Mines was specifically selected because due to the importance of the Maccsand court case (City of Cape Town v Maccsand (Pty) Ltd.) and the eventual decision that led to certain sections of the Development Facilitation Act found to be unconstitutional (Van Wyk, 2012), which in turn led to the development of SPLUMA. The following is a summary of the key points of the interview and represents the view of the mining sector on the development of municipal land use schemes.

The Chamber of Mines acts as a principal advocate for mining in South Africa to government, communicating major policies endorsed by its members and important stakeholder in the discourse on land use planning. The interview was conducted with Dr. Elize Strydom, the Senior Executive Employment Relations and Legal at the Chamber of Mines.

From the interview it was noted that in 2015, mining was responsible for almost 17,4% (8,4% direct, 9% indirect and induced) of the GDP of South Africa (Strydom & Le Roux, 2017). Mining has always been one of the key economic sectors in South Africa, both in terms of revenue and employment. Mining activities typically happen in the rural components of municipalities and have to date mostly been excluded from land use schemes (Strydom & Le Roux, 2017). In fact, in some provinces this exclusion was even legislated. Section 21(1) of the Transvaal Town Planning and Townships Ordinance (1986), for example, stated that a local authority shall not prepare a town-planning Scheme in respect of land on which prospecting, digging or mining operations are being carried out, unless such land is situated within an approved township.

Whilst SPLUMA requires the incremental introduction into land use schemes of areas not previously part of town planning schemes, there is uncertainty amongst stakeholders how to apply this to mining. The number of court cases in recent years involving mining and municipal zoning is an indication of just how complex this matter can become. The Department of Rural Development and Land Reform in co-operation with the Chamber of Mines of South Africa has committed to drafting special guidelines applicable to dealing with mining in new generation Municipal land use schemes. At the time of drafting of this document, these special guidelines

were not available, however both parties felt that it is important to highlight the following complexities for Municipalities to consider:

- Many municipalities now include areas where mining activities have been exercised legally for many years. The fact that mining activity occurs, does not necessarily mean that mining is accommodated in the land use schemes of the municipality in some forms (e.g. City of Cape Town). SPLUMA requires the development of land use schemes that cover the entire area of jurisdiction of these municipalities – therefore mining must be accommodated in some form or other. The specific view from the Minerals Council is that Municipalities cannot “force” **existing legal mines** to “re-zone”. A possible solution to this is to “legalise” the existing legal mines when compiling a single land use scheme.
- “Mining” is not necessarily a zoning that one could typically find in a land use scheme (for example City of Cape Town). Instead, mining use resorted under a general exemption, a general exclusion, an existing use exemption, some form of industrial zoning, or as a consent use right under agriculture. Due to mining being excluded from some schemes in the past, very few municipalities have included zonings or use zones that can accommodate the complexity of this type of land use.
- Moreover, mining in a broad sense takes various forms, such as reconnaissance, prospecting, underground mining with ancillary surface use, underground mining with no ancillary surface use and opencast mining with or without ancillary surface use. Further, not only minerals but also petroleum resources (such as oil or methane gas) are at issue.
- Like agricultural land, land with high potential mineral deposits that could be used for mining in future is **FINITE**. This aspect relates to future mining, and more specifically the role of a land use scheme in protecting mineral resources.
- Municipal planners are not mining specialists. It is therefore of the utmost importance that the Municipality involves all mining stakeholders within their area of jurisdiction, or even stakeholders such as the Chamber of Mines when embarking on the process of compiling a land use scheme. The intended guidelines for mining, when they become available, should assist.
- Existing mines often include a variety of mining related surface uses. Figure 3.2 below provides an aerial view of the East Driefontein Mine close to Carletonville in Gauteng. The white lines indicate that the mine is situated over a number of farm portions. It is quite clear that the actual footprint of the mine includes ancillary surface uses such as single residential, multiple residential, parks and open space, sports facilities, schools etc.



Figure 3.2: East Driefontein Mine

Source: Own construction using cadastral information from the Surveyor General and Google Earth imagery (2018).

3.5.2 Expert inputs from Department of Agriculture

A semi-structured interview was conducted with the Department of Agriculture, Forestry and Fisheries (Collet, 2017), Land Use and Soil Management Directorate on the 25th of May 2017 in Pretoria. This Directorate aims to promote, regulate and co-ordinate the sustainable use of natural resources (land and soil) (Department of Agriculture, Forestry and Fisheries, 2018) and is concerned with land administration. From the interview it was evident that the Subdivision of Agricultural Land Act, 1970, (Act 70 of 1970) (which has not been repealed by SPLUMA) has specific relevance in the compilation of land use schemes:

- The Minister responsible for Agriculture needs to give consent to any land use scheme that affects “agricultural” land;
- Activities related to the subdivision, selling, leasing or using agricultural land requires the input of the Department of Agriculture, Forestry and Fisheries;

- Note that while emphasis is placed on what constitutes “agricultural land”, this definition more relates to **demarcation** than the agricultural potential of land. In the Act, for example, agricultural land is defined as “any land” except for:
 - land situated in the area of jurisdiction of a municipal council etc. (note that this refers to pre-2000 demarcation, before the introduction of wall-to-wall municipalities);
 - land which forms any area subdivided in terms of the Agricultural Holdings (Transvaal) Registration Act, 1919 (Act No. 22 of 1919);

It also became evident that it is rather difficult to determine exactly what “agricultural land” entails, when preparing a Scheme. The Department of Agriculture would consider the following steps good practise for municipalities to follow when compiling a land use scheme:

