



LAND DEVELOPMENT PLAN/RURAL SPATIAL DEVELOPMENT FRAMEWORK

2014



!KHEIS LOCAL MUNICIPALITY

LAND DEVELOPMENT PLAN / RURAL SPATIAL DEVELOPMENT FRAMEWORK

2014

Prepared and adopted in terms of the Northern Cape Planning and Development Act 7 of 1998 and as far as possible aligned with the provisions of the Spatial Planning and Land Use Management Act, no. 16 of 2013.

PREPARED FOR:



PREPARED BY:



Geographic Information System Data Sources:

Northern Cape Provincial Government (2012)

South African National Bio-diversity Atlas (2012)

Council for Geo-Science (2004)

Council for Scientific and Industrial Research – CSIR (2010)

National Geo-Spatial Information – NGI (2010)

Eskom (2010)

MandalaGIS (2012)

Agriculture Research Council (2012)

Municipal Demarcation Board (2011)

South African Weather Service (2010)

Statistics South Africa – Census 2011

Dept. Water Affairs and Forestry (2007)

Statistics:

Statistics South Africa Census 2001 and 2011

Photos:

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FOREWORD



The !Kheis Local Municipality has never had a Spatial Development Framework. With my Council's bold step of adopting this document, we are entering a new era in which the municipality will be able to (1) manage land-use and land development, and (2) undertake targeted, inclusive, equitable and sustainable social, economic and spatial development in its area of jurisdiction.

While we are very excited about the potential this framework has for the future development of our municipality, merely having it on a shelf in our offices is no better than having no plan at all. We need to, and will make sure that we use it to (1) decide on all applications for land development in our municipal area; (2) cluster public land uses in nodes in each of our settlements; and (3) assist all of our communities to make of use and benefit from the vast agricultural, beneficiation and tourism potential our municipality offers.

We invite everyone that shares this framework's spatial development vision of *'a diverse, well connected, vibrant, economically integrated and socially cohesive municipality in which all residents enjoy a decent quality of life'* for !Kheis, to take hands and jointly make this vision a reality. I thank you in advance for all your endeavours in this regard!

Executive Mayor: The Honourable Mr Paul Vries

May 2014

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EXECUTIVE SUMMARY

The !Kheis Local Municipality (KLM) does not have a Spatial Development Framework (SDF). This is a serious gap, with (1) a range of new solar power projects being launched in the area, and (2) the region having to urgently embark on a new economic trajectory to address the growing unemployment, poverty and despair that many of its people have to endure on a daily base. In order to address this situation, the KLM, with the support of the Department of Rural Development and Land Reform, embarked on the process of preparing an SDF, which consisted of a series of interrelated steps, viz.: (1) social, economic, spatial and geo-technical data-gathering, community participation and intergovernmental engagement; (2) data-analysis and synthesis; (3) framework preparation; and (4) implementation planning. The outcome of this process was this SDF, which provides a *spatial vision*, *spatial mission* and series of *spatial development objectives, strategies* and *projects* to (1) address the municipality's most pressing challenges and issues; (2) optimise its strengths; and (3) utilise the opportunities it offers.

The *spatial vision*, as put forward in and pursued by the KLM SDF is: '*A diverse, well-connected, vibrant, economically integrated and socially cohesive municipality in which all residents enjoy a decent quality of life*'.

The accompanying *spatial mission* of the municipality seeks to ensure the provision of: (1) a well-functioning, affordable and reliable public transport service to ensure connectivity between the various settlements; (2) basic municipal services in all the settlements in the municipal area; (3) access for all to housing; (4) a logical, efficient and sustainable municipal land-use pattern; (5) health, education and early childhood development services that meet the needs of all the people in accessible buildings; (6) safe and maintained recreational facilities in all the settlements in the municipal area; (7) land for grazing of animals and the growing of fruit and vegetables; and (8) land, equipment, technical support and mentoring to assist in the establishment of beneficiation and manufacturing activities in all the settlements in the municipality. The *spatial development objectives for the KLM* are focused on the realisation of the spatial mission, and seek to:

- Improve the accessibility to and quality of government services;
- Ensure the development of settlements that allow their inhabitants to live dignified lives;
- Increase participation of all the inhabitants of the municipality in the local and regional economy; and
- Provide an attractive settlement for residents, investors and tourists.

The *overarching spatial development strategies for the municipality* are to:

- Improve the quality and accessibility of Government Services, especially health services and education;
- Create 'Community Facility Clusters' in every settlement that are not only focused on providing government services, but also on creating spaces for youth development;
- Create jobs through a focus on beneficiation, agriculture, tourism and exploitation of the construction and operational stages of the solar projects in the area; and
- Develop Groblershoop into an attractive Kalahari village that can attract residents, investors/businesses and tourists.

For each of the four spatial development strategies, a series of accompanying *spatial projects* are put forward. An *implementation framework* provides the objectives, target groups, location, outputs, project timeline, responsible agencies, major activities, cost/budget, source of funding, and development priority for each of these projects.

It is now up to the KLM, its partners, communities, farmers and businesses, and the relevant provincial and national government departments to give expression to this SDF through rapid, focused and sustained implementation.

GLOSSARY OF TERMS

CRDP: Comprehensive Rural Development Programme

DBSA: Development Bank of South Africa

DHE: Department of Higher Education

DM: District Municipality

DR ZFM: Dr ZF Mgcawu District Municipality

DTI: Department of Trade and Industry

DWA: Department of Water Affairs

EMF: Environmental Management Framework

EMP: Environmental Management Plan

IDC: Industrial Development Agency

IDP: Integrated Development Plan

IPAP: Industrial Policy Action Plan

KLM: !Kheis Local Municipality

LM: Local Municipality

LOWMA: Lower Orange Water Management Area

NC: Northern Cape

NCDARD: Northern Cape Department of Agriculture and Rural Development

NCDEDETEA: Northern Cape Department of Economic Development, Tourism and Environmental Affairs

NCDRDLR: Northern Cape Department of Rural Development and Land Reform

NCDRPW: Northern Cape Department of Roads and Public Works

NCPSDF: Northern Cape Provincial Spatial Development Framework

NDP: National Development Plan

NGP: New Growth Path

NIPF: National Industrial Policy Framework

NWP: North West Province

OABS: Optimal Agricultural Business Systems

PGDS: Provincial Growth and Development Strategy

PRASA: Passenger Rail Agency of South Africa

PSDF: Provincial Spatial Development Framework

SDF: Spatial Development Framework

CHAPTER 1: INTRODUCTION



1.1 THE DEVELOPMENT OF A RURAL SDF FOR THE KLM

The KLM does not have an SDF, and never had one.

In terms of the mandate placed on municipalities in the Constitution, every municipality must manage the area under its jurisdiction, and pursue social and economic development in this area. This is not impossible, but very hard to undertake without a well-planned and widely consulted spatial development tool/instrument, be it a guide, a plan or a framework.

A range of provincial and national Acts (notably the Municipal Systems Act, 2000, the Northern Cape Planning and Development Act, 1998, and the Spatial Planning and Land Use Management Act, 2013) provide for the preparation of such a spatial development tool/instrument, and also specify what its contents must be. This tool/instrument is very aptly called (1) a “Spatial Development Framework” or SDF for short, in the Municipal Systems Act, 2000, and the Spatial Planning and Land Use Management Act, 2013, and (2) a “Land Development Plan” in the Northern Cape Planning and Development Act, 1998. In addition to the legal requirements as set out in the above Acts, the Department of Rural Development and Land Reform (DRDLR) has also published a set of Guidelines that have to be used as guide in the preparation of these SDFs.

This SDF, the preparation of which is funded by the DRDLR, while way overdue, could not have come at a more opportune time, with a range of new solar power projects being launched in the area, and the region having to urgently embark on a new economic trajectory to address the growing unemployment, poverty and despair many of its people have to endure on a daily base.

Map 1: Location of !Kheis LM in South Africa



1.2 WHAT IS A MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK?

A municipal Spatial Development Framework (SDF) is the outcome of a Spatial Development Planning process undertaken by a municipal council (i.e. either a Metropolitan, District or Local Municipal Council) in accordance with the planning powers accorded to it in terms of the Municipal Structures Act, 1998 (Act No. 117 of 1998). This planning process can either be for the preparation of a ‘new’ or the review of an existing SDF. In terms of appearance and form, an SDF consists of:

- An analysis of all relevant data;

- A synthesis of the analysed data; and
- A series of proposals.

As such, an SDF includes:

- A series of maps;
- Supporting and explanatory text; and
- A plan with proposals in graphic and/or textual format.

Municipal SDFs were first called to life through the promulgation of the Local Government Municipal Systems Act, 2000 (Act No. 32 of 2000) and further elaborated on and described in the Local Government: Municipal Planning and Performance Management Regulations, 2001. On the 5th of August 2013 the President, by signing into life the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013), signed into existence a whole new era of spatial development planning and frameworks in South Africa. Not only does the new Act provide for the preparation and review of spatial development frameworks in the national, provincial, regional and municipal domains, it also makes a much stronger link between spatial development planning and land use management in municipalities. While it is still early days, the new Act is sure to also change the dynamics and relationship between the municipal SDF and the municipal Integrated Development Plan (IDP).

For now, and in accordance with these Acts and Regulations, and as things stand at this point, a municipal SDF must guide, direct and regulate land development and land uses in a municipality's area of jurisdiction. This it must do in accordance with the municipality's development vision, goals and objectives, as set out in its IDP, by providing for State interventions in the space economy of municipalities. On a *strategic level* and at the current historical post-apartheid juncture, this means rectifying the endemic inequalities and inefficiencies of South African settlements through decisive proposals on:

- The medium and long-term development trajectory of municipalities;

- The direction, nature and programming of future settlement expansion;
- The spatial location and capacity of investment in economic and household infrastructure; and
- The corrective and progressive broadening of access for previously excluded South Africans to wealth-generating natural and manmade resources, including land redistribution.

On an *operational level*, it means providing guidance for a Municipal Land Use Management System (LUMS) with regards to:

- The location, density, intensity, mix and use of desirable land uses;
- The location, impact, intensity and scale of operation of necessary, but undesirable land uses; and
- The attraction and facilitation of desirable land uses to ensure and enhance desired settlement patterns and land-use profiles in terms of diversity and intensity.

As such, and from an institutional perspective, the SDF has to be tightly aligned (1) at a *strategic level* with the municipality's IDP and Growth and Development Strategy, and (2) at an *operational level*, with the municipality's land-use planning and regulation and engineering services-functions.

1.3 WHAT IS SPATIAL DEVELOPMENT PLANNING?

Spatial Development Planning is a legally sanctioned, defined and guided activity by which the *use, utilisation and/or improvement* of space in a *geographically defined area* is carefully considered and planned to ensure the realisation of *social, environmental, economic and political objectives* during or at the end of a *given period of time*. As noted above, at the current juncture in South Africa, the key focus of Spatial Development Planning is the achievement of rapid sustainable, inclusive and equitable growth to counter the poverty, inequality and resource-use inefficiencies left by decades of

colonial and apartheid-misguided spatial planning. In terms of the South African legal and policy framework, *spatial development planning* is mandated, given substance to, and guided by the Local Government Municipal Systems Act, 2000 (Act No. 32 of 2000), the Local Government: Municipal Planning and Performance Management Regulations, 2001, the National Development Plan, 2011, the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) and the Department of Rural Development and Land Reform's Guidelines on the Preparation of Spatial Development Frameworks, 2011. In addition to these national documents, spatial development planning in the Northern Cape Province is also framed and guided by the Northern Cape Province Planning and Development Act, 1998 (Act No. 7 of 1998) and the Northern Cape Spatial Development Framework, 2012.

Spatial Development Planning assists government, where possible and beneficial in partnership with the private sector and communities, to ensure that (1) *investment in places* and (2) *spending on people* is carefully planned, targeted, synergised and programmed to achieve maximum developmental impact.

In order to ensure these desired impacts, Spatial Development Planning must:

- Be directed at the realisation of a spatial development vision that is shared and bought into by all stakeholders and role-players in the area;
- Be informed, guided by and focused on the features, the potentials and the constraints of (1) the people, (2) the place, (3) the institutions, and (4) the interplay and interactions in and between these entities;
- Tap into, use, strengthen and optimise beneficial activities, relations and links in places to achieve desired outcomes;
- Regulate or prevent detrimental activities, relations and links in places to achieve desired outcomes;
- Be done in a collaborative, collective, focused and constructive way by a group of actors from a variety of State and non-State institutions; and

- Be used by provincial sector departments when planning, budgeting and implementing developmental strategies, plans and programmes, and in so doing, strengthening intergovernmental harmonisation, alignment, integration and synchronisation in the actions of the various organs of State.

1.4 WHAT IS THE ROLE OF A LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK?

A Local Municipality Spatial Development Framework is a *local level strategic* spatial development planning instrument. In terms of the current institutional and development planning framework, it occupies a unique, in-between place between (1) the Provincial SDF, (2) the District Municipal SDF, and (3) the Land Use Management System of the particular local municipality. As such it seeks to:

- Give expression in the municipal sphere to the strategic objectives as set in the national and provincial spheres with regards to sustainable development, natural resource management, regional economic investment, job creation and poverty alleviation;
- Provide a clear expression of the long-term sustainable economic development trajectory to be jointly pursued in the geographical area of the municipality by all three spheres of government, the private sector and the community;
- Act as a bridge between the broader, strategic, longer-term socio-political, economic and ecological long-term analysis, thinking and strategizing in the provincial sphere and the more detailed short-to medium term land-use and infrastructure investment planning, regulation and implementation that has to be undertaken in the municipal sphere;
- Act as conduit between the strategic-level planning undertaken by the district municipality and the provincial sphere, notably in the Premier's Office and in Sector Departments when preparing sector strategies, plans,

programmes and budgets and the detailed spatial development analysis and planning done by the various sector departments in the local municipality;

- Provide an indicative framework for (1) infrastructure investment and development spending in regionally-significant nodes and corridors, (2) integrated rural development, (3) economic sectors to be targeted, and (4) environmental management, informed by provincial and national analyses within which the more detailed spatial development planning of the local municipality can be located;
- Harmonize, coordinate and align the spatial development planning done in and by the district municipality with the spatial development objectives and intentions in the local municipality;
- Highlight areas of (1) real development potential, (2) dire need/poverty and (3) bottlenecks in the realization of the development potentials and alleviation and eradication of poverty, in the municipality; and
- Provide high-level, strategic guidance with regards to desired land use patterns, intensities, densities and mixing in broad zones/categories of human settlement-types in the municipality.

1.5 USING THE !KHEIS LOCAL MUNICIPALITY SDF

The KLM SDF is an indicative, strategic planning document that provides strategic guidance on the future economic and spatial development of the municipality. As such, it does not seek to, but may make statements about the development or use of individual properties in settlements, or farms and farm portions. It, does, however, definitely:

- Make strong *policy statements* about larger areas in which similar needs are prevalent, development possibilities exist, development challenges are experienced and economic activities and human settlement take place and could take place;

- Provide a *future spatial development vision, set of spatial development objectives and spatial development strategies* to which all investment and spending actions must be directed; and
- Set out an *implementation framework* and a series of *development indicators* with which to measure progress towards the realisation of the development objectives and the spatial development vision.

