Chapter 6
A Policy Framework for Sustainable Utilisation of Farmland for the Waterberg District Municipality in South Africa

Charles Nhemachena, James Chakwizira, Mac Mashiri and Sipho Dube

Abstract This study crafts a policy framework for sustainable utilisation of farmland for the Waterberg District Municipality in South Africa. The district, being predominantly agricultural and rural, faces contention in terms of land allocation for traditional agricultural land uses versus contemporary uses such as golf courses, game ranching and holiday accommodation/lodges. The situation was exacerbated by the fact that these challenges were besetting the district at a time when it did not have a policy for sustainable land use. Fully cognisant of this shortcoming, the municipality decided to generate a policy framework for sustainable utilisation of farmland. The approach entailed a participatory situational analysis identifying all land zones for agricultural purposes in the district and prime agricultural land as well as environmentally sensitive areas. In addition, the policy environment governing the development of agricultural land was thoroughly assessed to ensure compliance, consistency and alignment of the policy with the provincial and national policies. The outcome is a policy framework expected to facilitate, guide and influence the sustainable subdivision of farmland taking into account the realities of the existence of competing needs for agricultural land use. The policy framework clearly shows specific areas that may and may not subdivide further, with reasons. Also, it presents a set of guidelines and minimum requirements, to inform decision-making regarding subdivision proposals.

Keywords Land policy • Sustainable • Farmland • Waterberg • South Africa

C. Nhemachena (✉)
Council for Scientific and Industrial Research (CSIR) Built Environment Unit,
P.O. Box 395, Pretoria 0001, South Africa
e-mail: cnhemachena@csir.co.za
e-mail: nhemachenacharles@yahoo.co.uk

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6.1 Introduction and Background

"Land is an asset. Land is scarce. Land is fragile." These statements reflect the basic relationships of humankind with land: social, economic and environmental. Humanity's association with land springs from the enduring nature of land: it is the basis of food, shelter and livelihoods (Ministry of Agriculture and Land Affairs 2001). It is no exaggeration to say that sustainable utilisation of land resources is pivotal to the economic, social and environmental future of the economy. Furthermore, high potential and unique agricultural land is likely a non-renewable asset, and its preservation is fundamental to achieving sustainable resource management, including sustainable use of agricultural land (Department of Agriculture 2006).

An increasing trend of subdividing productive agricultural land in the Waterberg District Municipality (WDM) has been witnessed in recent years. Most of the subdivisions have been executed without public interest, participation and assessment of the costs and benefits leaving the district with little productive land for agricultural development (Waterberg District Municipality 2008a). In a bid to promote balanced sustainable development, WDM resolved that generating a policy framework to guide the subdivision of agricultural land was necessary. Such a policy framework would further assist the district and local municipalities in developing by-laws vital in executing the intentions of each municipality's respective relevant land use schemes.

The overarching strategic policy objectives and rationale for the study and development of a policy framework for sustainable utilisation of farmland in the Waterberg District Municipality were to: (a) preserve agricultural land in WDM as enshrined in the Subdivision of Agricultural Land Act (1970) (Act No 70 of 1970), the Conservation of Agricultural Resources Act (1983) (Act No 43 of 1983) and Department of Agriculture (2006) National Policy on the Preservation of High Potential and Unique Agricultural Land and; (b) provide guidelines relating to norms and standards applicable in the adjudication of applications for: subdivision of agricultural land, change of agricultural land, and rezoning and conversion of agricultural land.

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6.2 Conceptual Framework

Many human cultures have lived in harmony with diverse agro-ecological environments for centuries (Pontius and Schneider 2001; Perman et al. 2003). Many others have incidentally failed to live in harmony with the mundane agro-ecological environments, resulting in such problems as loss of biodiversity, climate change, food shortages, hunger, starvation, poverty, inequality, drainage or severe impact of wetlands, and soil erosion throughout the world (Parmesan and Yohe 2003; Leemans and Eickhout 2004; Rong and Futian 2007). Conservation of environments, habitats, ecosystems and wetlands needs to be a priority given the governance of cultural and ecological values enshrined and protected (Altieri 1999; Knill and Lenshow 2000; Moss 2004). But a more optimistic note is that large-scale restoration and recreation of habitats, ecosystems, wetlands and riverine systems is beginning to happen throughout the world through ecological engineering and diversified economic pathways opportunities (Dasgupta et al. 2000; Rabalais et al. 2002).