- Request that the Department of Agriculture, Forestry and Fisheries is part of the Steering Committee when compiling a land use scheme;
- Request that the Department of Agriculture to provide a GIS file that demarcates “agricultural land” in terms of Act 70 of 70 as initial input to the scheme;
- Request that the Department of Agriculture to further, identify areas of high agricultural potential;
- Consider measures in the Scheme to protect these areas of high agricultural potential (whether it is currently used for agriculture or not);
- Agree on the zoning types in terms of the agricultural zoning purposes with primary focus on:
 - high potential agricultural land;
 - areas earmarked for food production (commercial farming);
 - protected areas as identified by NEMA and its related Acts such as NEMPA and NEMBA;
 - areas earmarked for subsistence farming especially in rural areas;
 - areas earmarked for grazing;

- consider any agricultural land use guidelines that can assist in the compilation of schemes;
- circulate the draft land use scheme to the Department of Agriculture (among others) prior to approving and adopting the Scheme.

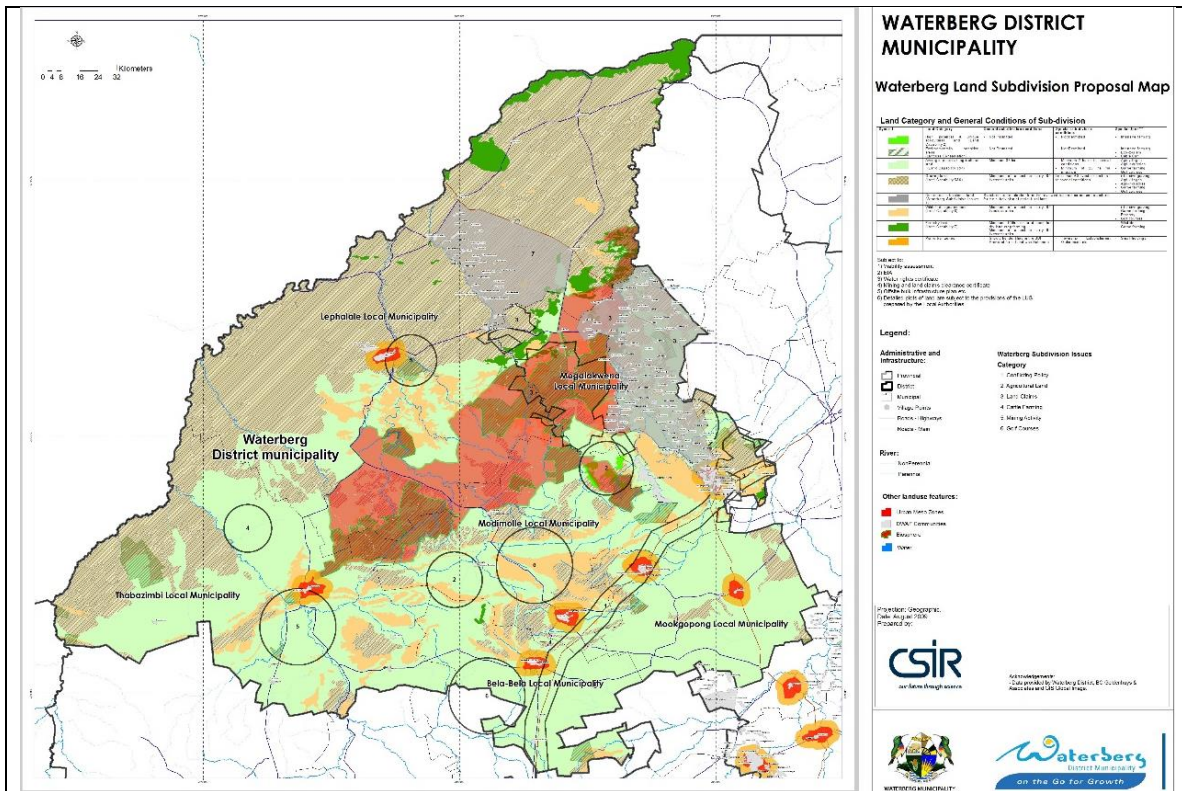
During the interview the following case study was provided as “best practise” when including agricultural use zones in municipal land use schemes (Department Cooperative Governance and Traditional Affairs Province of Kwazulu-Natal, 2011):

Table 3.11: Alternative use zones for Agricultural Zonings

No.	Use Zone	Intention
1.	AGRICULTURE 1 (or Agriculture Only)	A zone that provides for land and buildings where the primary activity is both intensive and extensive agricultural production of crops, livestock or products.
2.	AGRICULTURE 2 (or Agriculture Traditional)	A zone that provides for land used for low intensity and small-scale agricultural practices in association with other related uses in Traditional Authority areas, and may include market gardening, wood lots, the production of small areas of crops such as sugar cane and livestock.
3.	RESTRICTED AGRICULTURE	A zone that restricts intensive agriculture and cropping, so that it retains a level of natural vegetation.
4.	SPECIAL AGRICULTURE	A zone that provides for farming that comprises a substantial number of physical developments/buildings such as greenhouses, poultry farming, windfarms, etc.
5.	URBAN AGRICULTURE	A zone that provides for land located in urban areas for agricultural purposes, utilized for small scale agricultural production, market gardening, horticulture, aquaculture, the keeping of limited livestock and community gardens.
6.	FORESTRY	A zone that provides for land used or authorized for the growing of trees with the valid permission of Department of Water Affairs and the Department of Agriculture, Forestry and Fisheries.