Together these three components provide officials, politicians and non-State actors with:

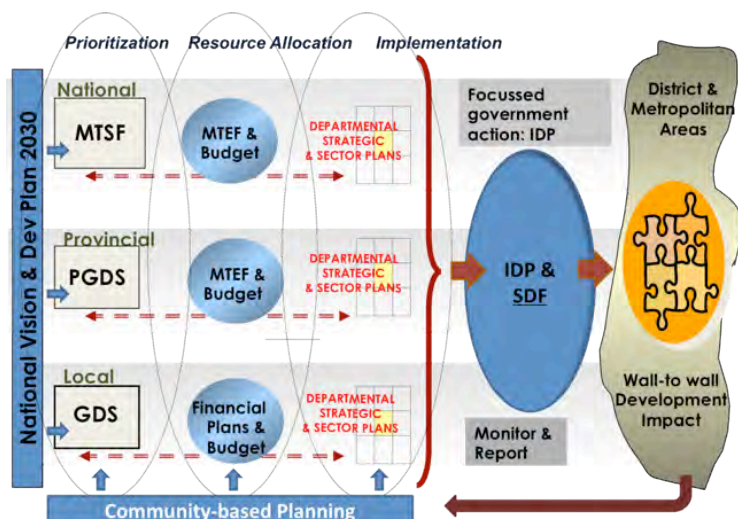
- A *proactive guide* for future spatial development investment decisions by both the State and the non-State actors active in the municipality;
- A '*strategic check-list*', in the form of a simple, very easy measuring rod with which to test and establish whether a proposed development option or spatial development application will contribute to the realisation of the municipal vision; and
- A *set of strategic actions* to be undertaken during the course of the next five years to ensure movement towards the realisation of the municipality's vision over the next twenty to thirty years.

While providing strong guidance, the intention is not that the SDF must become a strait-jacket, a cage from which no other option or proposal can, or should be considered. *What matters is the long-term sustainable, equitable and inclusive development of the municipal area, and this must always be the frame against which to consider, deliberate and take decisions.* This tool (the SDF) is in the end just a tool. As such it can enhance and support, but never replace creative, accountable, responsive, well-informed and caring collective and individual action.

1.6 WHERE IS A MUNICIPAL SDF LOCATED IN THE BROADER INTERGOVERNMENTAL DEVELOPMENT PLANNING FRAMEWORK?

The diagram below indicates where the Municipal Integrated Development Plan and the Spatial Development Framework are located within the broader framework of intergovernmental prioritisation, budgeting and implementation.

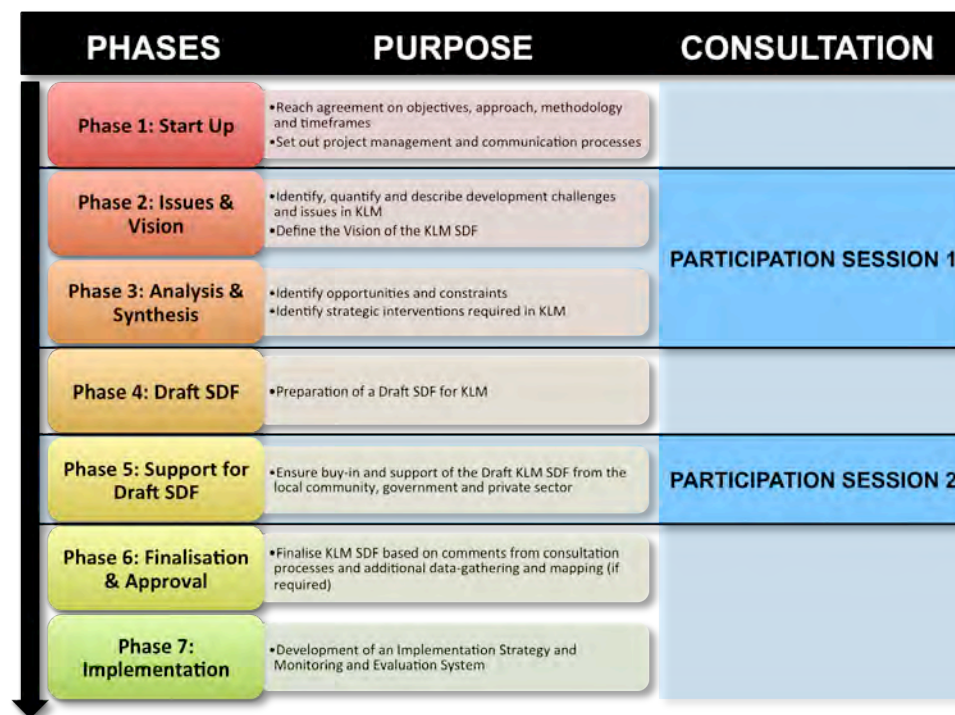
Figure 1: Locating the Municipal SDF in the Broader Intergovernmental Development Framework



1.7 THE PROCESS THAT WAS FOLLOWED IN THE DEVELOPMENT OF THE !KHEIS LM SDF

The graph below provides an overview of the process followed during the development of the SDF.

Figure 2: SDF Development Process



CHAPTER 2: ALIGNMENT AND INTEGRATION



2.1 INTRODUCTION

A pillar of the 1996-Constitution and a core component of the South African development planning system is cooperation, alignment and integration. At the same time, and equally strongly advanced and protected in our Constitution, is the principle of distinctness, uniqueness and interdependence of the three spheres of government. In practice, and when preparing or reviewing a municipal SDF, this means that every effort has to be made to align the framework with the development, spatial, financial and sector plans within its own sphere (and in particular the municipality in for which it is prepared), as well as in the two other spheres. In the section below, the key institutional drivers (plans, frameworks, strategies and programmes) in the national, provincial and local spheres are identified, and their significance for the preparation of the KLM discussed.

In the *national sphere*, the key drivers are (1) the National Development Plan, (2) the Comprehensive Rural Development Programme, (3) the New Growth Path, (4) the Industrial Policy Framework and the 2011-Industrial Policy Action Plan and (5) the 2013-Industrial Policy Action Plan. In the *provincial sphere* it is the Northern Cape Provincial Growth and Development Strategy and the Northern Cape Provincial Spatial Development Framework. Each of these is dealt with below in terms of the significance of the particular plan or programme for the KLM SDF. In the *local government sphere* it is the district and local municipal SDFs, IDPs and Sector Plans.

2.2 THE NATIONAL SPHERE

2.1 The National Development Plan (2011)

The Plan argues that South Africa remains a divided society characterized by inequality, poverty and unemployment. The National Development Plan 2030 calls for the elimination of poverty (reduce the proportion of households with a monthly income below R419 per person from 39% to 0%) and reduction of

inequality by 2030 (the Gini-coefficient should fall from 0.69 to 0.6). The point of departure is that “*South Africa belongs to its people*” and they should join hands and realize that the future success of our country is our collective responsibility therefore the slogan “Our future: make it work”. The rationale of the NDP is to address these challenges by bringing the gap in the divide. The foundation of the plan is based on the collaborative effort to unite South Africans, tapping their energies, building capacity and capabilities of both citizens and leaders alike and in the process growing an inclusive economy. Citizens are encouraged to actively participate in the development process – changing and growing together. The NDP provides a strategic framework document to guide decisions and actions, steered by the President and the Cabinet. The NDP identifies the following key priorities (p. 27):

- Raising employment through faster economic growth,
- Improving the quality of education, skills development and innovation, and
- Building the capability of the state to play a developmental, transformative role.

One of the main driving forces of the document is to stimulate economic growth by increasing employment (from 13 million in 2010 to 24 million in 2030) and reducing poverty (Raise per capita income from R50 000 in 2010 to R120 000 by 2030). The document sets the national income share of the bottom 40% of the population from 6% to 10%. In order to achieve these targets, the document identified 13 areas for intervention (Economy and Employment, Economic infrastructure, Environmental sustainability and resilience, *Inclusive rural economy*, South Africa in the region and the world, Transforming Human Settlements, Health care for all, Social protection, Building Safer Communities, Building a capable and developmental state, Fighting corruption, Nation-building and social cohesion). The document furthermore sets a number of objectives (targets) for each area of intervention and proposes a series of subsequent actions to achieve these goals.

The NDP recognises that many of South Africa's rural areas are marked by high levels of poverty and have limited employment opportunities. The status quo has partly been created by the apartheid system that restricted the African population to a life in 'rural reserves'. The result was an advanced and diversified commercial farming sector relying on poorly paid farm labour with a limited economic outlook. The government is, however, committed to changing the status quo by improving the overall livelihoods of the rural communities. This is clearly reflected in the NDPs spatial vision for rural South Africa as *"the development of vibrant, productive rural communities that create and keep wealth in their areas and also provide benefit to the nation"* (p. 283).

In terms of specifically *relevant principles and policies*:

- The NDP envisages an inclusive and integrated rural economy *viz.* dynamic spaces supplied with greater opportunities to "participate fully in the economic, social and political life of the country" supplied by an array of basic services including education, health care and transport opportunities. Basic services are considered to be a critical success factor that enables people to develop personally and in turn transfer their skills to their communities.
- The NDP proposes a multi-faceted approach to rural development which includes successful land reform, infrastructure development, job creation (the proportion of adults working in rural areas are set to increase from 29% to 40% (p. 61)) and rising agricultural production. The agricultural sector is expected to create approximately 1 million jobs by 2030 (p. 219).
- In terms of land reform, the NDP stipulates that the principles underpinning land reform includes the de-racialization of the rural economy, democratic and equitable land allocation and use across race, gender and class, and lastly a sustained production discipline for food security (p. 140). It is clear that National Food Security is high on the priority agenda of the NDP. The document proposes that region-based approaches to food security should be investigated. This implies that South Africa's agriculture sector should

strive to become more *"specialised and efficient"* and therefore *"there may be a trend away from the production of staples to higher-value crops"* (p. 230).

- The NDP proposes that the South African economy should increase the export of products proven to be of comparative advantage including agriculture and agro-processing. The document also pro-actively encourages agro-processing, tourism and small enterprise development.
- Both the NDP and the Integrated Growth and Development Plan for the Department of Agriculture, Forestry and Fisheries refers to increasing support for small-scale farmers (the 'missing middle') to operate alongside the commercial farming sector and subsistence (rural farmers) sector in order to ensure the protection of rural livelihoods.
- The document distinguishes between three types of intervention required, based on the varying opportunities of each rural settlement area (p. 218):
 - *"High Economic Potential areas"*: Expand irrigated agriculture (according to research the 1.5 million ha can be expanded with an additional 500 000ha), supplemented by dry-land production;
 - *"Some Economic Potential areas"*: Support non-agricultural activities i.e. agro-processing, tourism and small enterprises; and
 - *"Low Economic Potential areas"*: The provision of basic services (health care and education) should be prioritised. The development of human capital is therefore encouraged.

In view of the differentiated characteristics of rural towns and settlements, it is critical that plans and rural strategies should be developed for each area based on its economic potential.

2.2.1 The Comprehensive Rural Development Plan (2009)

- The Comprehensive Rural Development Programme is included as "Strategic Priority Number 3" in the Government's Medium Term Strategic Framework. The CRDP distinguishes itself as being premised on a

“proactive participatory community-based planning approach rather than an interventionist approach to rural development”.

- Comprehensive, integrated and sustainable rural development has been put forward as one of the key priorities of Government. The aim with the focus on such development is to (1) address the deep poverty and destitution in many of the country’s rural areas, notably the former Bantustans, and (2) create sustainable rural communities throughout the country.
- In accordance with this view, the CRDP seeks to achieve social cohesion and development in rural communities through:
 - Coordinated and integrated broad-based agrarian transformation;
 - An improved land reform programme; and
 - Strategically increasing rural development.

The Programme defines rural development as a people-centre approach whereby rural residents *“take control of their destiny (thereby dealing effectively with rural poverty through the optimal use and management of natural resources”.*

In terms of specifically *relevant principles and policies*:

- The Comprehensive Rural Development Programme lists the following ‘underlying principles of rural development’ (p. 5):
 - The establishment of business initiatives, agro-industries, cooperatives, cultural initiatives and vibrant local markets in rural settings;
 - The empowerment of rural communities, especially women and the youth, through facilitating and mediating strong organisational and institutional capabilities and abilities to take full charge of their collective destiny;
 - Capacity building initiatives, whereby rural communities are trained in technical skills, which, if combed with indigenous knowledge, can be used to reduce community vulnerability to

especially climate change, soil erosion, adverse weather conditions and natural disasters, hunger and food insecurity; and

- Revitalisation and revamping of old, and the creation of new economic, social and information communication infrastructure and public amenities and facilities in villages and small rural towns.

The document reiterates the prominence of rural development and, secondly, the principles of the document are supportive and in line with the project criteria *viz.* creating viable and sustainable rural settlements.

2.2.2 The New Growth Path (2011)

The New Growth Path framework:

- Was initiated in response to the prevalent dire economic conditions in the country and places job creation at the center of the economic policy of the country;
- Is targeted to create approximately 5 million job opportunities by 2020; and
- Identifies a number of job drivers and key priority sectors that will be the focus of the government within the next couple of years.

The rationale of the framework is to identify the country’s economic priorities in order to steer and align investment and actions of the private sector, organised labour and government, and to build partnerships in addressing the economic challenges (p. 1).

In terms of specifically *relevant principles and policies*:

- The New Growth Path framework proposes that more labour-absorbing activities across the main economic sectors should be targeted as key job drivers, more specifically the “agricultural value chain” the “green economy”, and “tourism and certain high-level services” (p. 24).
- One of the core strategies to achieve employment targets in the agricultural sector is to provide support for smallholder schemes and by

upgrading employment in commercial agriculture in order to achieve the national target of food security (p. 29).

- The document foresees that approximately 300 000 households can benefit from the smallholder schemes, whilst the opportunity exist to upgrade the living conditions of an additional 660 000 farmworkers. The document supports and promotes the acceleration of the land claims process and support of new farmers following land-claims settlements.
- In order to prevent the current practice of large exports of raw products, the plan is strongly supportive of *'value-adding activities'* to raw products, including agro-processing. The latter, it envisages can create 145 000 jobs by 2020 (p. 29).
- While the document clearly recognises the need for trade with other countries, it comes out strongly in support of *'deepening'* the domestic market and of producing products with high multiplier effects in the local economy. As such, it is highly supportive of cooperatives that *'enable small producers to enter formal value chains and take advantage of economies of scale'* and *'building on regional synergies and clusters'*.
- The framework indicated that one of the aspects that hampers rural employment is the finalisation of a *"spatial perspective that sets out the opportunities available and the choices that we must make in order to lay the basis for aligning government spending, infrastructure and housing investment and economic development initiatives"* (p. 35).

The government furthermore commits itself to improve their efforts to provide public infrastructure and housing in rural areas in order to lower the cost of economic activity and to foster sustainable communities. It is furthermore stated that the livelihoods of approximately 500 000 people can be improved by means of rural development programmes.

2.2.3 The National Industrial Policy Framework (2007) and the 2011-Industrial Policy Action Plan (IPAP 2)

- The NIPF seeks to articulate government's *'broad industrial policy vision'* and approach to industrialisation in the context of its key economic growth and social inclusion targets. The IPAP 2 sets out the implementation approach to the NIPF, and outlines the key interventions to give effect to it. As such it seeks to provide clarity and certainty to the private sector and the social partners of government with respect to government's industrial priorities up to 2014.
- The NIPF clearly states that it is policy framework and not a blueprint for the South African industrial economy. It does not take a *'one-size-fits-all'* approach to industrialisation. The focus is more on principles and processes by which sector strategies will be developed and prioritised, and not on imposing interventions on people or places. And, in contrast to standardised one-size-fits-all approaches, it puts forward a policy that acts upon real opportunities for growth. In general, the NIPF seeks to diversify the South African economy, boost labour-absorbing economic activities and focus on *"value-adding tradable goods and services"*.

The IPAP 2 is not only viewed by Government as the implementing programme of the NIPF. Government also sees it as a central tool in the NIPF-job-creation strategy. It is anticipated that the interventions it proposes for the period 2011/12-2012/13, will lead to job growth of 43 000 direct jobs and 86 000 indirect jobs, i.e. altogether 129 000 jobs.

In terms of specifically *relevant principles and policies*:

- While noting that employment in agriculture has been on the decline in South Africa, the NIPF argues that there is still much scope in this sector, with agriculture and agro-processing described as *'... one of the most labour-intensive in the economy'* and stating that it will, as such, *'... be*

investigated further to identify opportunities for employment creation and new enterprise development’.