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One of the requirements of sustainable utilisation of resources is the efficiency of intergenerational allocation that is important to the long-term utilisation of resources (Rong and Futian 2007). Marsden et al. (2001) argues for the need to reconstitute nature through rural development practices by way of realignment of social theory and empirical practice in considering the real potentiality of alternative and emergent rural development cases.

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Ellis and Boggs (2001) argue that if a new paradigm of rural development is to emerge, it will be one in which agriculture takes place along with a host of other actual and potential rural and non-rural activities that are important to the construction of viable rural livelihoods, without undue preference being given to farming as the unique solution to rural poverty (Bilsborrow and Ogendo 1992; Kline and Ralph 1999; Kohler 2000). This paper focuses on a multi-disciplinary approach to addressing sustainable utilisation of farmland in the Waterberg District Municipality.

6.3 Study Area

The WDM (Fig. 6.1) is located in the western section of the Limpopo Province sharing the provincial border with Botswana. Within the province, Waterberg shares its borders with Capricorn and Sekhukhune District Municipalities. The southern boundary of the district abuts Northwest Province and Gauteng Province.

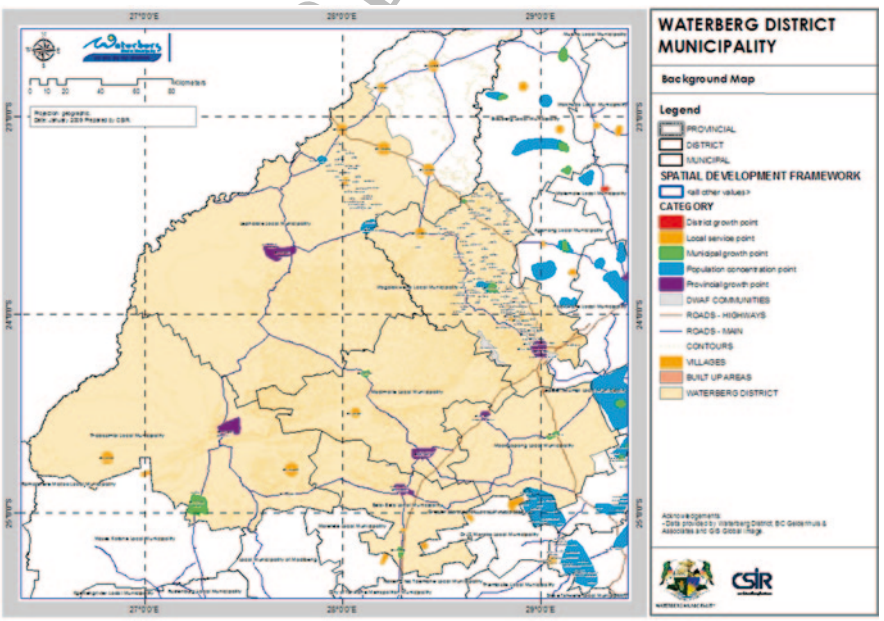

Fig. 6.1 Background map of the Waterberg District Municipality

Waterberg District consists of six local municipalities: Bela-Bela, Modimolle, Mogalakwena, Mookgopong, Lephalale and Thabazimbi. Compared with the rest of the province, Waterberg is unique as it encompasses little former homeland area and has an internationally acclaimed biosphere making up 15% of its total area. This creates its own set of challenges and opportunities. Waterberg consists mainly of commercial farms, game farming and only approximately 0.54% of the total area is used for settlement purposes (both towns and villages) (Waterberg District Municipality 2008a; Waterberg Spatial Development Framework-SDF 2009).