Source: Department of Cooperative Governance and Traditional Affairs of Kwazulu-Natal, (2011)

Another important consideration from an agricultural perspective (derived from the semi-structured interview) to consider in the discourse on land use schemes, is the size of a farm that can effectively be used for agriculture. The Waterberg District Municipality compiles a land subdivision map that can be used to inform Municipal land use schemes in its area of jurisdiction (see Figure 3.3).



Land Category and General Conditions of Sub-division

Symbol	Land Category	General sub-division conditions	Special sub-division conditions	Special Uses***
	High potential & unique agricultural land (Land Capability 2)	- Not Permitted	- Not Permitted	- Intensive farming
	Environmentally sensitive areas (Landuse Conservation)	- Not Permitted	- Not Permitted	- Intensive farming - Eco-tourism - Cable Car
	Average potential agricultural land (Land Capability 3&4)	- Minimum 38 ha	- Minimum 2 ha s.t to special conditions - Minimum of 20 ha for irrigation	- Agri-villages - Agri-industries - Game farming - Golf courses
	Grazing land (Land Capability 5&6)	- Minimum of a unit to carry 60 livestock units	Less than 60 livestock units s.t to special conditions	- intensive grazing - Agri-villages - Agri-industries - Game farming - Golf courses
	Communal subsistence land (Waterberg Subdivision issues 7)	Standards to be adopted from the reviewed national norms and standards for the subdivision of agricultural land		
	Wildlife designated land (Land Capability 8)	- Minimum of a unit to carry 60 livestock units		- intensive grazing - Game farming - Forestry - Golf courses
	Forestry land (Land Capability 7)	- Minimum 100ha on land used for dry land crop farming - Minimum of a unit to carry 60 livestock units		- Wild life - Game farming
	Peri-urban zones	- Should be identified in the SDF - Provided for in Land Use Schemes	- Township Establishment Ordinances etc	- Small-holdings

Figure 3.3: Waterberg District Municipality - land subdivision proposals

Source: Waterberg District Municipality (2009).

This “map” provides basic land categories related to agricultural activities together with conditions that relates to the sub-division of farm portions in each category as well as suitable land uses. This can (and should) be included in Municipal land use schemes.

3.5.3 Expert inputs from Traditional Authorities

In section 2.5.1 it was highlighted that Traditional Authorities have in many cases, been excluded from land use schemes. As such there are no local case studies that can be used to inform addressing this specific gap. In order to gather information on possible aspects to address such, semi-structured interviews were held with Traditional Authorities located in three areas of Lephalale Local Municipality (Lephalale Local Municipality recently commissioned a new land use scheme which provided easy access to traditional leaders):

- Shongoane Traditional Authority (Chief Mpitso Anna (9 September 2017)
- Mokuruanyane Traditional Authority (Chief Langa R A) (11 September 2017)
- Ga-Seleka Traditional Authority (Chief Sleka Z K) (31 September 2017)

Based on these interviews, the following should be considered for land use management in Traditional Authority Areas:

- Traditional Authorities have never been included in Municipal land use schemes. At best, the only form of planning done in most of these areas include some form of future planning in precinct plans or inclusion in Municipal Spatial Development Framework.
- Land in Traditional Authority Areas are not surveyed, therefore maps indicating the extent of each property together with a stand number are not available.
- Introducing SPLUMA to Traditional Authorities raises the issue of land tenure. Traditional Leaders interviewed are vehemently opposed to individual ownership of land (which would mean the survey of each property and issuing of title deeds to individuals).
- All traditional leaders understand the need for land use management. Practical examples of this include houses built inside the 1:100-year flood line as well as liquor stores or taverns built opposite schools.
- Traditional Leaders expressed their willingness to co-operate in the process of including traditional villages in a Municipal land use scheme but expressed concern over the fact that as Traditional Leaders, they were excluded from taking land use decisions (in terms of SPLUMA Traditional Leaders cannot form part of a Municipal Planning Tribunal).
- Traditional leaders (as well as communities) expressed the need to have some input into which land uses are allowed in their areas.

3.6 Findings from the empirical investigation

This chapter considered critical analysis of SPLUMA requirements (refer to section 3.3) which led to the development of a compliance template that can be used to assess the land use schemes of Municipalities for SPLUMA Compliance.

The template was used in a case study analyses (refer to section 3.4) of seven Municipalities and found that none complied a hundred percent with the requirements of SPLUMA for land use schemes. Mining, Agriculture and Traditional Authorities emerged as gaps that required further attention.

Expert inputs (refer to section 3.5) were obtained from the agricultural and mining sector, which can be used to address these sectors in more detail in land use schemes. In addition, Traditional Leaders were also interviewed to gain better understanding of their view regarding Land Use Management.

The following chapter will expand on the above findings in more detail.

CHAPTER 4: CONCLUSIONS

4.1 Introduction

The previous chapters focused on South Africa's new uniform planning legislation and more specifically its impact on Municipal land use management. The research is based on a sample of seven purposefully selected case studies. The sample is therefore neither a comprehensive sample nor is it representative, rather it is an informative sample which provides insight into the ability of South African Municipalities to adhere to legislative requirements imposed on them by the new Spatial Planning and Land Use Management Act. Based on the literature review and empirical investigation considering case studies and expert perspectives, the following research questions could be answered:

- Does land use planning theory guide mainstream planning in practice?
- To what extent is the legislative framework for planning in South Africa effective?
- Are there any gaps between existing town planning Scheme instruments and those that are required by SPLUMA?
- Which additional requirements for land use schemes should Municipalities include when compiling new land use schemes?
- Can local best practices and alternative forms of zoning guide land use planning in South Africa?

These questions are accordingly answered under specific themes related to the context of this research.