- In addition to this, the NIPF identifies agro-processing as area that needs to be supported. With this objective in mind, it calls for the investment in *‘catalytic project-specific infrastructure such as cold chain facilities to unlock particular types of agro-processing activities’.*
- The NIPF also includes *‘Small Enterprise Support’* as area of focus, indicating that it will support activities that fall in this group through *‘... finance and technical support, together with finding ways to strengthen market opportunities for small enterprises, including cooperatives’.*
- The IPAP 2 identifies three key Clusters for focus in the period 2011/12-2013/4:
 - Included in Cluster 1 (*‘Qualitatively New Areas of Focus’*) is listed (1) *‘Green’* and energy-saving industries; and (2) Agro-processing, linked to food security and food pricing imperatives.
 - Included in Cluster 2 (*‘Scaled-up and Broadened interventions in Existing IPAP sectors’*) is *‘Biofuels’.*
- The IPAP 2 includes in the list of sub-sectors under *‘Agro-processing’* the following: (1) Food processing; (2) Beverages; and (3) Medicinal, aromatics and flavourants. It sees these activities as creating huge numbers of jobs, both up and downstream in the economy.
- Reference is made in the IPAP 2 to three broad product-groups in the Agro-processing sector, including (1) *‘High-quality, high-value, competitive sub-sectors, e.g. fresh fruit, wine and fish products’;* and (2) *“New” sub-sectors with niche market potential but small-scale production, e.g. ostrich meat, indigenous flowers, biofuels, essential and olive oils, and medicinal extracts’.*

The IPAP 2 indicates that a *‘Food Processing Strategy and Action Plan’* will be prepared, which will include the development of an institutional structure for engaging the food-processing sector.

2.2.4 The 2013-Industrial Policy Action Plan (IPAP 5)

IPAP 5 is aligned with both the National Development Plan and New Growth Path Document, and is considered to be one of the key pillars of the latter. The rationale of IPAP is to *“prevent industrial decline and support growth and diversification of South Africa’s manufacturing sector”* with the main focus being on job creation. IPAP 5 re-emphasises the fundamental role of manufacturing in employment and economic growth of the country. It is also mentioned that industrial policy should particularly focus on *“value-adding sectors”* which holds high potential for employment and growth multipliers (p. 12).

In terms of specifically *relevant principles and policies*:

- The document states that the high rates of growth in many countries in Africa (including South Africa), is directly linked to the increase in resource and agricultural commodity prices. The document therefore argues (as the National Development Plan) that regional growth is the *“biggest stimulus to long-term growth in South-Africa”* (p. 20).
- IPAP 5 outlines the *“achievement highlights”* of IPAP2 and in terms of industrial financing, the Industrial Development Corporation (IDC) is committed and re-oriented to finance IPAP/NGP sectors. The IDC has committed R 5.5 billion for investment in the *“Green Economy”* and a further R 1.1 billion for investment in the *“agriculture and forestry value-chains”* (p. 26).
- The agriculture and agro-processing value chain has been identified as a potential area for labour –intensive growth. This value chain has the potential to create a number of direct and down-stream employment opportunities. In order to achieve these employment targets, the document makes provision for six Key Action Programmes, including the following:
 - Development of a Food-processing Strategy and Action Plan,
 - Development of a small-scale milling industry,

- Enhancement of Competition in the Fruit and Vegetable Canning Industry,
- Development of a Soybean Action Plan promoting market linkages between primary agricultural producers and processors,
- Development of the organic food sector, and
- Supporting the Public-Private Partnership for Food Security.

Although the Biofuels industry has experienced rapid growth internationally, the South African biofuels market is lagging behind. According to IPAP 5, this sector holds considerable employment opportunities, specifically in the agricultural sector (p. 92).

2.3 THE PROVINCIAL SPHERE

2.3.1 The Northern Cape Provincial Growth and Development Strategy (2011)

The vision of the NC PGDS is “Building a prosperous, sustainable growing provincial economy to eradicate poverty and improve social development for a caring society”. It identifies the following sectors as areas of potential growth: (1) Agriculture and Agro-processing; (2) Fishing and Mari-culture; (3) Mining and Mineral Processing; (4) Manufacturing; (5) Tourism; (6) Knowledge Economy; and (7) Energy. Of particular importance to the KLM are the strategic interventions in the agriculture sector outlined in the NC PGDS of which the key elements are: (1) Land reform and promotion of optimal and sustainable agricultural production; (2) Marketing support to improve market access by small holder farmers; (3) Promotion and support of agri-businesses and agro-processing; (4) Technology development and transfer; (5) Implementation of an integrated food security programme; and (6) The development of farm workers and dwellers to enhance their livelihood and full participation in the sector (NC PGDS 2011: 27). In addition to this, the NC PGDS

identified the following key resources and corridors that should be exploited and developed:

- The Orange River where the expansion of irrigated agricultural production based on new water allocations is possible. In addition to agriculture, it is the Orange River that defines the Green Kalahari Region, a contrasting region with desolate semi-desert landscapes broken by the lush and fertile Orange River valley that is already a great tourist attraction. Linked to this is the vineyards and orchards in Groblershoop and water sports on the Orange River and Boegoeberg Dam;
- The SKA Corridor which includes parts of !Kheis LM; and
- The Solar Corridor running from Prieska to Upington through all the main settlements in KLM. This area has been identified as having a high potential for solar energy exploitation, based on its high levels of solar radiation.

2.3.2 The Northern Cape Provincial Spatial Development Framework (2012)

The vision for the Northern Cape Provincial Spatial Development Framework (NC PSDF), as inspired by the Northern Cape Provincial Growth and Development Strategy, is “Enhancing our future”. Accordingly, the PSDF responds and gives practical effect to the overarching objective stipulated in the Northern Cape PGDS, i.e. to ensure integration of development processes and, in particular, to facilitate sustainable development throughout the province. The NC PSDF uses the Bioregional Planning approach and sees Bioregional Planning as *“planning and land management that promote sustainable development by enhancing environmental integrity and human well-being through economic efficiency within a defined geographical area, the boundaries of which are determined in accordance with environmental, social and economic criteria”* (NC PSDF 2013:17).

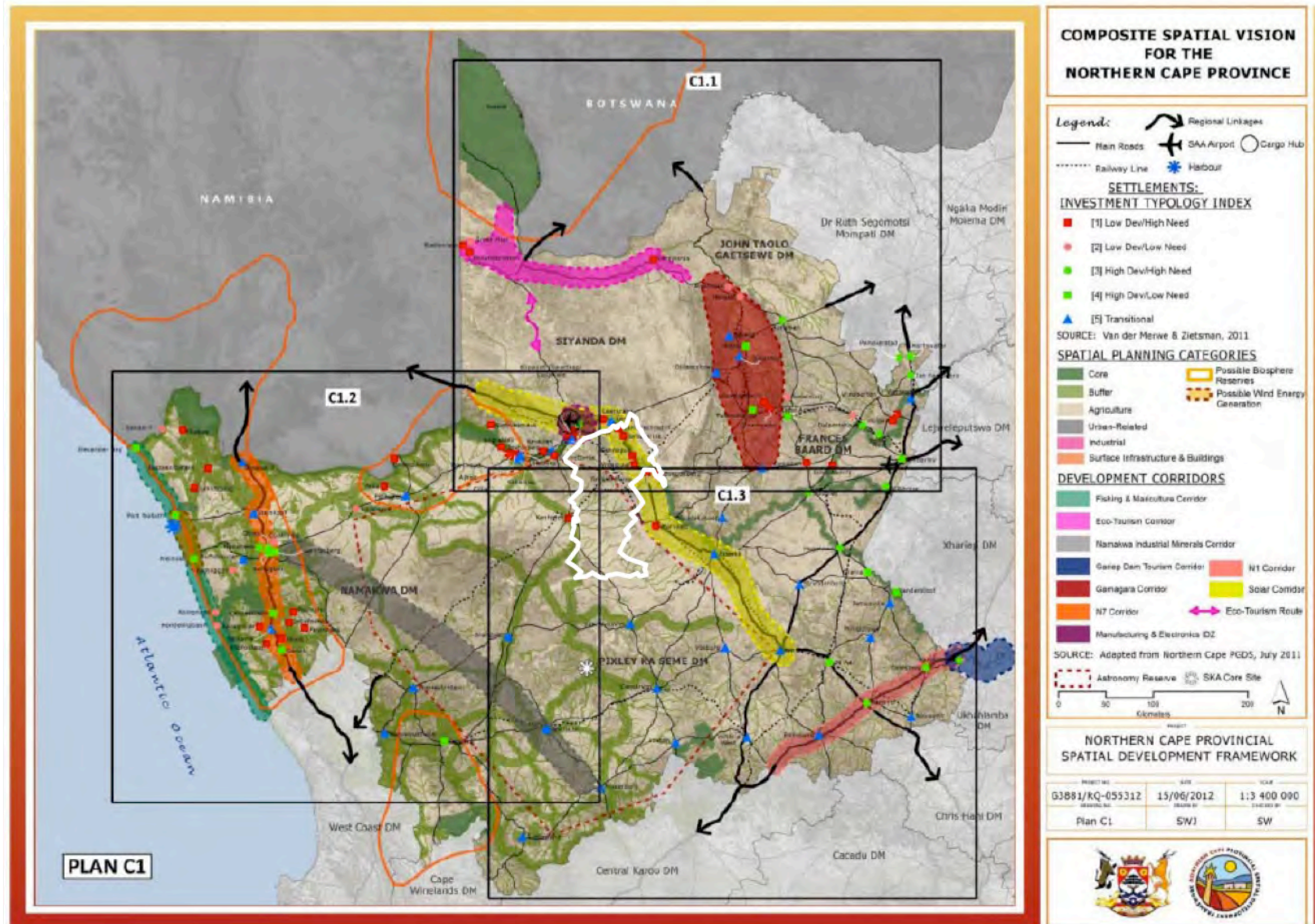
According to the NC PSDF, municipal SDFs must be aligned to the PSDF and all land-use amendments have to conform to the PSDF. District Municipalities are responsible for detailed delimitation of bioregions in accordance with Toolkit D7, while Local Municipalities must delimit neighbourhood areas as fine-grained planning units as outlined in Toolkit D8. In addition to this Local Municipalities must undertake detailed land-use classification in accordance with the Spatial Planning Categories and Sub-Categories as outlined in the Toolkit C1 and Chapter C1 of the NCPSDF (NC PSDF 2012:168).

Implications of the NC PSDF for KLM SDF (see **Map 2**):

- The Solar Corridor that traverses the northern regions of the municipality from northwest to southeast: Some of the best solar radiation areas in the world are found in the area from Prieska to Upington;
- The Upington Manufacturing and Electronics (IDZ) – the Upington Airport has been earmarked for a cargo hub for manufacturing related to local agriculture production, electronic goods production, SKA-related and solar energy foods and services. Furthermore, the airport is already a facility that exports large amounts of agricultural produce. The Upington area has also been earmarked for a number of solar plants;
- The SKA reserve includes the entire southern section of the district; and
- According to the Settlement Investment Typology, the main settlements in KLM have been classified as:
 - **Grootdrink:** Low Development Potential/High Human Development Need (Category 3 Investment type = Small-scale monetary capital, basic services and social capital);
 - **Wegdraai:** Low Development Potential/High Human Development Need (Category 3 Investment type = Small-scale monetary capital, basic services and social capital);

- **Groblerstroom:** High Development Potential/Low Human Development Need (Category 1 Investment type = Infrastructure capital, large-scale monetary capital);
- **Topline:** Low Development Potential/High Human Development Need (Category 3 Investment type = Small-scale monetary capital, basic services and social capital); and
- **Boegoeberg:** Low Development Potential/High Human Development Need (Category 3 Investment type = Small-scale monetary capital, basic services and social capital).

Map 2: Composite Spatial Vision for the Northern Cape Province



2.4 ANALYSIS OF THE LOCAL GOVERNMENT SPHERE

2.4.1 Introduction

The KLM is surrounded by three District Municipalities and seven Local Municipalities, viz.:

- ZF Mgcawu District Municipality (of which KLM is part):
 - Tsantsaban LM;
 - //Khara Hais LM; and
 - Kai! Garib LM;
- Namakwa District Municipality:
 - Hantam LM; and
- Pixley ka Seme District Municipality:
 - Kareeberg LM;
 - Siyathemba LM; and
 - Siyancuma LM.

DM SDFs that are aligned with the NC PSDF have been prepared for the ZFM DM and Namakwa DMs.

2.4.2 ZF Mgcawu District Municipality

ZFM DM District Municipality SDF

The ZFM DM SDF (2012) has been aligned with the NC PSDF. It identifies six bioregions, with the KLM falling predominantly within the South Bushmanland region and Orange River Corridor. The main proposals with regard to these regions are:

North Bushmanland:

- Promote responsible veld management in extensive agricultural areas grazing livestock or game to improve veld carrying capacity and biodiversity in western part of bio-region;
- Ensure ecological functioning of pans and wetland network is conserved;
- Investigate opportunities to benefit from the SKA development;
- Take cognizance of the proposed Desert Star Film Studio Initiative located north of the Orange River in Namibia. This development will have a city, tourism development, film studios and related infrastructure that will eventually accommodate more than 50 000 people;
- All municipalities should implement a multi-pronged water management strategy for water conservation, demand management, recycling and re-use which includes rainwater harvesting and the introduction of efficient and sustainable plumbing technologies in each building;
- As a general rule, fracking should only be permitted in any of the bio-regions if EIA studies that include amongst others, groundwater, geo-hydrological, traffic impact and water provision impact studies indicate that the proposed activity will not have a negative effect on the receiving environment. EMPs should contain appropriate mitigation measures for any anticipated negative impact and should require appropriate rehabilitation measures and the creation of an Environmental Fund to be used for rehabilitation should the need arise after the closure of the activity; and
- Sensitively place solar projects within the Solar Corridor with due regard to the visual impact of these facilities.

Orange River Corridor:

- Investigate setting up an Orange River Corridor Authority to coordinate the development efforts of all knowledgeable stakeholders engaged in infrastructure, tourism and agriculture, including the Local Municipalities of Kai !Garib, //Khara Hais and Kheis. This authority could extend westwards into Namakwa District and include international cooperation with southern Namibia;
- The Orange River Corridor Authority should be tasked with, inter alia, rolling out the SDF in the Corridor; preparing an SDF and detailed Management Plan for the Corridor; and obtaining buy-in from all municipalities and stakeholders for the above;
- In the absence of an Orange River Corridor SDF and Management Plan, all local authorities should ensure that their SDFs are in line with the Siyanda District SDF and EMF;
- Implement urban design and landscaping upgrades of main settlements' main streets and CBDs;
- All municipalities should implement a multi-pronged water management strategy for water conservation, demand management, recycling and re-use which includes rainwater harvesting and the introduction of efficient and sustainable plumbing technologies in each building;
- As a general rule, fracking should only be permitted in any of the bio-regions if EIA studies that include amongst others, groundwater, geo-hydrological, traffic impact and water provision impact studies indicate that the proposed activity will not have a negative effect on the receiving environment. EMPs should contain appropriate mitigation measures for any anticipated negative impact and should require appropriate rehabilitation measures and the creation of an Environmental Fund to be used for rehabilitation should the need arise after the closure of the activity; and

- Sensitively place solar projects within the Solar Corridor with due regard to the visual impact of these facilities.

Strategies specifically identified for the KLM are (see **Map 3**):

- Update the settlement hierarchy as per the PSDF;
- Refine and indicate the proposed bio-regions and related strategies;
- Refine and indicate the spatial planning categories and related proposals; and
- Indicate the following in spatial development plans: (1) Potentially high wind energy zones; (2) Potentially high solar energy generation zones; (3) Solar corridor from Britstown along the N10 Freeway to Namibia; (4) Critical Biodiversity Area; (5) Square Kilometer Array reserve; and (6) Proposed Orange River Corridor.

Tsantsabane LM SDF (2009/10)

The Tsantsabane SDF does not address the land directly adjacent to KLM due to the SDF having been developed when the KLM still fell under District Administration.