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6.4 Study Methodology

The process of drafting the Waterberg District land policy framework was conducted through official consultation and stakeholder participation at all levels of the political economy impacting and impacted by WDM. A broad consensus emerged not only on the need for urgency in policy development but also on the critical issues that process should address. A number of sequential processes were adopted and satisfied. These entailed a comprehensive review of available literature (existing agricultural reports, Integrated Development Plans (IDPs), Spatial Development Frameworks (SDFs), legislative documents), preparation and revision of several drafts, discussion of drafts with civil society groups, the private sector, owners and users of land and various government agencies (Nhemachena et al. 2009a). The penultimate version of the policy was presented to a District Planning Forum before transmission of the final draft to the District for approval. Figure 6.2 is a graphical representation of the study methodology.

6.5 Results and Discussion

6.5.1 Situational Analysis of the Agricultural and Related Environment

This section presents the major highlights of results from the situational analysis of the agricultural and environment of WDM (Nhemachena et al. 2009a).

Legislative framework The generated policy framework recognises the existence of other legislations that have a direct or an indirect bearing on the access to and utilisation of agricultural land, including, but not limited to: Development Facilitation Act (1995) (Act 67 of 1995); National Environmental Management Act (1998) (Act 107 of 1998); Local Government Municipal Systems Act (2000) (Act 32 of 2000); Land Use Management Bill (2004); National Policy on the Preservation of High Potential and Unique Agricultural Land 2006 and various provincial ordinances. The study confirmed the findings of the National Policy

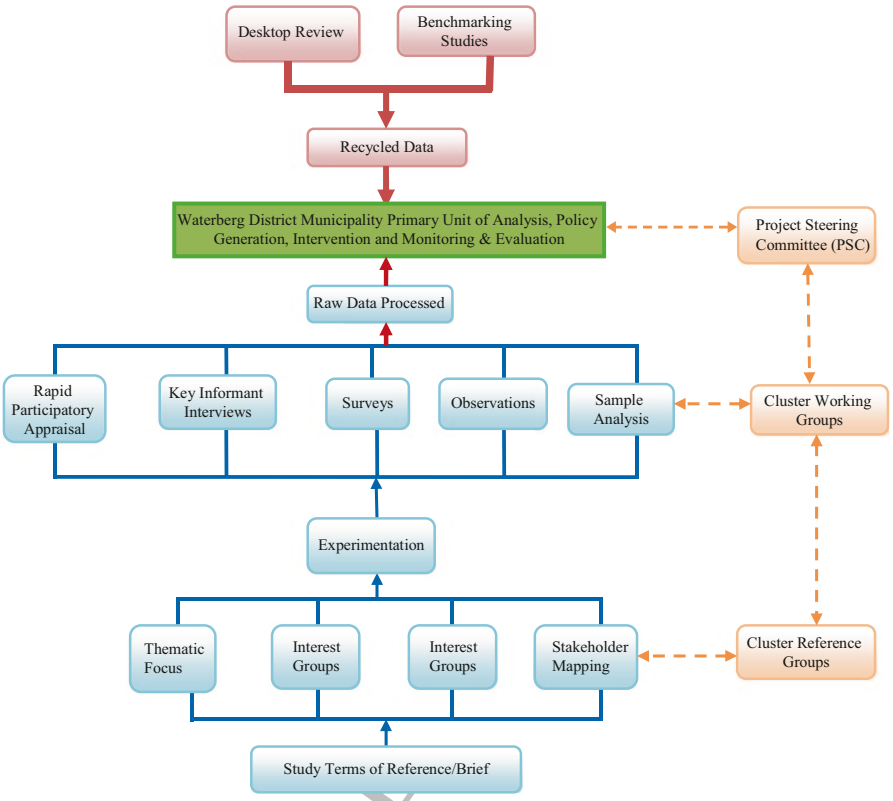

Fig. 6.2 Study methodology

on the Preservation of High Potential and Unique Agricultural Land (Department of Agriculture 2006) including a summary of some of the legislative and administrative flaws that emerged in the administration and implementation of the Subdivision of Agricultural Act (1970) (Act 70 of 1970). These are summarised in Table 6.1.