4.2 Land use planning theory versus practise

Does land use planning theory guide mainstream planning in practice?

Land use planning theory is not implemented in modern day land use schemes. While the legislative framework has shown significant innovation in order to address the spatial wrongs of the past, new generation land use schemes still seem stuck in the past. Many municipalities are dusting off Town Planning Schemes formulated during Apartheid and trying to fit them to the spatial challenges of a new South Africa. Planning theory has definitely influenced spatial planning, indicating that South African planners have some view of a better future, but the same

has not filtered through to land use schemes – meaning planners are struggling to manage the present and provide an effective roadmap towards achieving the future.

4.3 The effectiveness of South Africa’s legislative planning framework

To what extent is the legislative framework for planning in South Africa effective?

Prior to 1994, South Africa had different planning legislation for each province. In addition, the former black homelands as well as some townships in urban areas were managed using the Black Communities Development Act (Act 4 of 1984). After democracy, these pieces of legislation remained largely unchanged (South African Cities Network, 2015). SPLUMA sets out to address the spatial disparities that characterises South African cities and towns due to its apartheid heritage (both in the preamble to the Act as well as one of the key objectives). Obviously, new legislation cannot lead to policies and processes that can change the urban form in the 5 years since its enactment. It is therefore more important to investigate whether the Act provides an effective framework to allow for this change over time. Within the context and limitations of this study, this should be re-phrased to investigate whether the new framework for land use management could change the apartheid spatial form.

The requirements for land use schemes spelled out by SPLUMA compels Municipalities to compile a land use scheme for its entire area of jurisdiction (section 2.4). Note that in previous legislation this was optional (see Table 2.2). The option of ignoring certain areas (importantly Traditional Communities) and rural land uses (as has happened) in the past therefore no longer remains.

SPLUMA acknowledges that informal settlements and Traditional Authorities have been excluded from land use management legislation (section 2.5.1). It considers that including these areas into land use schemes may be a lengthy process and stipulates that Municipalities can “incrementally” introduce land use management to these areas. Both the occurrence of informal settlements and former homelands can be ascribed to Apartheid spatial policies. Including these areas in the legislative framework governing land use management can therefore lead to spatial transformation. Including these areas in the land use scheme can direct development in a proper direction, protect people from environmental hazards such as flood lines and protect valuable agricultural and environmental resources). At worst, these areas can no longer be ignored, at best these areas will be effectively integrated into planning systems and systematically planned for (as in the Case of City of Johannesburg and City of Cape Town).

Spatial Development Frameworks have, almost since its inception, promoted social integration and planning for the poor. Previous legislation did, however, not adequately propose the alignment of the SDF and the LUS. Todes (2008:1) attributes this to the fact that SDFs were too “utopian” in nature and often neglected or ignored at site specific level (i.e. land use management level of individual properties). SPLUMA once again forces municipalities to ensure that the LUS be consistent with, and give effect to the SDF of the municipality. It furthermore compels Municipalities to review both the SDF and the LUS at least every five years. Ideally the SDF should be reviewed first to ensure the correct emphasis on the spatial form of the city, after the SDF, the LUS should be reviewed (if necessary) to ensure alignment with the SDF. If implemented correctly, this could ensure long term alignment between these two instruments. In addition, SPLUMA requires that LUS include instruments and incentives that will ensure that Municipal policies such as the SDF are implemented (e.g. inclusion of instruments promoting affordable housing).

It can therefore be concluded that SPLUMA as the new legislative framework for planning is a step in the right direction, which, if adhered to, could lead to spatial transformation. It should be noted though that for the framework to be effective, it MUST be implemented by Municipalities. In this instance to SPLUMA (section 10(5) of the Act) has provided a solution, empowering Provincial Governments to develop mechanisms to ensure that Municipalities abide by the requirements of SPLUMA.

4.4 Gaps between existing Town Planning Schemes and SPLUMA land use schemes and additional requirements to be addressed.

Are there any gaps between existing Town Planning Scheme instruments and those that are required by SPLUMA?

Which additional requirements for land use schemes should Municipalities include when compiling new land use schemes?

The case study analysis (section 3.4.8) indicated that existing land use schemes have some way to go in order to comply with the requirements of SPLUMA. The figure below summarises the findings of the analysis, with the cells in red indicating the % of the selected Municipalities that do not comply with the requirements of SPLUMA. Note once again that the sample size was 3.29% and therefore may not be reflective of all municipalities in South Africa.