//Khara Hais SDF (2009)

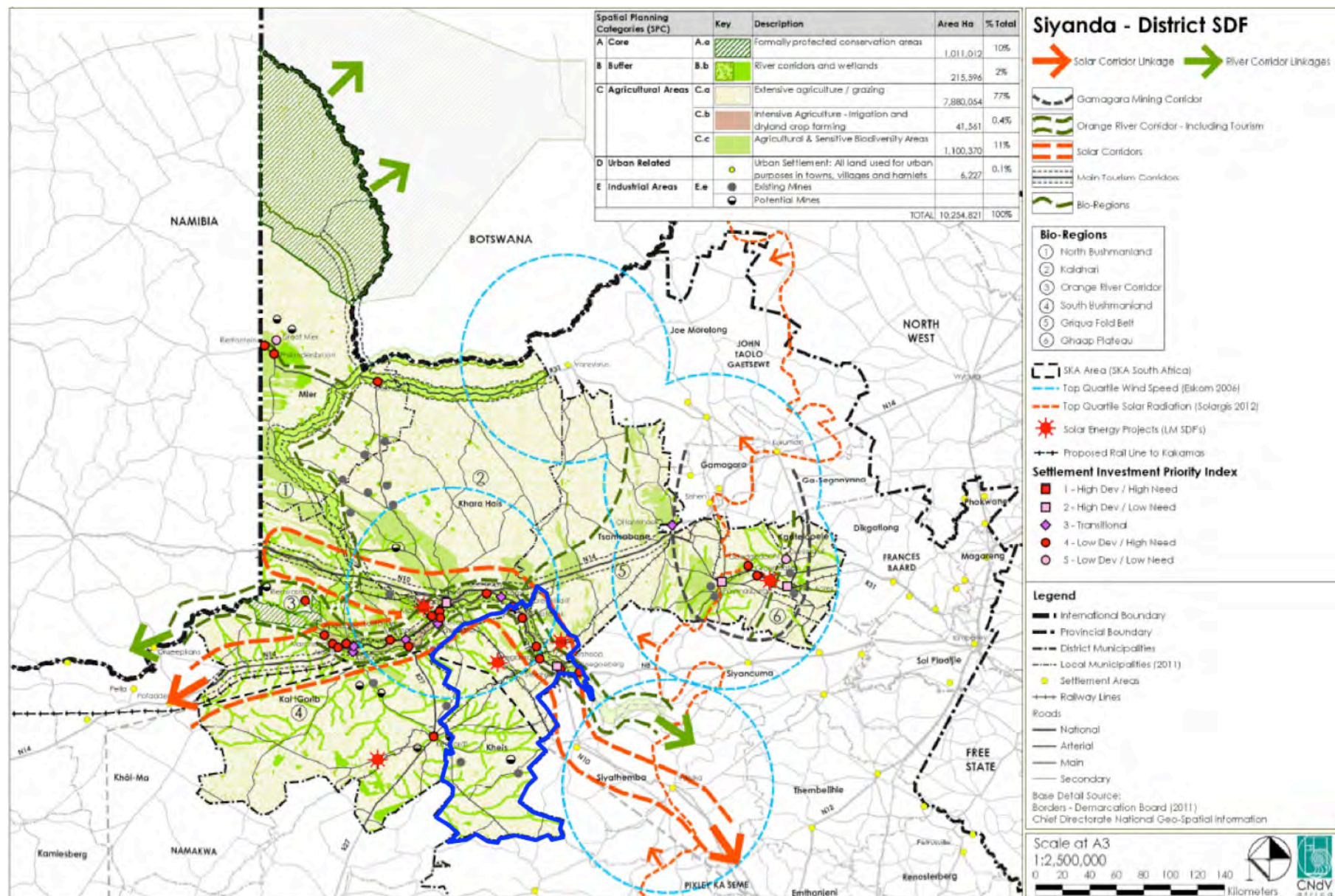
The //Khara Hais SDF focuses on the following focal points:

- The updating the existing Vacant Land Analysis;
- Strategies and control measures for rural (peri-urban) development;
- Guidelines for the development of sensitive areas such as the flood plains and land within the flood lines of the Gariep River;
- Detail development strategy for the development of the river banks in Upington town; and
- Guidelines on the decentralisation of CBD functions within Upington town.

Projects that could impact on the KLM are:

- The Upington Solar Power Plan;
- The Upington Industrial Development Zone; and
- The upgrading and extension of the airport terminals and development of a Cargo Hub and Aircraft Maintenance and Storage Facility.

Map 3: ZFM DM SDF (2012:221)



Kai !Garib SDF (2012)

The Kai !Garib SDF has been aligned with the NC PSDF, but in terms of spatial planning its focus is on settlement level with very little guidance being given to planning on a municipal level. A settlement in the Kai !Garib SDF that is in close proximity to KLM is Kenhardt, which is classified as a “Primary Town”. According to the SDF, Primary Towns should contain the highest population in the municipality and the most investment potential, and should be investment focus areas.

The Kai !Garib SDF also identified a number of Trans-Municipal Corridors that have to be managed on a district level. Those applicable to KLM are: (1) N10 and (2) the Orange River.

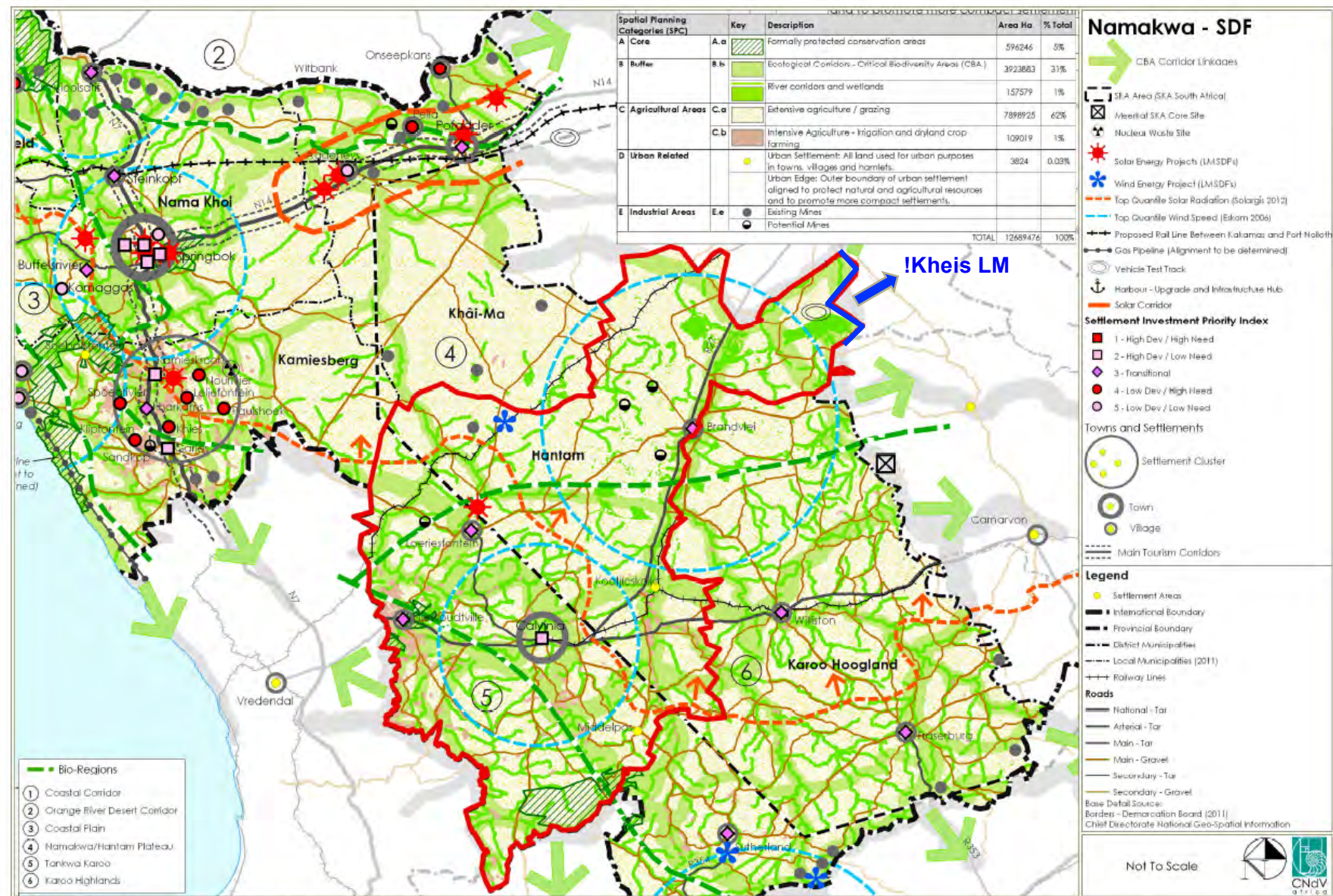
2.4.3 Namakwa District Municipality

While the Namakwa DM SDF has been aligned with the NC PSDF and with the ZFM DM SD, no major proposals are made with regard to the Hantam LM, which borders a small part of the KLM in the Namakwa SDF (see **Map 4**).

2.4.4 Pixley ka Seme District Municipality

Due to the low population levels and size of the Northern Cape and its municipalities, few spatial development proposals made on a district and local municipal level impact strongly on bordering municipalities. The Pixley ka Seme District Municipality District Development Strategy (see **Map 5**) identified a variety of main settlement areas, but few are in close proximity to the KLM. The Kareeberg LM identified Van Wyksvlei, about 40km from the KLM border, as a rural service centre, with the type of services envisaged as: (1) municipal services such as pay points; (2) social and support services; (3) small scale retail; (4) tourism facilities and services; and (5) transportation and roads. The N10 was identified as a development corridor, and the Orange/Gariep River and Gariep Dam as having development potential.

Map 4: Namakwa District SDF (2012)



Map 5: Pixley ka Seme District Development Strategy

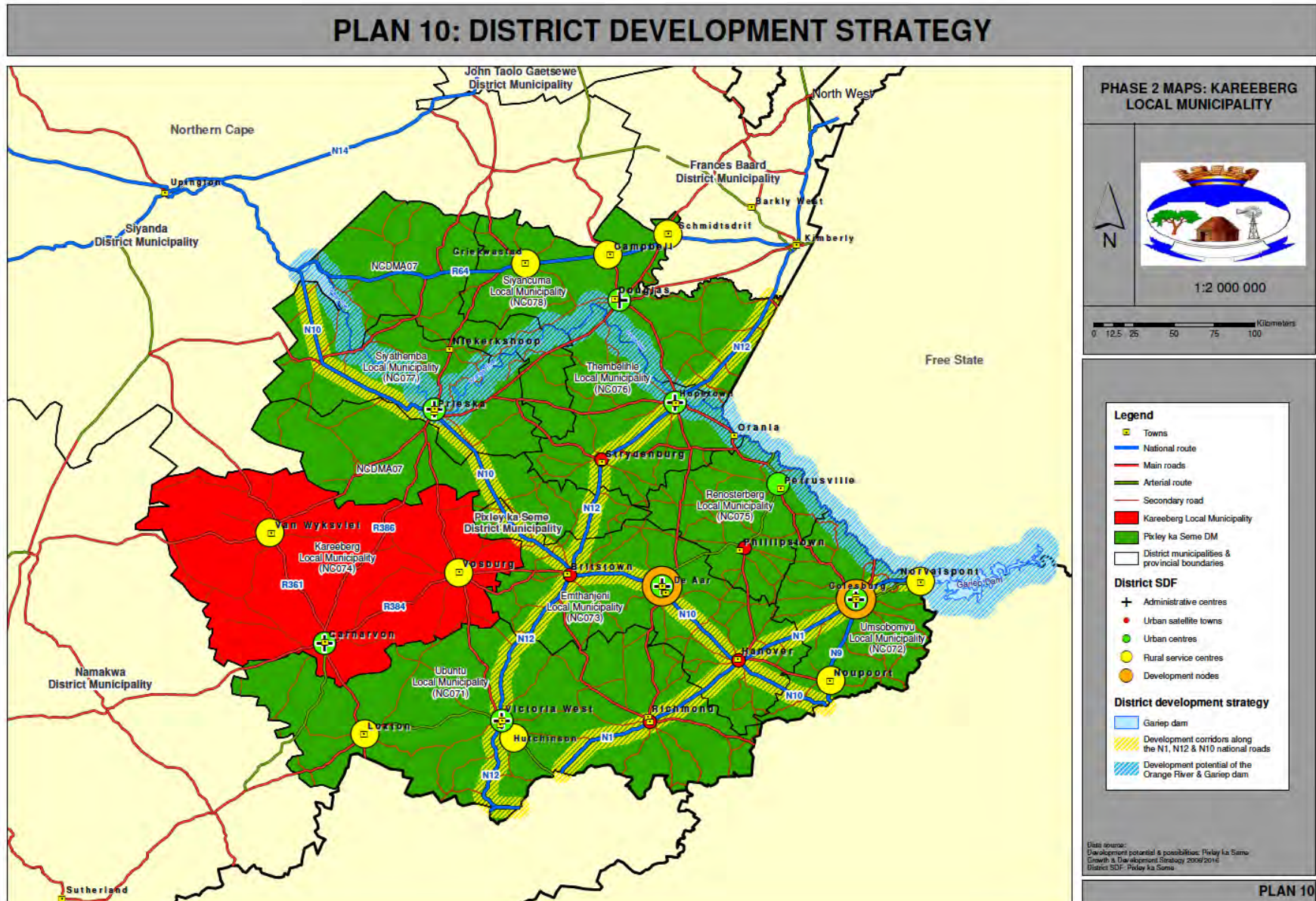
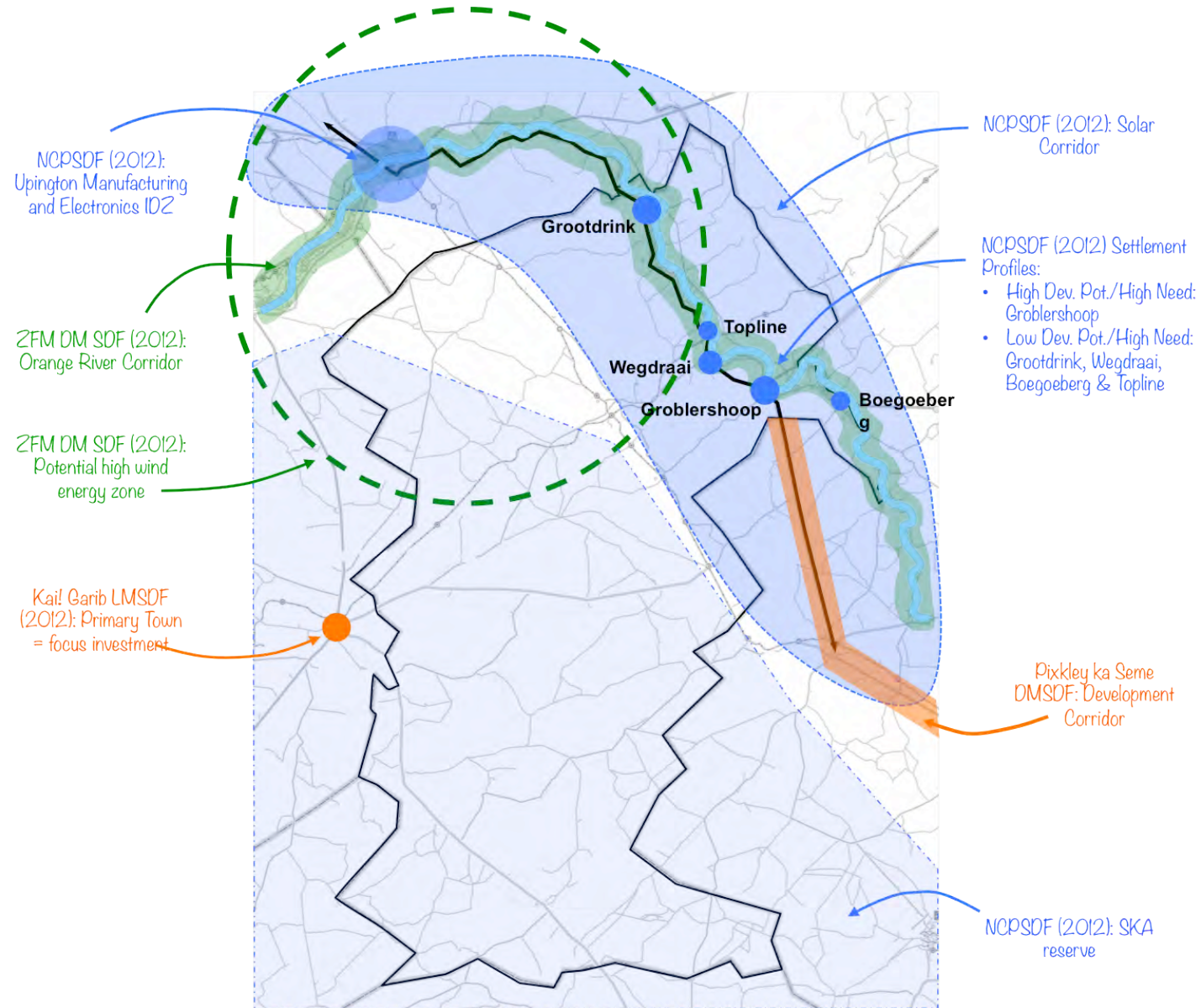