Importance of land policy for agricultural land use management and development The WDM land policy framework for agricultural land-use management is guided by two main underlying rationales. Firstly, there is the widely perceived resistance to the idea of uncontrolled agricultural land development. Secondly, there is the commonly expressed preference in particular sectors of society to promote a healthy mix of various types of desirable agricultural land development, urban development and meeting the requirements of sustainable environments (Ministry of Agriculture and Land Affairs 2001). The *resistance to uncontrolled development* is motivated by a number of concerns, the precise mix of which is determined by the particular social, economic and political contexts of different times and places. Some of the reasons include the ones summarised in Table 6.2. Also, the *wish to*

Table 6.1 Sustainable utilisation of agricultural land gaps and shortcomings

Physical and spatial bottlenecks	Agricultural impediments	Legislative constraints	Political challenges
Inadequate and inappropriate control, protection and regulation of the available high potential and unique agricultural land Absence of uniform guidelines for use by local authorities in the development and review of their SDFs and IDPs Increase in the proliferation of land use changes, rezoning and subdivision of agricultural land which take place without approval	Absence of refined agricultural subdivision norms and standards to appropriately guide decision-making on agricultural land use related matters	Fragmentation and multiple statues applicable to agricultural land make planning, management and sustainability of the sector a challenging task A number of land use related legislations (e.g. Development Facilitation Act (DFA), Draft LUMN, etc.) which are administered by other departments and/or spheres of government, place a direct and indirect demand on agricultural land for non-agricultural development	Adjudication over land development applications on agricultural land is not uniform and consistent at all levels of decision-making

Table 6.2 Reasons for controlling agricultural land use and development

Environmental concerns	Efficiency of infrastructure provision and traffic management	Social control	Health and safety concerns	Aesthetic concerns
Uncontrolled development of agricultural land can have adverse effects on natural habitats, cultural landscapes, and air and water quality	Infrastructure capacity constraints presented in a context where development permits are granted without assessing critically the capacity of existing infrastructure to accommodate the new developments The concomitant challenge regarding infrastructure that is provided, generally at high financial cost, without taking into account the opportunity cost of these new developments in terms of the societal impact on land-use and settlement patterns for example	Controlling agricultural land uses and building types has long been a means of exerting social control, particularly through the exclusion of certain types of person, household or economic activity from certain areas through the application of particular development controls limiting, for instance, plot sizes, plot coverage and home industries	Uncontrolled development can lead to overcrowding and unsafe building construction Certain agricultural land use and development decisions can also be detrimental to the health and safety of neighbours	Controlling and regulating agricultural land development enables the district to prescribe certain design parameters for buildings

promote desirable development is driven by a number of different concerns that relate mainly to land management and development.

Subdivision of productive agricultural land has become a trend in recent years Most of the land and agricultural subdivisions have been executed in the absence of clear guiding principles and regulations (Waterberg District Municipality 2008a). Consequently, land and subdivision suitability assessments criteria including auditing the public and environmental benefits and costs of proposed land and subdivision developments have been in most cases not considered at all.

The distribution and demography of the population has implications for land and agricultural use policy and decisions In the study area, such densely populated areas as Mogalakwena exert pressure for the provision of engineering services and socio-economic developments to meet the growing needs and demands of such spatial areas. Twenty percent of all people in the district area reside on farms; 39% in formal towns; 2% in informal settlements and 39% in tribal areas (Waterberg District Municipality 2008a; Mogalakwena Local Municipality 2008). Pro-active and strategic forward planning of regulation, managing and sustaining the competing and often conflicting land and agriculture development interests is therefore a vital component of the growth and development trajectory in the district.

Agriculture profile of the district and continued dependence on food imports despite the inherent local agricultural production potential Despite the high agricultural production potential, agriculture continues to contribute only 3.6% towards the economy of WDM (Waterberg District Municipality 2005, 2007, 2008a; Waterberg SDF 2009). Many local municipalities in the district continue to import agricultural products outside their boundaries despite this potential, perhaps a worrisome trend and cause for concern. This trend is probably explained by a combination of factors some enumerated in the Waterberg IDP (Waterberg District Municipality 2008a). These range from generally low levels of development in the area that is manifested in terms of high levels of poverty. In addition, poor land and agriculture infrastructural development further inhibits the growth and development potential. This may suggest strongly that potential and emerging farmers have limited access to resources necessary for enhanced production.