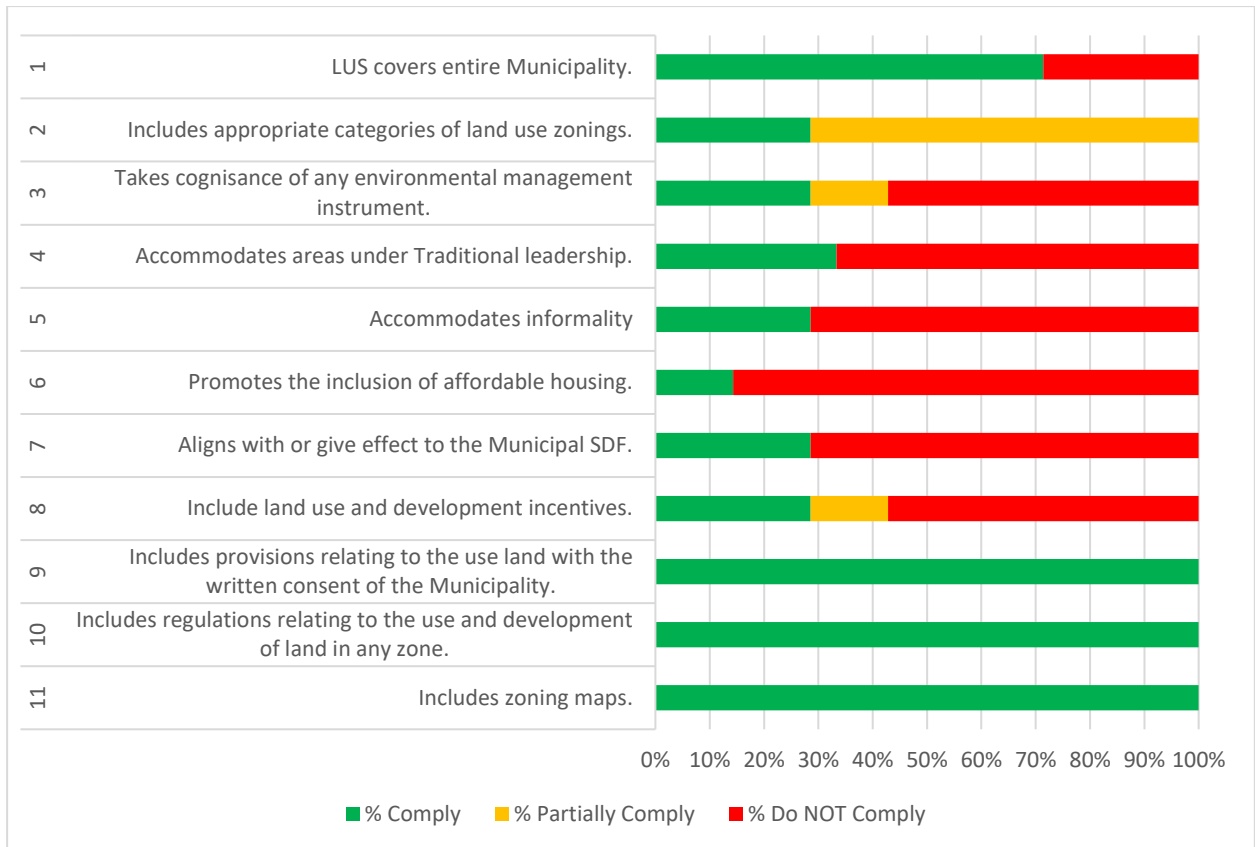


Figure 4.1: Percentage of Municipalities analysed that comply with the requirements of SPLUMA

Source: Own construction (2018)

It is clear that most of the selected Municipalities struggle to come to grips with informality as well as incorporating Traditional Authorities into its land use schemes. There is also little proof of alignment between the SDF and the LUS of the Municipalities, despite the fact that Municipalities have had more than 5 years (since the promulgation of SPLUMA) to address these issues. There is some guidance from the Department of Rural Development and Land Reform who published guidelines in 2017 to assist Municipalities in the drafting of Schemes.

Most of the Schemes analysed seem to address agriculture in the same manner, through a blanket zoning “agriculture”. Expert inputs from Department of Agriculture (section 3.5.2) indicate that more detail is required to ensure adequate protection of South Africa’s agricultural resources. Similarly, Schemes ignore environmentally sensitive areas that are not officially declared as Conservation Areas or Nature Reserves. Closer alignment between the LUS and Environmental Management Frameworks (Municipal or District level) can lead to better protection of these sensitive areas.

There is a real danger that Municipalities will interpret the requirements of SPLUMA in a “business as usual” approach. In some instances, compulsory requirements for a LUS were ignored completely or only addressed in a perfunctory manner. This could highlight a lack of skills and insight at Municipal level (South African Cities Network, 2015:40) (or even at Private sector who are often contracted to compile Municipal LUS). To adequately address these gaps in a manner consistent with SPLUMA will require innovation as well as collaboration between Municipalities and Sector Departments (e.g. Department of Agriculture).

Expert interviews provided the following considerations than can assist Municipalities with addressing gaps in their land use schemes:

Table 4.1: Summary of lessons learned from expert interviews

SPLUMA Requirement	Theme	Input
Includes appropriate categories of land use zonings.	Mining	<ul style="list-style-type: none"> • Mining activities typically happen in the rural components of municipalities and have to date mostly been excluded from land use schemes. • Many municipalities now include areas where mining activities have been exercised legally for many years. SPLUMA requires the development of land use schemes that cover the entire area of jurisdiction of these municipalities – therefore mining must be accommodated in some form or other. • Include “mining” as a type of zoning with primary and secondary rights NOT as a right under another zoning such as industrial. • Municipalities cannot “force” existing legal mines to “re-zone”. Rather the existing legal mines should be included in the scheme at the time of compilation. • Schemes can be used to protect limited mineral resources.
Includes appropriate categories of land use zonings / Takes cognisance of any environmental management instrument.	Agriculture	<ul style="list-style-type: none"> • The Minister responsible for Agriculture needs to give consent to any land use scheme that affects “agricultural” land. • Activities related to the subdivision, selling, leasing or using agricultural land requires the input of the Department of Agriculture. • When compiling a Scheme, involve the Department of Agriculture in order to identify areas of high agricultural potential as well as measures design to protect such land in the Scheme. • Consider more than one type of agricultural zoning.