Figure 3: Summary of Provincial, District and Local SDFs



2.4.5 Sector Plans

STATUS OF SECTOR PLANS	
Water Services Development Plan	In process of being developed.
Capital Investment Plan	To resort under the Service Delivery Budget Implementation Plan in future.
Integrated Institutional Plan	An institutional plan has been developed and consists of all the council's by-laws and policies in accordance with Section 15(1) of the Municipal Systems Act 32 of 2000.
Integrated Monitoring and Performance Management Plan	The system is newly acquired. Implementation will start in the 2012-2013 financial year. The first evaluation is envisaged to take place in the first quarter.
Local Economic Development Strategy/Plan	In the process of being developed.
Integrated Tourism Plan	A draft Tourism Plan was developed for the KLM by the former National Department of Environmental Affairs and Tourism. This plan is being reviewed and integrated with KLM's own ideas regarding Tourism and Environmental issues.
Disaster Management Plan	Specific strategies need to be compiled into the existing Plan in order to address the issue

STATUS OF SECTOR PLANS	
	of Disaster Management within the KLM. This would need to happen with the assistance and capacity building from the DM, as well as the Department of Local Government and Housing.
HIV/Aids Strategy	The HIV/AIDS forum of the municipality has been established by the Mayor and the KLM is in the process of developing the strategy.
Integrated Environmental Management Plan	Due to lack of resources, these plans have not yet been developed, however, the IDP has been aligned to the District Municipality's Environmental Management Framework. In addition to this, an 'Environmental Plan of Action' has been developed in collaboration with the National Department of Environmental Affairs.

2.5 KEY IMPLICATIONS OF POLICY DOCUMENTS

Table 1: Key implications of Policy Documents

NATIONAL SPHERE
The National Development Plan (2012)
The people of !Kheis need to come together, take hands and map and build make the road forward together – that means the people on both sides of the N10. Poverty must be eradicated and inequality reduced by increasing the number of those employed. This can be done by using the unique tourism, agriculture and beneficiation opportunities that the KLM has. The KLM must be turned into a vibrant place with a growing, inclusive and resilient economy. Small-scale farmers must be a key component of the local KLM economy through the expansion of the irrigation economy and agro-processing activities.
The Comprehensive Rural Development Plan (2009)
The KLM needs to address the deep poverty and destitution that many of its inhabitants are suffering, and create a sustainable and viable rural community. The KLM needs to pursue social cohesion and development through agrarian transformation, land reform and spatially and economically suitable rural development. The KLM must prioritise agro-businesses, cooperatives, infrastructure investment and the empowerment of youth and women.
The New Growth Path (2011)
The KLM must pursue job creation in the agriculture value-chain, the ‘green economy’ and tourism. Smallholder farms are a way of growing significant numbers of new jobs. The KLM needs to make sure that national and provincial government departments, and the private sector, are aware of the opportunities it offers, and that they invest in support of the utilization/exploitation of these opportunities.
The National Industrial Policy Framework (2007) and the 2011 Industrial Policy Action Plan (IPAP 2)
The KLM must seek to grow industrial jobs, based on its agricultural and agro-processing potential. Catalytic infrastructure projects need to be identified and built. The KLM must explore high-quality, high quality agricultural produce and new niche sub-sectors that can make the most of the area’s unique climate and irrigation potential.
The 2013-Industrial Policy Action Plan (IPAP 5)
The KLM should explore export opportunities to other African countries, especially so by making use of the Upington international airport. The KLM must make use of its ‘green economy’ and agriculture and agro-processing opportunities. The KLM must make sure that those that are currently struggling to survive outside the formal economy are included in up- and downstream activities that the green economy and agriculture and agro-processing opportunities can provide.

PROVINCIAL SPHERE

The Northern Cape Provincial Growth and Development Strategy (2011)

Of particular importance to the KLM are the strategic interventions in the agriculture sector outlined in the NC PGDS. These interventions run across the whole value chain of agriculture from the promotion of optimal and sustainable agricultural production to the support of agri-businesses and agro-processing and the development of farm workers. In addition to this, the NC PGDS identified the following key resources and corridors that should be exploited and developed: (1) The expansion of irrigated agriculture and tourism along the Orange River; (2) the SKA Corridor development which has the potential of increasing industry related development and tourism in KLM; and (3) The Solar Corridor running from Prieska to Upington through all the main settlements in KLM which had been identified as having a high potential for solar energy exploitation, based on its high levels of solar radiation.

The Northern Cape Provincial Spatial Development Framework (2012)

According to the NC PSDF the following opportunities exist in KLM: (1) Solar Corridor that traverses the northern regions of the KLM providing opportunities for the further development of the solar energy industry; (2) The Upington Manufacturing and Electronics Industrial Development Zone – The Upington Airport has been earmarked for a cargo hub for manufacturing related to local agriculture production, electronic goods production, SKA-related and solar energy foods and services – the close proximity of KLM to Upington means that KLM can take advantage of this development; and (3) The SKA Corridor development which has the potential of increasing industry related development and tourism in KLM. In addition to these opportunities, the NC PSDF also classified the main settlements in KLM into certain categories which determines the type of investment it deems appropriate:

- **Grootdrink:** Low Development Potential/High Human Development Need (Category 3 Investment type = Small-scale monetary capital, basic services and social capital);
- **Wegdraai:** Low Development Potential/High Human Development Need (Category 3 Investment type = Small-scale monetary capital, basic services and social capital);
- **Groblershoop:** High Development Potential/Low Human Development Need (Category 1 Investment type = Infrastructure capital, large-scale monetary capital);
- **Topline:** Low Development Potential/High Human Development Need (Category 3 Investment type = Small-scale monetary capital, basic services and social capital); and
- **Boegoeberg:** Low Development Potential/High Human Development Need (Category 3 Investment type = Small-scale monetary capital, basic services and social capital).

LOCAL SPHERE

ZF Mgcawu DM, Tsantsaban LM, //Khara Hais LM and Kai! Garib LM SDFs

The ZFMDM SDF has been aligned with the NC PSDF, and as such has identified bioregions that will guide development in the district. KLM falls within the North

Bushmanland and Orange River bioregions with some of the main proposals being: (1) The implementation of multi-pronged water management strategies in all bioregions; (2) Setting up an Orange River Corridor Authority which will be responsible for the development of an SDF in the Orange River corridor; and (3) Only allowing fracking in the bioregions if EIA studies indicate that the activity will not negatively impact on the receiving environment. The ZFMDM SDF also provides certain guidelines regarding the development of local SDFs and their alignment with the NC PSDF that need to, and have been taken into consideration in the development of the KLM SDF.

With regard to local municipal SDFs in ZFMDM, the //Khara Hais SDF and its proposals around the Upington Industrial Development Zone and the upgrading of the Cargo Hub and Aircraft Maintenance and Storage Facility in Upington will have the biggest impact on KLM through improving KLM's access to these type of services, as well as increasing development in the area.

Namakwa DM (Hantam LM) and Pixley ka Seme DM (Kareeberg LM, Siyathemba LM and Siyancuma LM) SDFs

Due to the low population levels and size of the Northern Cape and its municipalities, few spatial development proposals made on a district and local municipal level bordering KLM impact the area strongly. The majority of proposals impacting on the KLM relate to elements that have to be managed on district and provincial level, such as the proposed corridor development along the N10 and the Orange River corridor. These proposals are in line with the development direction of the ZFMDM and NC PSDF.

CHAPTER 3: STATUS QUO



3.1 INTRODUCTION TO THE STATUS QUO ANALYSIS

This section provides an overview of the Bio-Physical, Socio-Economic, Settlement and Infrastructure conditions in KLM, as well as a summary of the Public Consultation Processes that was followed.

3.2 INTRODUCING THE !KHEIS LOCAL MUNICIPALITY

Map 6: Locational setting of KLM



The first inhabitants of the area now known as the !Kheis municipal area were the San people, whose traces of movement through, and settlement for short periods of time in the area date back to tens of thousands of years ago. The San were followed by the Khoi, who arrived in the area, first in smaller

numbers from around 1500s onwards, and later, in larger numbers during the 1700s. While the nomadic San hunter-gatherers stayed in the area on a short and seasonal base, the Khoi, who kept sheep, goat and cattle, established small tribe-based settlements, primarily in fertile valleys in close proximity to rivers and streams. With the arrival of European settlers, and after numerous empire-expanding wars waged by primarily the British, during which many of the leaders of the Khoi tribes were either killed or imprisoned, the Khoi increasingly lost their ability to sustain their way of life and with that, to maintain their settlements. Through the introduction of harsh taxes, designed to finally destroy (1) the Khoi's community structure, (2) their ability to mobilise, and (3) their self-sufficiency, as well as to force them into wage labour, the era of the Khoi settlements in the area came to an end. With this began the era of predominantly large white sheep and cattle farms in the area on which, in many cases, the descendants of the Khoi lived as farm-worker communities.

The creation of the irrigation farming model and the associated series of settlements along the N10 dates back to the 1930s, when as part of a larger project of (1) restarting a floundering national economy amidst the wider international Great Depression, (2) mass job creation and (3) addressing what was then described as the 'Poor White Problem', the then government embarked on a programme of dam building, coupled with the establishment of irrigation farm economies in a number of distressed rural areas. Amongst the projects, which included the establishment of the Vaalharts Scheme (also in the now Northern Cape Province) and the Loskop and Hereford Schemes (in the now Limpopo Province) was the Boegoeberg Scheme in the lower reaches of the Orange/Gariep River. This scheme entailed the construction of the Boegoeberg Dam, and the building of 270 kilometres of canals, largely by means of rudimentary equipment and hand. As part of the scheme, and initially to house workers on the scheme, the town of Boegoeberg, and later the towns of Grootdrink, Sternham, Groblershoop, Gariep, Wegdraai and Topline were established. Once complete, irrigation farming was possible, and

just over a thousand small farms (of between 4.9 to 6.8 hectares) were made available on probation to impoverished white farmers. Over time this saw (1) the introduction of a range of crops, notably citrus trees, vineyards, lucerne and later also pecan nuts to the area, and (2) 'the Scheme' and the lush stretch of land around the Orange/Gariep River very aptly being given the name of the "Green Karoo". Groblershoop became the core town in the region, providing, albeit limited, the widest range of retail, government and personal and financial services to the surrounding farming community, while the other towns increasingly became home to erstwhile farm workers from the surrounding farms and seasonal 'outside' workers who decided to stay on in the area.

Over the last two decades, and largely due to mechanisation, changes in crop types and a continuous pursuit of lowering input costs, an ever-increasing number of former farm workers moved, and were moved to the settlements along the N10. Due to the seasonal nature of the available work in the area, the low wages associated with farm work, and the limited availability of any other job opportunities these areas have become troubled by (1) deep poverty, (2) a feeling of marginalisation and hopelessness, and (3) alcohol and drug abuse, and an accompanying myriad of social ills. Through the State's social grant programmes, RDP housing construction, municipal infrastructure construction and basic service provision, and the provision of education and health services, people have been able to get by and raise their children. This model is, however, reaching the limits of what it can do to lift people out of abject poverty. Increasingly so, children born in the 1990s are moving through the school system and into a world of long-term unemployment. This in itself is causing further tension and instability. This new and deepening level of 'free-born' joblessness not only means that huge amounts of human capital are being wasted, but that the social foundations and fabric of these settlements is being, and will increasingly be threatened by a restless generation of highly expectant young people. This new dynamic, layered over the already high levels of joblessness and poverty in the settlements, urgently requires (1) new

economic ventures and substantial job creation in the KLM, and/or (2) the equipment of youth with the necessary abilities and life-skills to leave the area and make a life elsewhere.

This SDF is prepared within this understanding and a desire to make a contribution in this regard.

3.3 BIO-PHYSICAL CONDITIONS

3.3.1	Summary of the Bio-Physical Environment	p. 32
3.3.2	Geology and Soils	p. 34
3.3.3	Topography and Slope	p. 34
3.3.4	Climate	p. 34
3.3.5	Hydrology	p. 45
3.3.6	Groundwater	p. 45
3.3.7	Flora	p. 56
3.3.8	Fauna	p. 56
3.3.9	Biodiversity	p. 56
3.3.10	Agriculture	p. 57
3.3.11	Mining	p. 57

3.3.1 Summary of the Bio-Physical Conditions

The KLM is characterised by semi-desert conditions, with high summer temperatures (35-40°C) and low annual rainfall levels (130mm per year). The Orange River forms a green strip through the otherwise arid landscape of the KLM, and is the main source of surface water for the ZFM DM as a whole. Large parts of the KLM are not suitable for arable agriculture, with only the irrigated land around the Orange/Gariep River, made possible by the construction of the Boegoeberg Dam and water channels in the early 1930s, able to support more intensive agriculture. The irrigated farmland area around the Orange River in the Northern Cape is one of the main producers of table grapes and dried fine fruit in the country, and also supports the wine cellar industry in the area. Groundwater utilization is important in the KLM and constitutes the only source of water *from* the area. However, due to the low rainfall in the region, the recharge of groundwater is limited and only small quantities can be abstracted on a sustainable basis.

Opportunities:

- Intensification of irrigated agriculture along the Orange River;
- Agro-processing linked to the irrigated agriculture along the Orange River;
- Natural Scenic beauty of KLM; and
- Production of Solar Energy.

Challenge:

- No significant potential for further sustainable development/use of the groundwater exists;
- Climate change will impact the western parts of South Africa severely, and it is estimated that only 28% of the Nama-Karoo Biome will remain as such by the year 2050;
- The majority of the water in the Orange River originates in up-stream catchments over which there is little local control;

- The high evaporation rates and limited run-off yield in the area;
- The dependence of agriculture on surface water from the Orange River; and
- Insufficient measurement, monitoring and control of water used for irrigation.



Grape Farming



Orange River



Orange River Canal System



Landscape in KLM



Accessing Water in KLM



Boegoeberg Dam

3.3.2 Geology and Soils

The KLM is located on the great African plateau, which formed part of the ancient continent of Gondwanaland that formally included eastern Brazil, southern India, Western Australia and Antarctica. The general surface geology of the KLM is (1) Exposed metamorphic rocks originating mostly from intrusive rock; (2) Thick sand and alluvium; (3) Sedimentary rocks and/or sand (Karoo Sediment); and (4) Folded sedimentary and volcanic rocks. For a more detailed description of the geology of KLM see **Map 7**.

The soils in the KLM predominantly have a depth of less than 450mm and generally consist of rocks with a limited soil presence. As a result, large parts of the KLM are not suitable for arable agriculture, with only the southern portions able to support arable agriculture where climate permits (see **Maps 8 and 9**). The soils are however able to support forestry and grazing, but once again only where the climate permits. According to the Land Capability Map (**Map 10**), which considers and incorporates (1) the risk of damage if land is used for unsuitable uses, and (2) how the land responds to management, the KLM has severe limitations for grazing due to steep land and high erosion potential. Only the irrigated land around the Orange River can support more intensive agriculture but this may be compromised by soil-salination. Excessive irrigation, especially micro-spray irrigation, causes leaching of soils that permeate to lower lying irrigation areas and accumulate as salts that destroy the continued potential of such lower lying areas (most often in the flood plain of the Orange/Gariep River).