Relative importance of land and agriculture in local economic growth and development Although agricultural development is not as dominant in terms of its contribution to the Gross Value Added of the region, it remains a critical base for livelihood sustenance of the majority of the people especially from the previously disadvantaged sections of the society (Waterberg District Municipality 2005). Also, land and agriculture forms an integral backbone for providing basic infrastructure, facilities and amenities that support and promote eco-tourism (incidentally a vital component of the district economy; Waterberg District Municipality 2005, 2007, 2008a, b).

Soil potential and land capability assessment indicates that high potential areas for crop farming are limited Ranching potential, however, is widespread and conservation outside the proclaimed nature reserves is limited to eco-tourism activities on

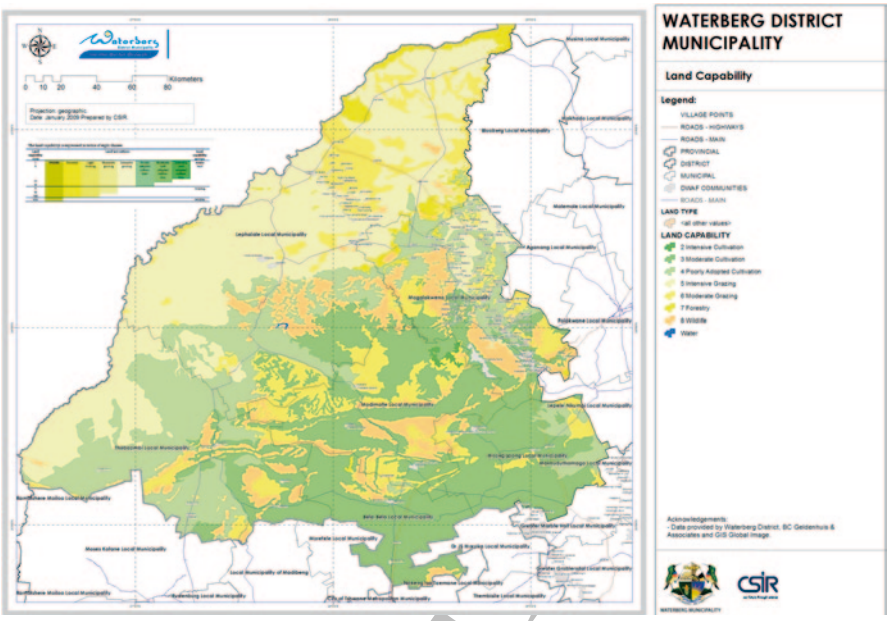

Fig. 6.3 Land capability map

commercial farms. The scope for maximising on this opportunity should be tapped. Figure 6.3 presents a land capability map for WDM.

Land reform issues Within WDM land reform issues encompass a complex array of challenges located within the sphere of land access, land tenure, land restitution (land claims) and land administration. The key challenge for the district in the land reform process is to effectively deal with the injustices of land dispossession, equitable land distribution in terms of ownership, reduction of poverty and economic growth, tenure security as well as a system of land management which will support sustainable land use patterns. Land restitution and land redistribution of which the potential impact is yet unknown could alter the spatial pattern and land needed for various macro land uses (e.g. settlement development, agricultural development, mining, conservation areas) enormously.

Based on the situational analysis (Nhemachena et al. 2009a) and stakeholder engagements, one could postulate that the land restitution process could potentially witness many people obtaining access to land that could result in improved living standards and quality of life (provided adequate training and support systems are established for the programme). At the same time, the land restitution process could unfortunately result in large-scale sterilisation of economically productive land (e.g. including high potential agricultural land, mining of certain minerals, and nature conservation areas) if not managed and planned within the context of a spatial development framework, land and agricultural subdivision policy framework and guidelines that considers all these factors. Land claims are mainly concentrated

in the Mogalakwena and Lephalale Local Municipalities. These are also the areas with the highest population densities and as indicated earlier this emanates from the historical background of the areas (Waterberg District Municipality 2008b).

Environmentally sensitive areas Several areas in Waterberg have been identified as habitats of rare and threatened animal and plants species. These areas largely coincide with the biosphere reserve and existing conservation areas. These areas are highly vulnerable to the large-scale disturbances of mining and urban activities (Waterberg District Municipality 2008a, b). Ring fencing and sterilising these areas to land and agriculture subdivision is necessary with exploitation permitted under special consent.