<p>Accommodates areas under Traditional leadership.</p>	<p>Traditional Leadership Areas</p>	<ul style="list-style-type: none"> • Traditional Authorities have never been included in Municipal land use schemes. • Land in Traditional Authority Areas are not surveyed, therefore maps indicating the extent of each property together with a stand number are not available. • Introducing SPLUMA to Traditional Authorities raises the issue of land tenure. Traditional Leaders interviewed are vehemently opposed to individual ownership of land (which would mean the survey of each property and issuing of title deeds to individuals). • All traditional leaders understand the need for land use management. Practical examples of this include houses built inside the 1:100-year flood line as well as liquor stores or taverns built opposite schools • Traditional Leaders expressed their willingness to co-operate in the process of including traditional villages in a Municipal land use scheme but expressed concern over the fact that as Traditional Leaders, they were excluded from taking land use decisions (in terms of SPLUMA Traditional Leaders cannot form part of a Municipal Planning Tribunal).
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Source: Own construction (2018)

4.5 Best practices and alternative forms of zoning

Can best local best practises or even alternative forms of zoning guide land use planning in South Africa?

Section 2.6.1 indicated that many alternatives to single-use zoning exist. The case studies have indicated that, at best, use is made of overlay zones to include policies (such as incentives or to manage urban sprawl used by City of cape Town). Govan Mbeki Municipality has shown remarkable innovation in deviating from a typical land use scheme and can be used as case study on how to achieve alignment between the SDF and LUS through alternative zoning methods. Based on these conclusions, the following chapter proposed planning recommendations for future land use management.

CHAPTER 5: RECOMMENDATIONS

5.1 Introduction

The current approach to compiling land use schemes was evaluated throughout this research, against the background of the new SPLUMA requirements. In the previous chapter, it was concluded that gaps exist in current Municipal land use schemes that imply that Municipalities are non-compliant with the new legislative framework. The following recommendations are proposed to assist Municipalities over the long term to come to grips with the requirements imposed by SPLUMA.

5.2 Land use planning theory should be better aligned to practise

There is a general lack of skills and knowledge regarding in practise relating to the application of planning theory in the compilation of land use schemes. Old Town Planning Schemes were designed years or decades ago and some hardly ever reviewed. With the SPLUMA deadline of five years for the compilation of new land use schemes, there seems to a tendency of merely extending the existing Scheme to the entire municipality. This is definitely not the preferred situation. Rather, municipal planning practitioners should re-visit planning theory and review the entirety of the land use scheme, not for the sake of complying with legislation, but rather to ensure that Schemes are based on sound planning theory.

5.3 Gaps of existing Town Planning Schemes in relation to SPLUMA requirements should be identified and addressed

The requirements for Schemes that SPLUMA introduced are meant to achieve the objectives of the Act, which includes (among other) spatial justice, sustainability and resilience. Municipalities that do not identify and address gaps in their existing Town Planning Schemes not only risk non-compliance with the law, but also not achieving the stated objectives of the Act. Cities and Towns will not be spatially transformed if informality is not included in the land use scheme. Limited agricultural, environmental and mineral resources won't be protected if these are not included in the Scheme and protected in some manner. Furthermore, Spatial Development Framework will not be implemented if Municipalities cannot find some way of ensuring the link between the SDF and the land use scheme. Of particular concern is the complete lack of land use management in Traditional Authority Areas which accommodates 27% of South African households. There is a limited understanding among municipalities on how to overcome this huge challenge. It is, however, important that Municipalities at least start with this process and then refine over year to

come. The following methodology can assist municipalities with a “first attempt” of introducing land use management to Traditional Authorities.

Step 1. Start participation early


Typically, communities are consulted when there is a draft land use scheme or proposals on the table. With Traditional authorities this is too late. Notice should be given the Traditional councils that the Municipality is intending to compile a land use scheme. This could, inevitably open a can of worms related to the implementation of SPLUMA in these areas. The following proposals could assist in this process:

- Explain the purpose and benefits of land use management;
- Relay to the community the purpose and benefits of the process and that there is a need for a Scheme to be put in place with respect to services which can be provided once there is clarity on future land uses within the area;
- When the debate about land tenure comes up – emphasise that the purpose of the land use Scheme is to manage land uses, NOT ownership; and
- Emphasize that Traditional authorities are a partner to Municipalities in this instance – the aim is to incrementally incorporate Traditional and customary practises into the Municipal land use scheme.
- Explain that in terms of SPLUMA, the final decision making authority on land use matters is the municipality (though the municipal planning tribunal or land development officer). Within traditional authority areas, however, the decision making authority should consult with the traditional leadership and community before and after exercising such as decision.

Step 2. It all starts with a land use map

Mention was made in section 3.5.3 of the fact that old town planning schemes always attached a land use right to a surveyed cadastral entity. This cannot apply to Traditional villages. The solution is to create a map based on the actual use of the land – whether it has been surveyed or not. The methodology below summarises this process.

Table 5.1: Methodology to compile Land Use Maps for Traditional Authorities

	<p>Step 2.1. Aerial photos or satellite imagery</p> <p>In the absence of a proper base map – start by obtaining aerial photos of the Municipality from the following sources:</p> <ul style="list-style-type: none">• The Municipal GIS. Do not commission new aerial photography if not available from the Municipality – this is vastly expensive.• Department of Rural Development and Land Reform – National Geospatial Information (NGI) with offices in Cape Town or Pretoria.• GIS online sources such as BING, Google Earth, SA 50cm Colour Imagery (ArcGIS Online) etc.• Others. <p>The intention is to capture data in a GIS using the image as a backdrop. The date of the image may be an issue – but it will serve as starting point.</p>
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Step 2.2. Boundaries and names

- Use the StatsSA Census Subplaces (available from StatsSA – Census 2011) as base for the boundaries of the villages.
- Areas under consideration needs to be aligned with the area of a specific Traditional leader (or leaders) to avoid conflict. In some instances,
- Update the village boundary using the aerial photo. The village would probably have grown since 2011.
- Note that the name of the village is very important and often the local name differs in spelling from that recorded by StatsSA. Liaise with the Municipality to get the correct spelling.