3.3.3 Topography and Slope

In terms of its physical geography, the KLM falls predominantly within the Bushmanland basin with only the region around the Orange/Gariep River to the northeast falling in the Griqua Fold Belt.

Bushmanland is an arid, level sub-region of the Cape Middleveld to the east of the Namaqua Highlands. It is underlain by granitic Precambrian rocks on the

western and northern sides and, with specific regard to the KLM, by Karoo rocks towards the southeast. It is characterized by numerous large pans and “vloers” and is on average located between 900-1200m above sea level. The Griqua Fold Belt is a Highveld sub-region that lies in a roughly triangular shape to the west of the Ghaap Plateau, to the south of the Kalahari Basin and to the east of Bushmanland. It is responsible for the scenic Langberg/Korana Mountains to the northeast of the KLM. It is also this fold belt that is responsible for the elevations in slope in the northeastern part of KLM (see **Map 11**).

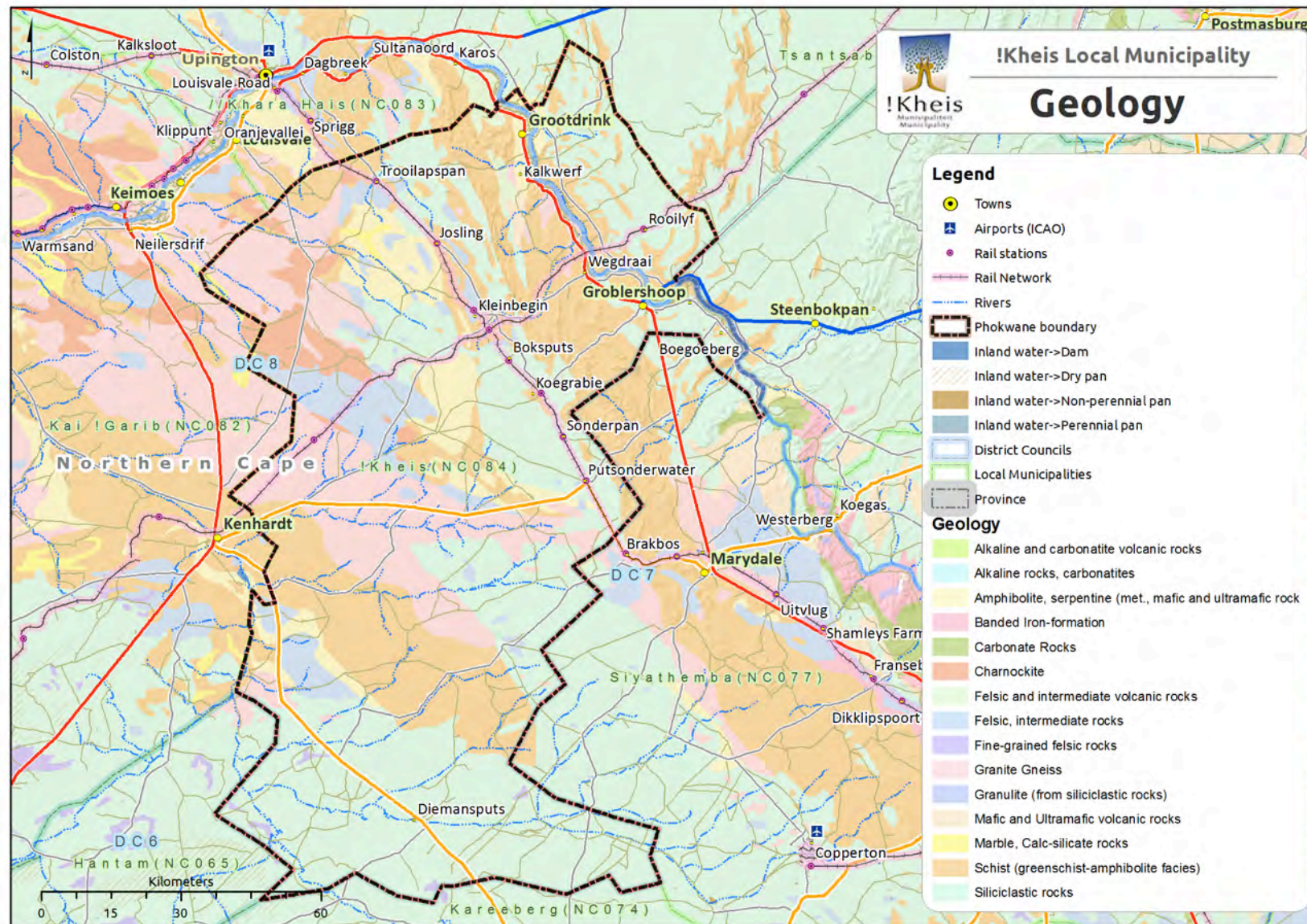
The ZFM DM Environmental Framework (2008) makes use of a terrain morphological classification, which gives a classification of the landforms that occur in the area irrespective of geology (see **Map 12** below). According to the terrain morphology map, the KLM consists predominantly of (1) ‘slightly irregular plains’, with ‘slightly irregular plains and pans to the south, and (2) ‘extremely irregular plains to the southwest and north east, with ‘hills’ to the northeast.

3.3.4 Climate

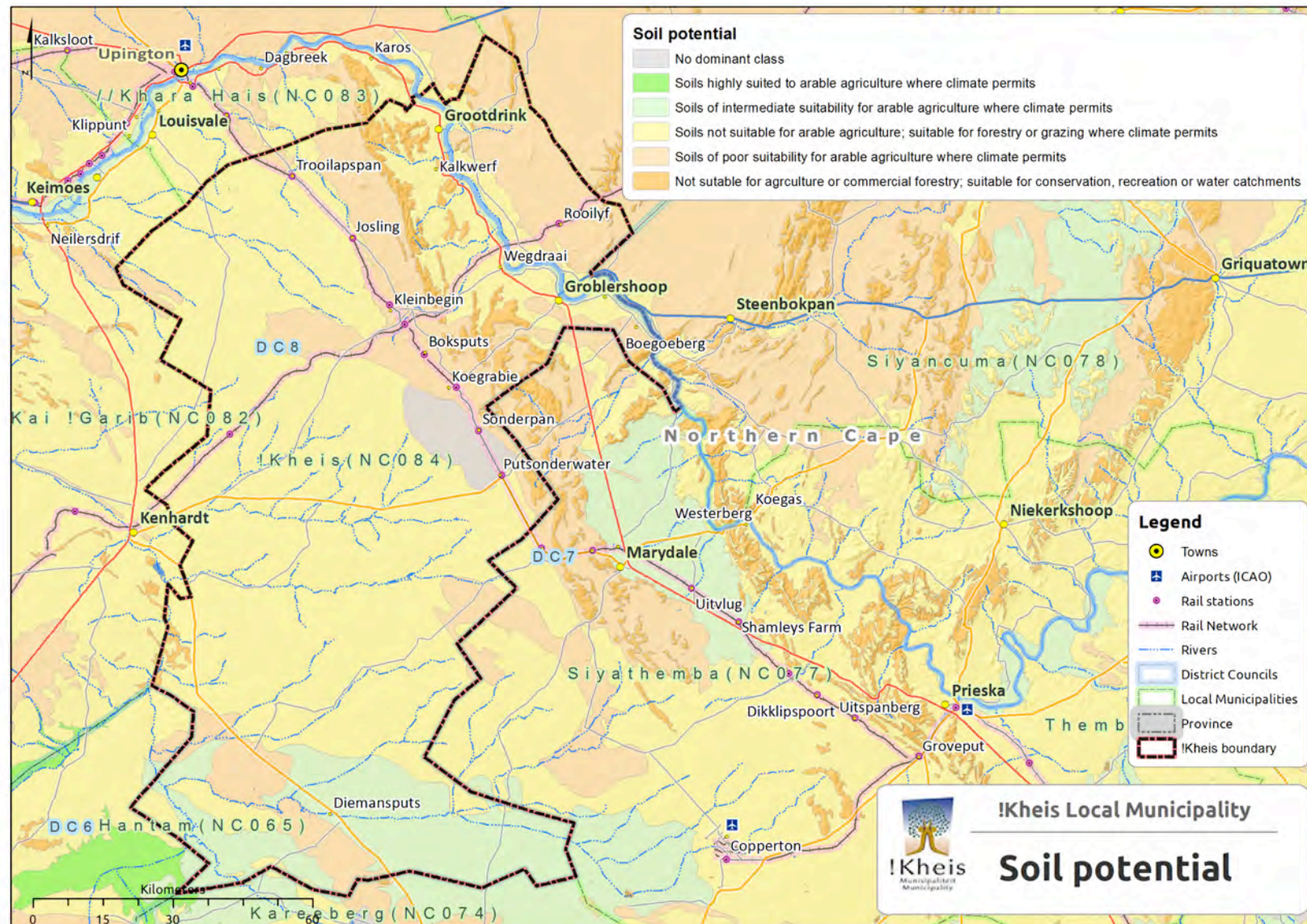
The KLM falls within a ‘rain shadow’ and as a result the average rainfall is very low at 130mm per year in the majority of KLM. Only the northeastern sections of the KLM receive an average rainfall of more than 200mm per year. In these semi-desert conditions, summer temperatures can reach up to 40°C in the northern parts of the KLM and winter temperatures average at 10°C, but can fall below 0°C in the evenings (see **Maps 13 and 14**).

The high levels of sunshine (see **Maps 15 and 16**) in the area provides the opportunity for the generation of electricity using solar energy. Currently a Concentrating Solar Power facility is being planned by Eskom a few kilometers outside Upington.

Map 7: Geology of the KLM



Map 8: Soil Potential in the KLM



Legend

- Towns
- Airports (ICAO)
- Rail stations
- Rail Network
- Rivers
- District Councils
- Local Municipalities
- Province
- !Kheis boundary

Grazing capacity (ha / animal)

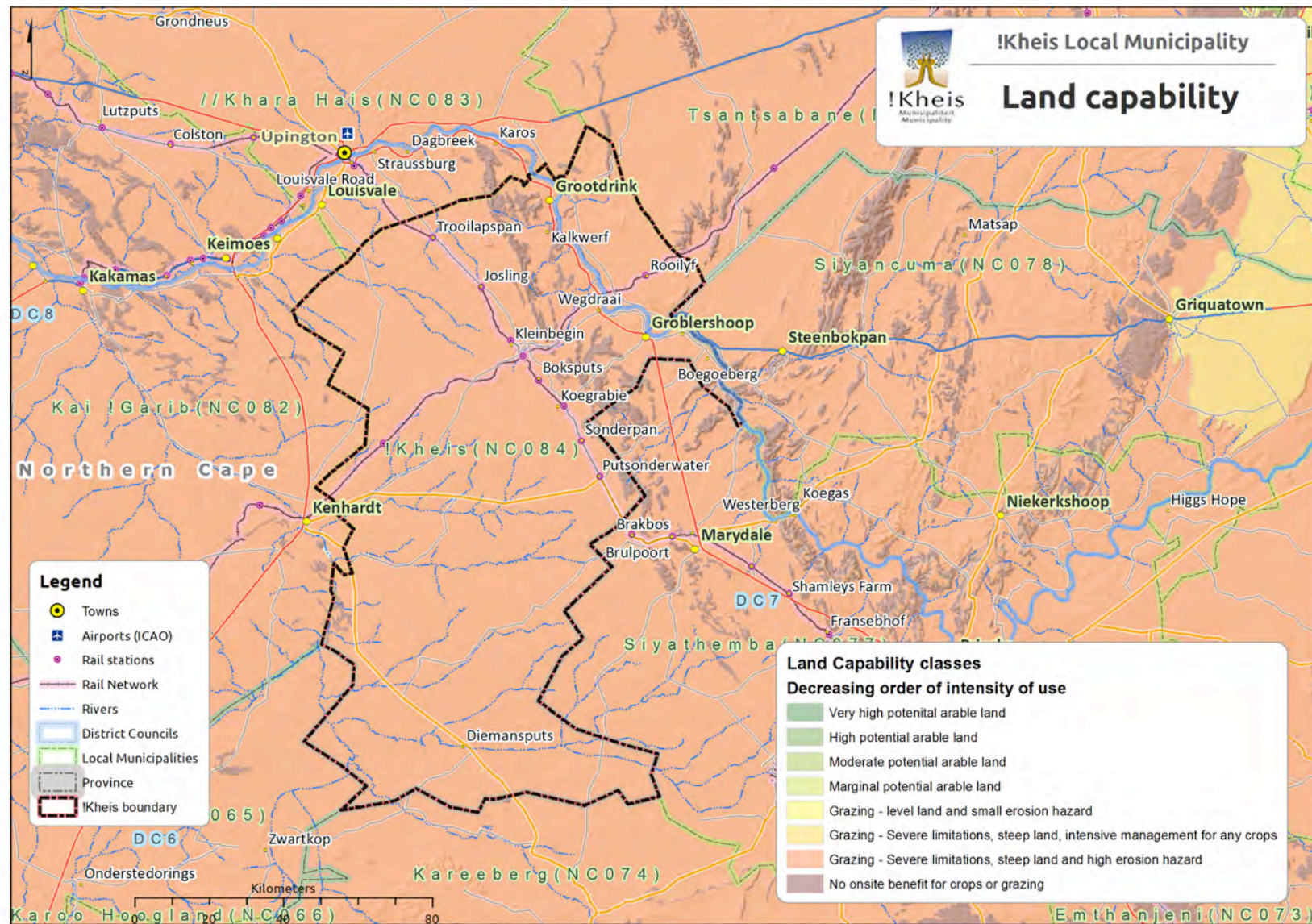
- 0 - 4
- 5 - 7
- 8 - 10
- 11 - 13
- 14 - 17
- 18 - 21
- 22 - 25
- 26 - 30
- 31 - 40
- 41 - 60
- 61 - 80
- 81 - 100
- > 100