The Waterberg Biosphere Reserve (Fig. 6.4) constitutes an environmentally unique area that might be negatively affected by human activities that physically change the environment. The Waterberg Biosphere Reserve established in 2001 is one of the only five biospheres in South Africa. The biosphere consists of three distinct zones: the biosphere core (114,571 ha); the buffer zone (150,000 ha) and a transition zone (15,0000 ha). The core area constitutes proclaimed nature reserves with the buffer and transition zones filling the areas in between (Waterberg District Municipality 2008a, b).

The biosphere is sensitive to urban, rural and mining activities but provides opportunities for ranching and conservation activities (Waterberg District Municipality 2008a; Waterberg SDF 2009). It is critical that any developments in and around

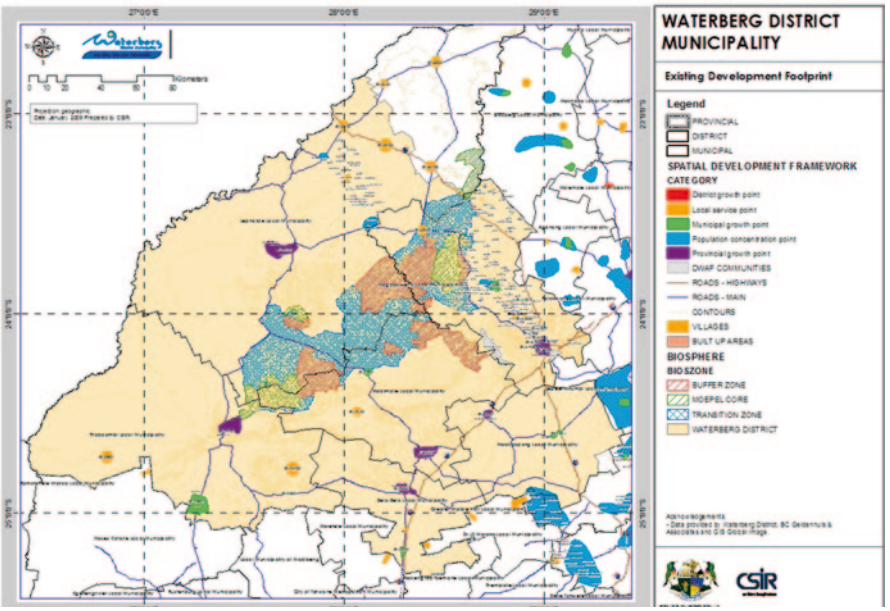

Fig. 6.4 The Waterberg biosphere reserve

Table 6.3 Departure points for land and agriculture subdivision policy framework development

Achieving the right mix of development	Food security and household productivity	Farmer productivity strengthening model
Development proposals should aim to achieve the correct balance between economic development, sustainable resource use and protection of natural resources	High potential agricultural land irrespective of existing use (i.e. whether it is cash crop farming or not) should be protected against future agriculture productivity sterilization from settlement development or any alternative land uses Township development at existing nodes (including future proposed nodes) should take full cognisance and be sensitive to high potential agricultural land Household food production is seen as a means of improving food security and fighting poverty through utilising agricultural resources within the vicinity of communities	Commercial agriculture contributes significantly to the district's economy and requires interventions, which create an enabling environment in which both established farmers and emerging commercial farmers can thrive and develop Improved institutional coordination of activities, interventions, programmes and projects is a key issue for improved delivery and successful development of the agriculture sector in the Waterberg District Municipality

the biosphere clearly distinguish high conservation potential areas, middle conservation areas and development nodes, e.g. in transitional zones. In addition, the density of developments that should be allowed across the biosphere need to be clearly identified and set out to ensure that environmentally sensitive and conservation areas are protected.

Departure points for land and agriculture subdivision policy directions Based on existing land and agriculture document analysis and reviews (Nhemachena et al. 2009a), fieldwork observation and measurements, geographical information systems analysis (including climatic, soil, hydrological, physical, and geological analysis), it is argued that it is imperative to have a land and agriculture subdivision policy for sustainable utilisation of agricultural and farmland in WDM. The policy framework departure points are summarised in Table 6.3.