Village names can also be corrected during the community participation phase.



Step 2.3. Incorporate linear data

- Incorporate linear data such as rivers and streams (from the 1:50 000 Topo datasets from NGI) and roads onto the base map.
- Roads data is available from NGI but can also be purchased from commercial data vendors such as TomTom.
- Use a GIS to buffer the roads dataset (measure the road and reserve on the photo and apply these distances, alternatively use township layout principals).

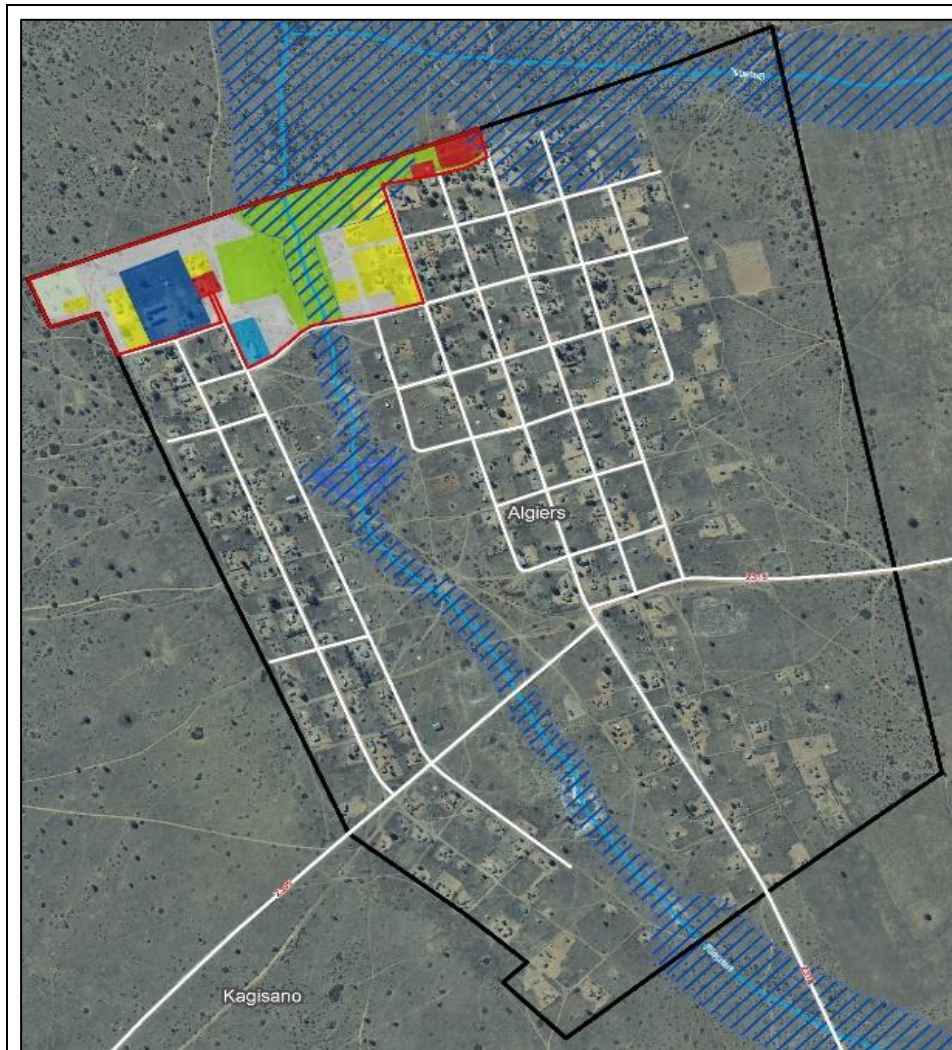
Overlay these buffers with the village boundary to create a set of street block polygons.



Step 2.4. Capture land uses or do a land use survey

- Use point data from various government departments to start the land use data capture process (desktop). These sources can include:
 - National and Provincial Dept.'s such as Health, Education, SAPS etc.
 - Eskom SPOT Building Count
 - StatsSA Dwelling Frame
 - Municipal asset registers
 - Commercial data vendors such as GeoTerralimage.
- Align land uses with the National Land Use Classification System discussed earlier (where possible).
- Note that land which may appear to be vacant on an aerial photo may in fact be used for some form of agriculture or more importantly grazing.

Schedule 2 of SPLUMA can also be used to indicate land use purposes on the land use map.



Step 2.5. Dealing with hydrology

- Where possible (and where available) incorporate actual 1:100 or 1:50 year flood lines. This data may, however, not be available. In the absence of flood line data, use the water features from earlier steps and apply the following simple modelling technique to indicate possible flood areas¹:
 - 30m buffer from the edge of the temporary zone of wetlands
 - 100m buffer from the banks of rivers/streams outside built up areas
 - 32m buffer from the banks of rivers/streams within built up areas

These buffers can be indicated as Public Open Space, agriculture or grazing depending on the actual use thereof.

¹ Department of Agriculture, Conservation and Environment - GDACE requirements for Biodiversity Assessments Version 2



Step 2.6. Finalise land use map

- Using the above methodology, finalise capturing and grouping land uses for the entire village.
- Once this draft land use map has been completed, verify the land use map by means of fieldwork. The aim of fieldwork is as follows:
 - Verify that the land use on the map is in fact the actual land use.
 - Unpack into more detail certain land uses e.g. a business land use can in fact be a general dealer, or a tavern, or a shop – each with different management characteristics.