Transformed rangeland

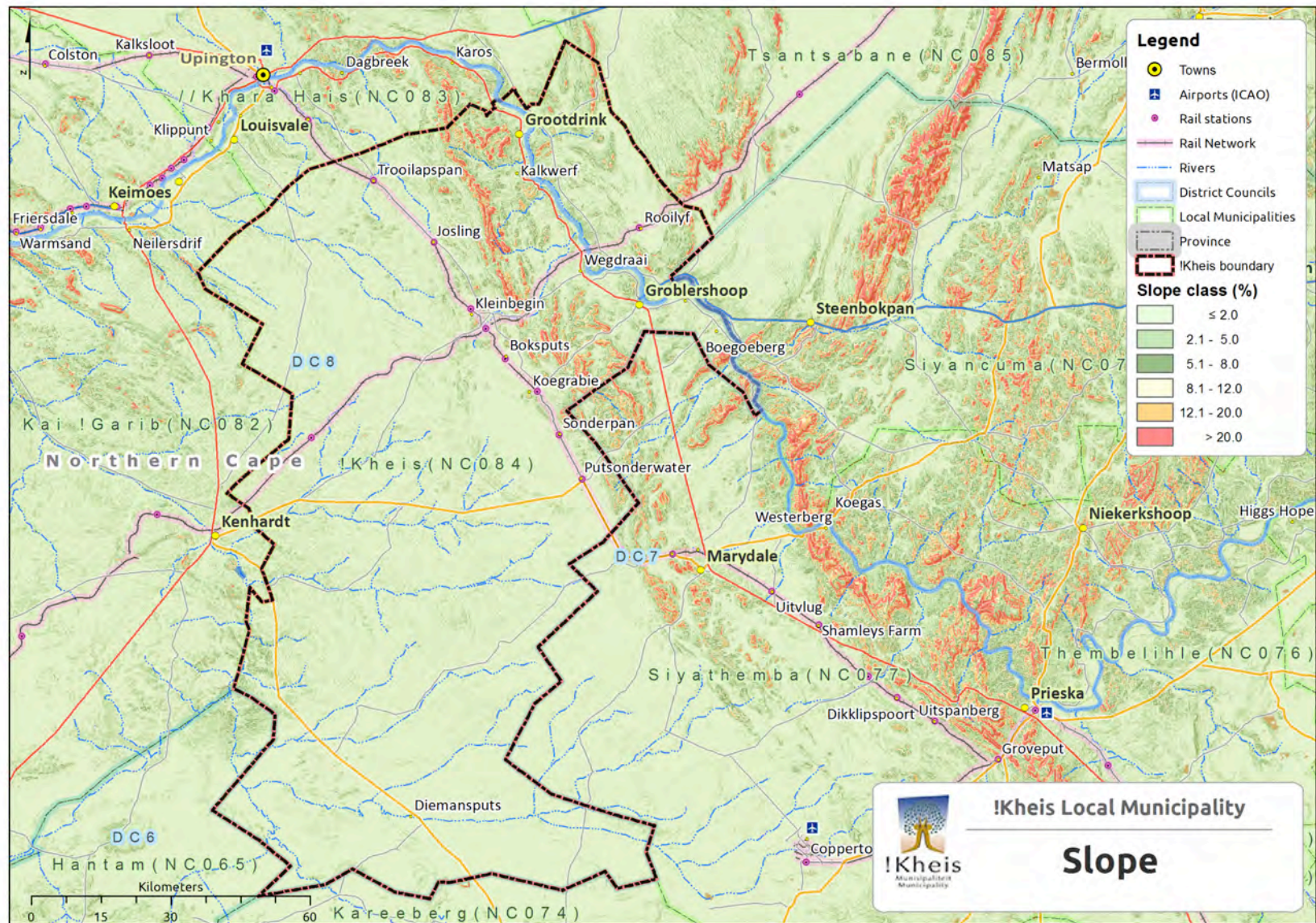
!Kheis Local Municipality

Grazing capacity

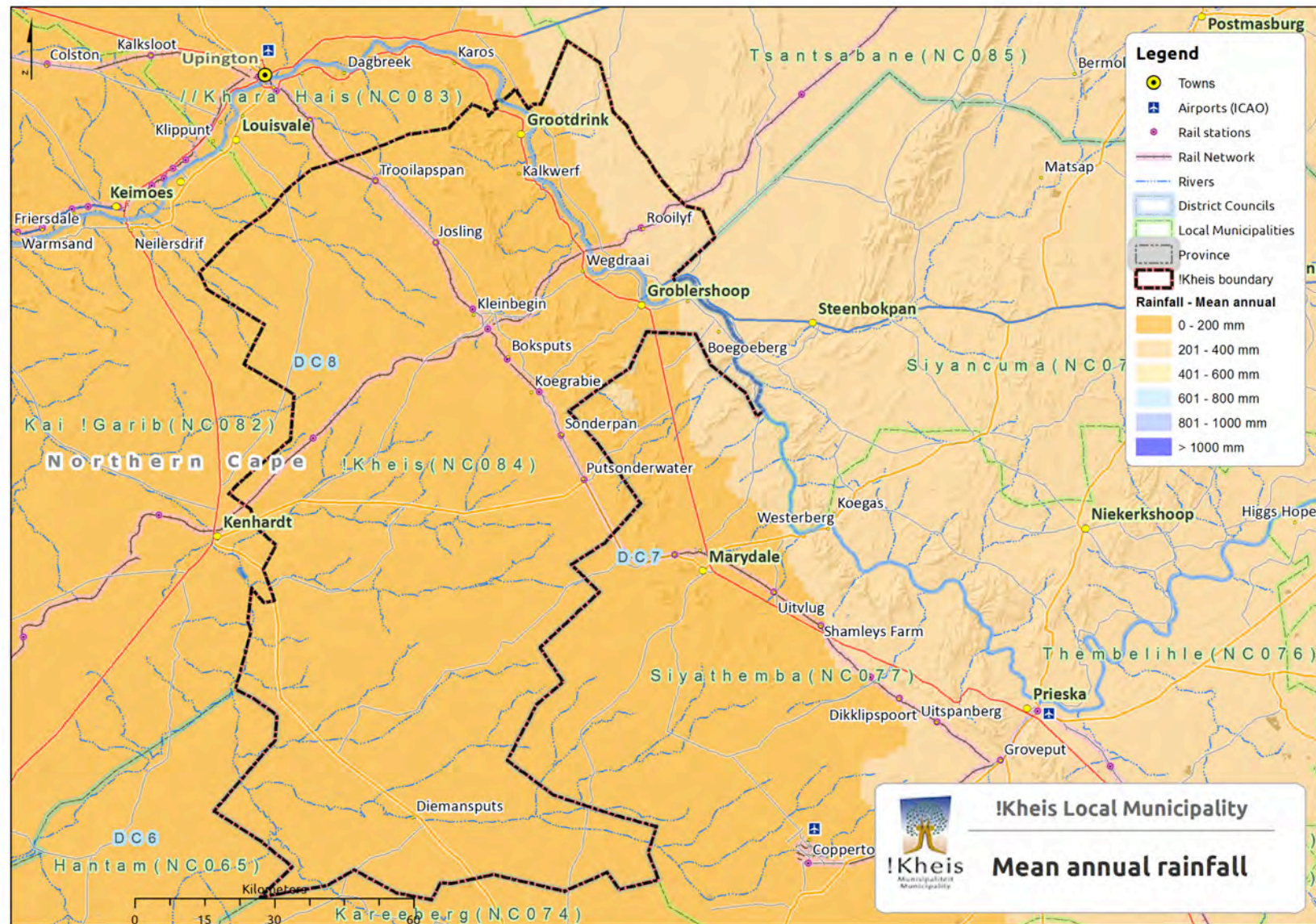
Map 10: Land Capability in the KLM



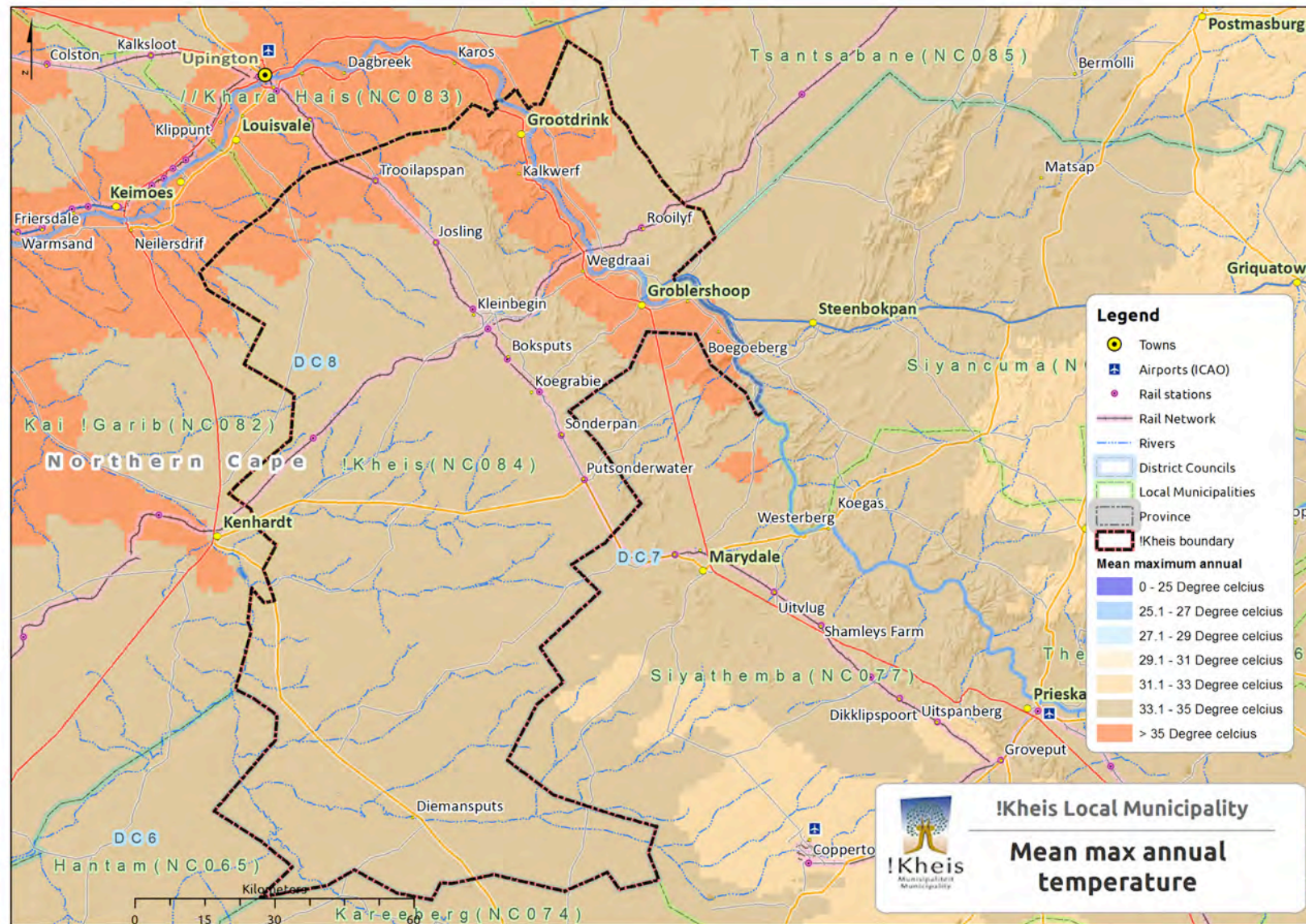
Map 11: Slope in the KLM



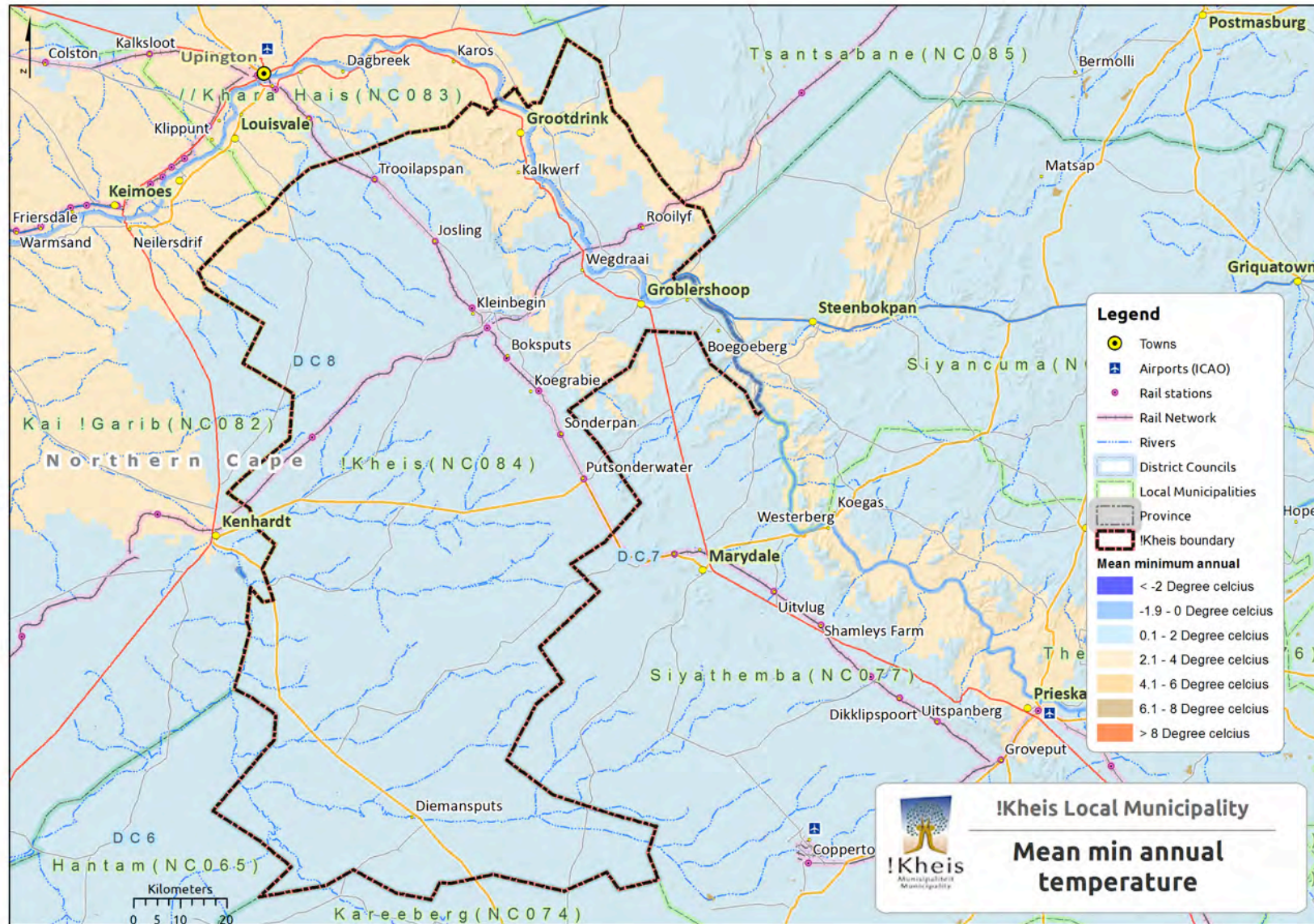
Map 12: Mean Annual Rainfall in the KLM



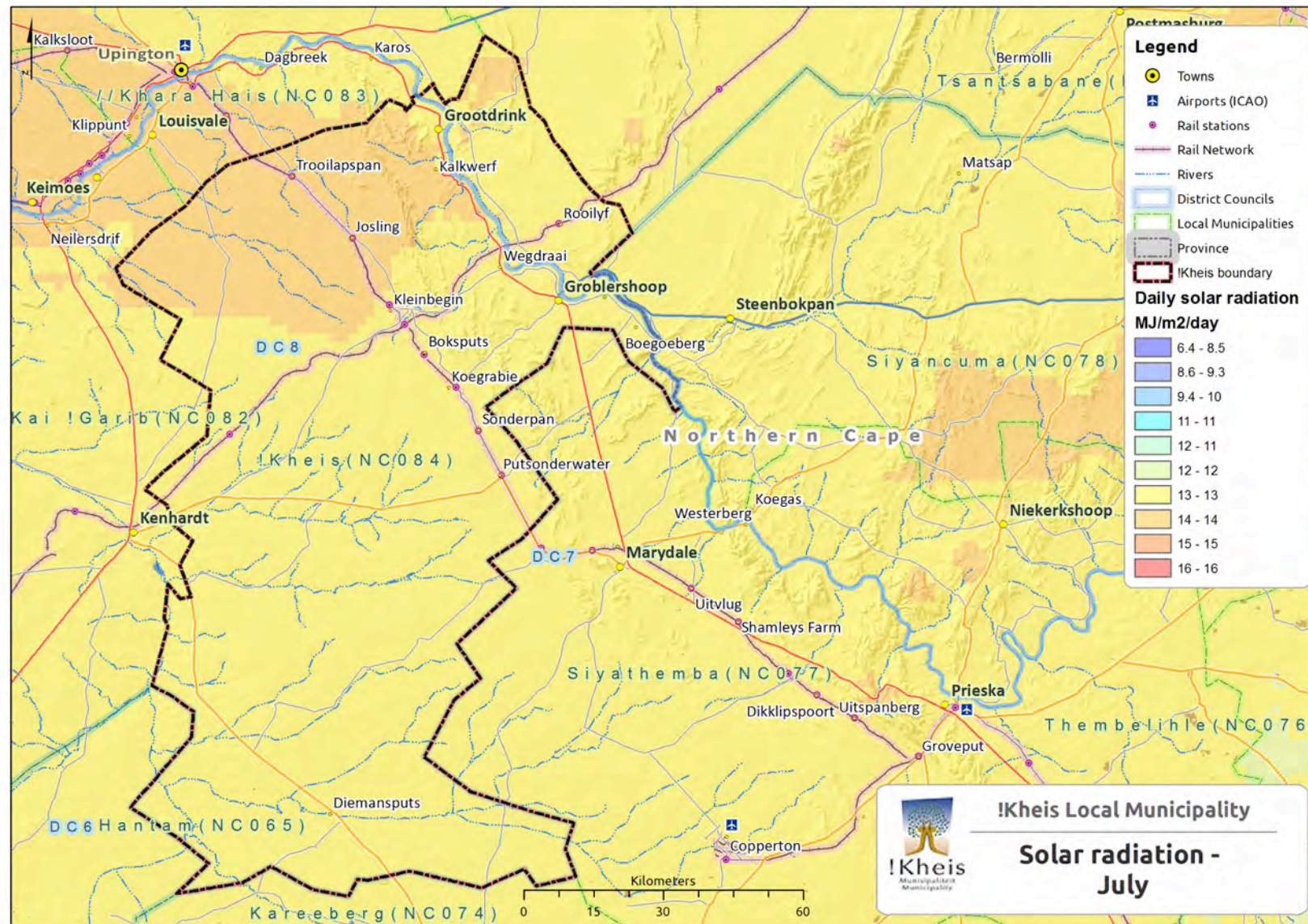
Map 13: Mean Maximum Annual Temperature in the KLM