6.5.2 Policy Framework Issues and Guidelines

The decisions of planning authorities, whether related to the formulation of plans such as IDPs or the consideration of land development applications, must all be consistent with the vision, objectives, principles, norms and standards as developed and generated in the sustainable utilisation of farmland policy document (Nhemachena et al. 2009b). The sustainable utilisation of farmland policy objectives, principles and norms and highlight of specific policy position is summarised in Table 6.4.

Table 6.4 Sample representation of some issues tackled by the sustainable utilisation of farmland policy in Waterberg District

Strategic vision				
To effectively, efficiently and continuously promote and sustain the long term future development, use and management of agriculture farmland, biosphere, mining and human settlements in the district				
Policy objectives				
Ensure that high potential and unique agricultural land is used primarily for agricultural purposes to enhance food security	Provide user friendly guidelines for agricultural land use changes as well as subdivision of agricultural land	Regulate and control access to agricultural land by proponents of non-agricultural development	Preserve agricultural land resources for the benefit of communities whose livelihood is based on agriculture for: income generation, food security, job opportunities and better quality of life	Promote knowledge and enhance skills transfer amongst stakeholders on matters pertinent to land use planning in general and preservation of agricultural land in particular
Principles, norms and standards				
Sustainability	Equality	Efficiency	Fairness	Good governance
Broad strategic policy intervention levers and areas				
Providing a definition of agriculture and farmland use that distinguishes agriculture land uses and activities from non-agricultural land uses and activities in WDM including defining what a farm unit is	Balancing environmental protection, agricultural exploitation needs with growth and development concerns in WDM	Generating specific types/classes of agricultural commercial and industrial uses (including farm-related industries) that are freely permitted in agricultural and farm lands in WDM, lodges, etc	Promoting balanced and sustainable environmental development, management of the natural environment and the biosphere in WDM	Guidance and direction in terms of the provision and delivery of community facilities and infrastructure in agricultural and farmland communities and areas
				Outlining development and provision of holiday accommodation on farmlands and agricultural areas guideline

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Table 6.4 (continued)

Example of specific provision to address the broad strategic policy intervention levers and areas: providing a definition of agriculture and farmland use that distinguishes agriculture land uses and activities from non-agricultural land uses and activities in WDM including defining what a farm unit is

Inclusive definition of agriculture and farmland use/activities accommodative of all farming types such as: industrial and commercial activities which are primarily related to agriculture, natural features that enhance the area for agriculture and ecosystem health and sustainable agricultural practices that promote a healthy environment has been incorporated	The farm unit should consists of: land base, barns and other buildings that support the farm operation, farm dwelling and temporary dwellings required for additional labour or for a retiring farmer	One residence/dwelling unit may be built on the agricultural farm premises where it is an accessory to a commercial scale farming operation	A second permanent dwelling on a farm or on a separated lot will not be permitted. Two additional units may be allowed at a density of 1 unit per 10 ha that could be used for guest accommodation. Clustering of buildings should be regarded as a high priority	Agri-villages establishment will be supported if it is in support of agricultural production and providing security of tenure to farm workers. The criteria that should be used in evaluating agri-village applications should include but not be restricted to the following: • Why farm worker housing cannot be provided in an urban area, before an agri-village can be established outside of existing nodes. • Agri-villages must be identified as a node in SDF. • Agri-villages should be within walking distance (less than 2 km). • Agri-villages should preferably be established on existing disturbed sites. • Agri-villages should be of limited population size (usually up to 500 people)