Source: Own construction (2018)

Step 3. Community participation – understanding land uses

The next step in the process deals with understanding local land uses and its implications. To this end, it is proposed that meetings are held with Chiefs and the community to discuss the land use maps. Specific attention should be paid to the following:

- Discuss each group of land uses, understand the land use and try and derive specific management characteristics. A tavern for example, requires a liquor license and sells alcohol. This use should not be located close to community facilities such as schools, crèches clinics etc. Row houses, which occurs in Northwest province can include rooms for hire – and may have specific design considerations when dealing with infrastructure such as sanitation.
- Derive development controls for land uses, e.g. should land uses be subject to height restrictions or coverage or building lines etc.
- Determine environmental issues – such as overgrazing of riverbeds, sand mining for brick in riverbeds dumping etc.
- Determine the growth direction of the village, and where new residential development should be allocated (don't forget to discuss infill development).
- Determine the average stand size.
- Determine land uses with nuisance characteristics e.g. noise, pollution etc.

Step 4. Formulate Scheme Maps

From the consultation process, it should emerge which land uses within the village should be managed as well as the extent of the management intervention required. Before Scheme maps are formulated, as far as possible, these should be formulated as land use rules e.g.:

- do not allocate residential or business land within the Public Open Space system and environmentally sensitive areas;
- do not allocate land for tavern within a street block of community facilities;
- allocate land for business close to existing nodes in the area;
- protect areas used for agriculture and grazing;

These land use rules can be included on the Scheme maps as well as developed further as specific policies to be included in the land use scheme clauses. With this done, land use scheme maps for every village can be developed. Note that it would be preferable to develop one such as map for every village, to be mounted at the Traditional Council Offices in order to serve as guideline for the allocation of land. Consider therefore a practical size and material to use for the maps (as well as the associated costs).

Note that the draft maps, land use rules and where applicable, policies that were developed must once again be workshopped with the Traditional leaders before finalised.

5.4 Alternative forms of zoning should be considered

All the land use schemes analysed still made use of single-use zoning (although some municipalities have augmented this with overlay zones). In many instances this is considered “old school” thinking. Single-use zoning still propagates the separation of different land uses – this in an era where the term “mixed-use” can be found in almost any Spatial Development Framework.

5.5 Training and capacity building should be emphasised

There is a distinct gap between planning theory and the implementation thereof in land use schemes. In many instances, Municipal Land Use practitioners find themselves unable to abide by the requirements of the brand-new legislative frameworks. New approaches to zoning seem to require additional skills that may not exist at Municipal level and may require research and dissemination of these practises through the Department of Rural Development and Land Reform (DRDLR) (tasked with the implementation of SPLUMA), Departments of Cooperative Governance and Traditional Affairs (COGTA) at national and provincial level, South Africa Local Government Association (SALGA) the South African Council for Planners (SACPLAN). In addition, there are few guideline documents or training manuals to assist Municipalities with the new requirements of SPLUMA. The following themes for capacity building are recommended:

Table 5.2: Recommendations for capacity building and skills transfer

Responsible organisation	Area of intervention	Potential outcomes
Department of Agriculture forestry and fisheries (DAFF).	The development of Geographic Information System datasets that indicate areas of critical agricultural importance (see section 3.5.2). These datasets should be distributed to all Municipalities to use in the compilation of their Municipal land use schemes.	Inclusion of areas of agricultural importance that must be protected in the Municipal land use scheme.
	The development of concept zonings and scheme clauses stipulating the land use constraints and requirements applicable to areas of agricultural importance.	Scheme clauses and zonings that can be incorporated into Municipal land use schemes.
Universities, SACPLAN.	The development of detailed training material on alternative forms of zoning and how this could impact South African land use schemes. Part of this could also be a twinning agreement with Municipalities and Cities in other countries who has successfully implemented alternative forms of zoning in their respective land use schemes. SACPLAN could potentially host a round of country wide workshops aimed at disseminating this knowledge to Municipal Planning Practitioners.	An increase in the skills base of South African planners which should filter through and result in innovative approaches to land use schemes in order to achieve the aims of SPLUMA.
SALGA / COGTA/ DRDLR	An assessment of all existing Municipal land use schemes with a gap analysis using a similar compliance template developed in section 3.2.	A Municipal compliance template for each Municipality in the country clearly indicating which aspects of SPLUMA the land use

		scheme is NOT complying with.
	Conduct provincial and district wide training workshops to highlight the requirements of SPLUMA, to identify GAPS in existing land use schemes and provide guidance and training on how to address these gaps.	Capacitated officials with skills required to address gaps and deficiencies in their respective land use schemes.
South African Chamber of Mines, Department of Mineral Resources	The development of detailed training material on how to accommodate mining in land use schemes.	Capacitated officials equipped with skills to include mining in a Municipal land use scheme.

Source: Own construction (2018)

5.6 Contribution of new knowledge to be considered in spatial planning approaches

This research reflected on SPLUMA requirements and the implications thereof for municipalities in South Africa. This research contributed to new knowledge that could be beneficial to the planning profession and guide spatial planning and land use management approaches going forward. These contributions include:

- Contextualising the current approach to land use management in South Africa
- Identifying the challenges associated with the current approaches and new SPLUMA requirements
- Identifying the SPLUMA requirements and gaps that need to be addressed
- Evaluating current Schemes against the SPLUMA requirements based on a compliance template
- Capturing expert perspectives regarding land use management in South Africa
- Proposing a way forward for land use management approaches in South Africa

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