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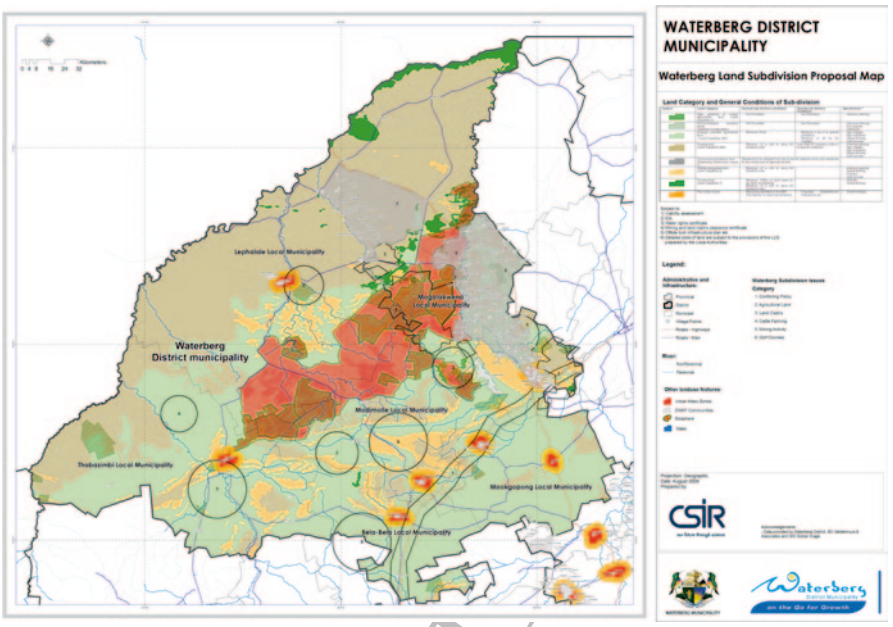

Fig. 6.5 Waterberg District subdivision of farmland issues and proposals

While Table 6.4 presents a snapshot of the policy document, the actual policy document itself is more extensive and provides clear policy direction and guidance regarding density, accessibility, siting/location, design, materials and aesthetics regarding developments in the area. This covers for such a range of activities as establishing holiday accommodation and lodges, developing cable cars in the biosphere, establishing agricultural factories on farmlands, bush pubs and conferencing facilities and infrastructure, handling home industries and home occupations, extraction and mining of pit and river sand in agricultural premises, greenhouse development and management, game farming infrastructure and development (Nhemachena et al. 2009b). Figure 6.5 presents WDM land subdivision proposals based on the above information.

6.6 Conclusions

The useful outcome of this study is a policy framework expected to facilitate, guide and influence the sustainable subdivision of farmland taking into account the realities of the existence of competing needs for agricultural land use. The generated policy framework shows clearly specific areas that may and may not subdivide further, with reasons. Also, it presents a set of guidelines and minimum requirements, to inform decision-making regarding subdivision proposals.

6.6.1 Recommendations

Generally, policy frameworks—such as the Subdivision of Agricultural Land Act (1970, Act No 70), the Conservation of Agricultural Resources Act (1983, Act No 43) and the Department of Agriculture (2006) National Policy on the Preservation of High Potential and Unique Agricultural Land—for sustainable utilisation of farmland should incorporate the following issues:

- The policy framework should be informed by an extensive agricultural environmental analysis supported with empirical evidence and insight into existing and potential agricultural land uses in the district.
- It is important to establish a baseline for systematic control, protection and regulation of available high potential and unique agricultural land as defined by stakeholders.
- A set of uniform guidelines should be generated to be used by local authorities in the development and review of their spatial development plans. The spatial development plans that will require updating to incorporate sustainable farmland utilisation requirements include the Spatial Development Framework (SDFs), Integrated Development Plans (IDPs), Town Planning Schemes (TPS), Master Plans (MP), Physical Plans (PP) and Land Use Schemes (LUS).
- It is also important to establish an appropriate policy framework for better tracking and management of agricultural farmland land use migration trends and changes, rezoning and subdivision so that planning becomes pro-active rather than reactive.
- Establishing an agricultural farmland databank is also one way of improving the agricultural information management systems.
- The final policy documents, including the translations into the major indigenous languages of the people in the affected areas, should be disseminated as widely as possible using different media.
- Inclusive and participatory approaches are important to allow various agricultural participants, experts, beneficiaries, users and interest groups to provide input and own the process and product.
- A strong capacity building and training programme should be factored as part of marketing and implementing the policy. This will need to be extensive and cover all levels of government and segments of society.
- The policy is never complete unless a robust implementation plan including specific projects, budgets, timelines and project champions has been clearly spelt out. A clear implementation framework, structure and plan are crucial to ensure that the good policies contained in the policy document are transformed into real projects that make a difference in people lives.

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