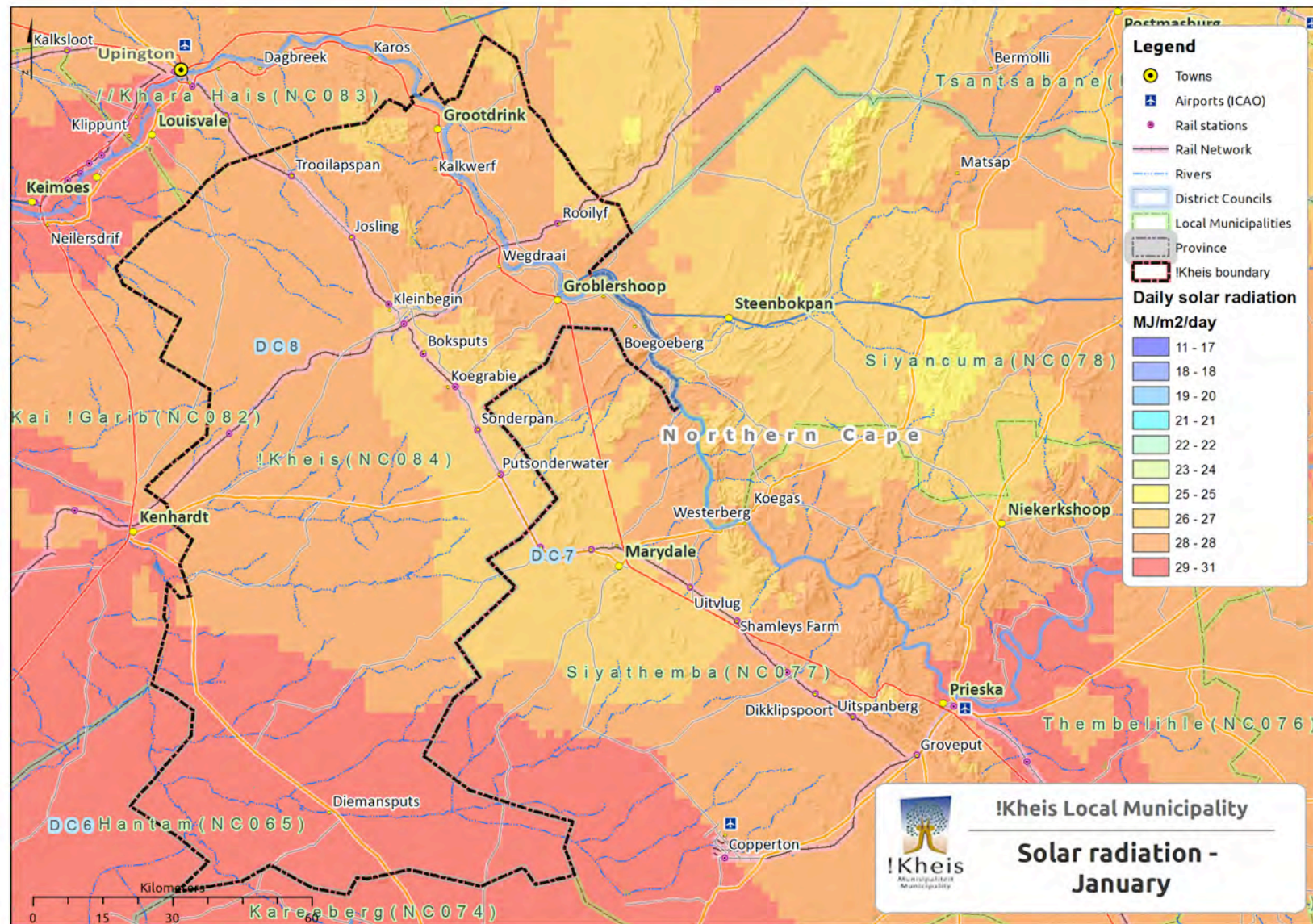
Map 14: Mean Minimum Annual Temperature in the KLM



Map 15: Solar Radiation in July in the KLM



Map 16: Solar Radiation in January in the KLM



3.3.5 Hydrology

The KLM falls within the Lower Orange Water Management Area (LOWMA), which is characterized by an arid climate with minimal rainfall, drought conditions and occasional severe flooding. The evaporation rate is as high as 3000mm per annum, which is far higher than the Mean Annual Rainfall and as a result little usable surface runoff is generated over most of the area. The majority of the water in the catchment area, pans and streams comes from the Upper Orange Water Management Area located to the south-east of the KLM, thus any activities that impact hydrology in that area has a direct impact on KLM (see **Map 17**). The area consists of a number of smaller quaternary catchments (please see **Map 18** for a more detailed description).

With the exception of the Orange River, all rivers in KLM are non-perennial (see **Map 19**). The Orange River forms a green strip through the otherwise arid landscape of the KLM, and is the main source of surface water for the ZFM DM as a whole. Although there are no natural lakes in the area many large depressions or pans can be found. In 2000, the recorded natural Managed Aquifer Recharge (MAR) quantity of the Orange River and its tributaries was approximately 478 million cubic metres per annum. Due to the development of irrigation farming on the banks of the Orange River, the Lower Gariep Alluvial Vegetation that grows in the floodplains of the Orange River is being lost and as a result increases the potential for the invasion of alien plants (see **Map 20**). With regard to the river ecosystem status, the rivers in the southern parts of the KLM are not threatened, but the rivers in the northern parts are, due to farming and urban development (see **Map 21**).

Surface water is mainly used for irrigated farming along the Orange River and some of its main tributaries. The Boegoeberg Dam enables the irrigation of the alluvial soils between the river's passage through the Ezel Rand (part of the Matsap quartzite) and the open granite country at Upington. The crops most suited to this part of the Orange River valley include lucerne, grapes and wheat, and subsidiary crops, notably vegetables, cotton, deciduous fruits,

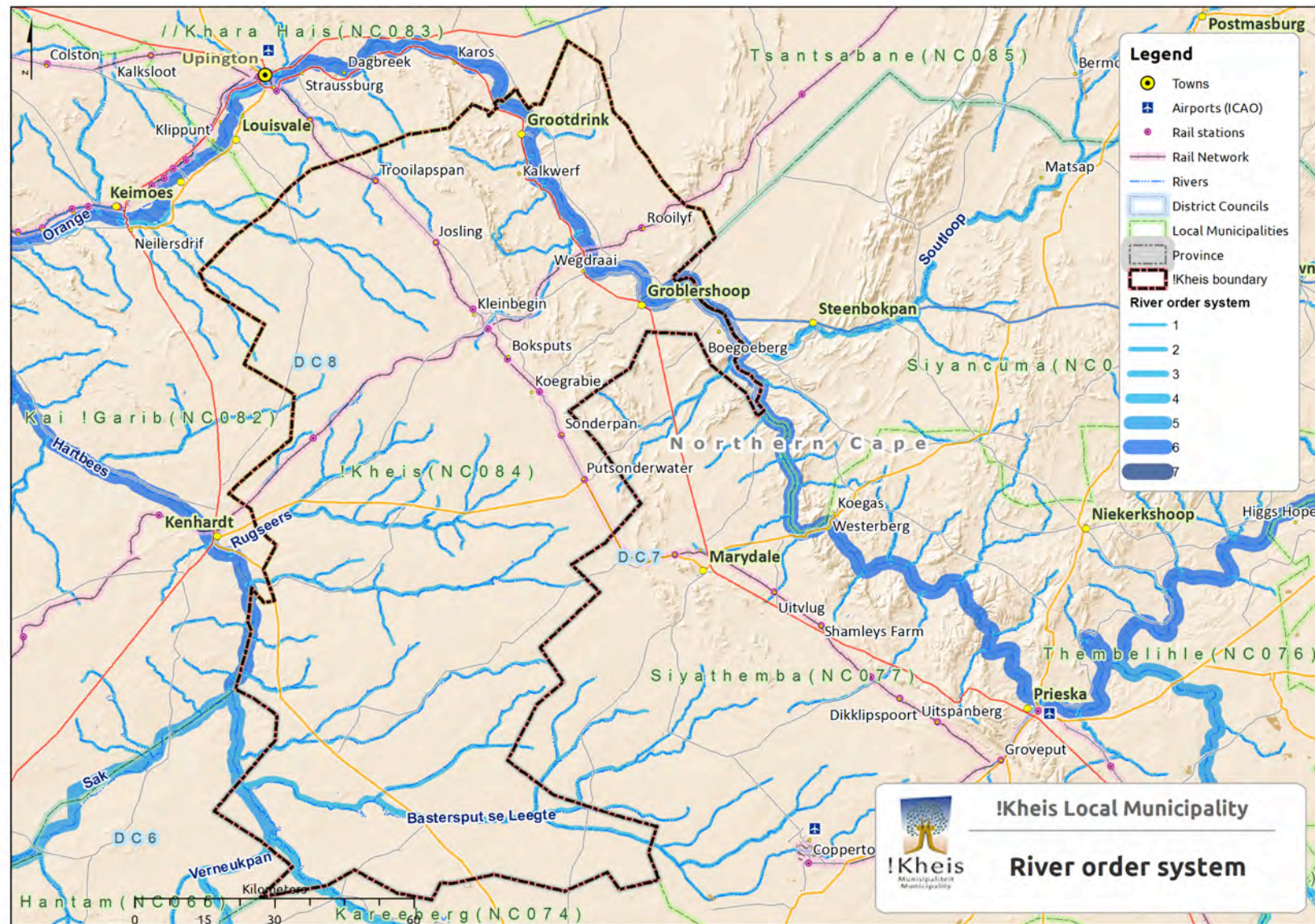
maize and citrus. According to the ZFM DM EMF (2008), the main constraints/concerns in the area with regard to surface water is: (1) the majority of the water originates in up-stream catchments over which there is little control; (2) the high evaporation rates and limited run-off yield in the area; (3) the dependence of agriculture on surface water from the Orange River; and (4) insufficient measurement, monitoring and control of water used for irrigation.

3.3.6 Groundwater

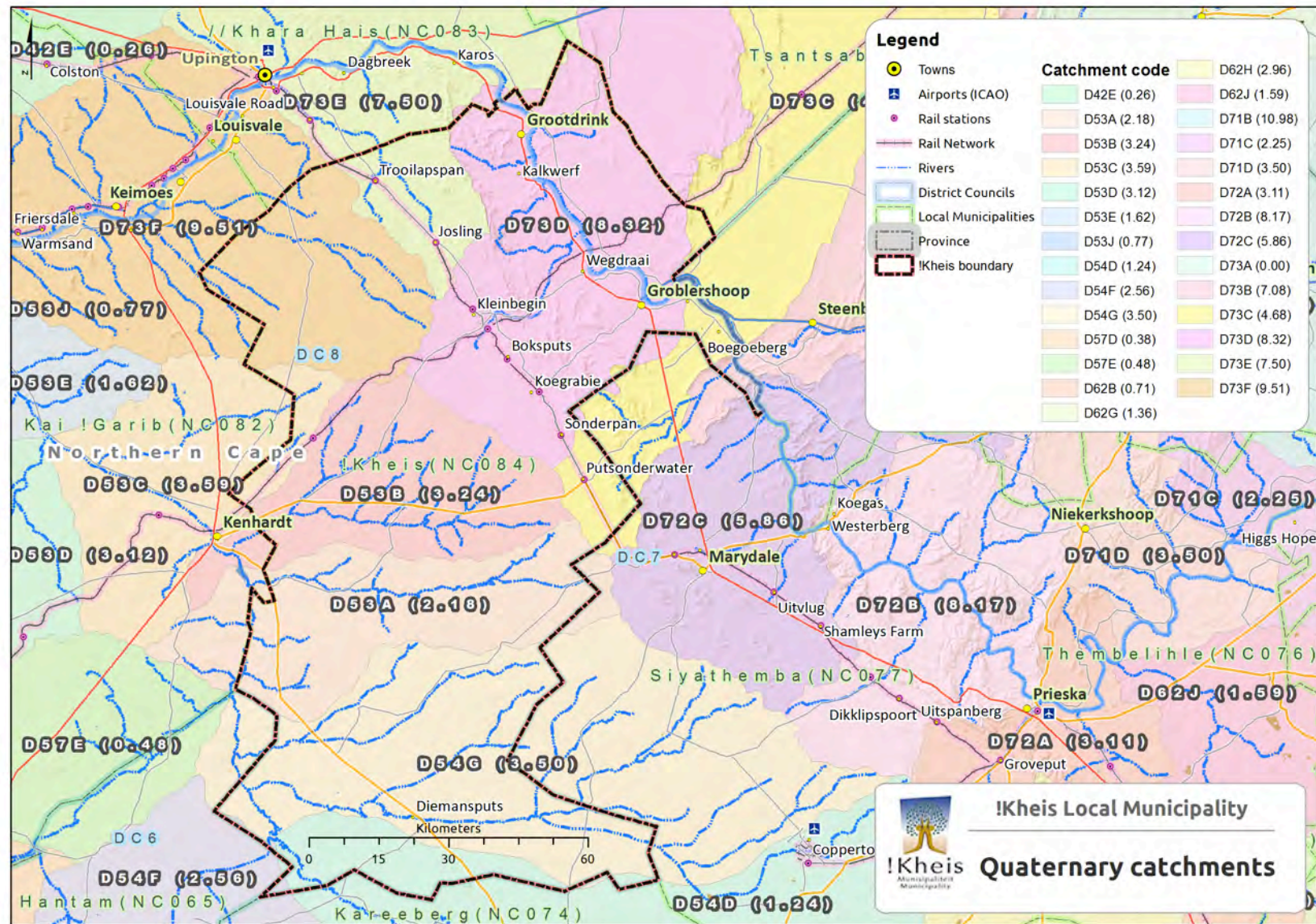
Groundwater utilization is important in the KLM, and constitutes the only source of water in most of the rural areas. As a result of the low rainfall over the area, the groundwater is mainly used for rural domestic water supplies, stock watering and water supplies to inland towns (see **Map 22**). Recharge of groundwater is limited and only small quantities can be abstracted on a sustainable base. Aquifer characteristics (borehole yields and storage of ground water) area also typically unfavourable because of the hard geological formation underlying most of KLM (see **Maps 23 and 24**).

In the Orange River tributaries, more than fifty percent of the available water is supplied from groundwater source. A small component of the available water in the vicinity of the Orange River is groundwater, however it constitutes an important source of water for rural water supplies in the area. A significant amount of groundwater is being abstracted near the river where the ground water levels are replenished by means of induced recharge from the river. According to the ZFM DM EMF (2008), the utilization of groundwater in 2000 was approximately in balance with the sustainable yield, but no significant potential for further development exists (see **Map 25 and 26**).

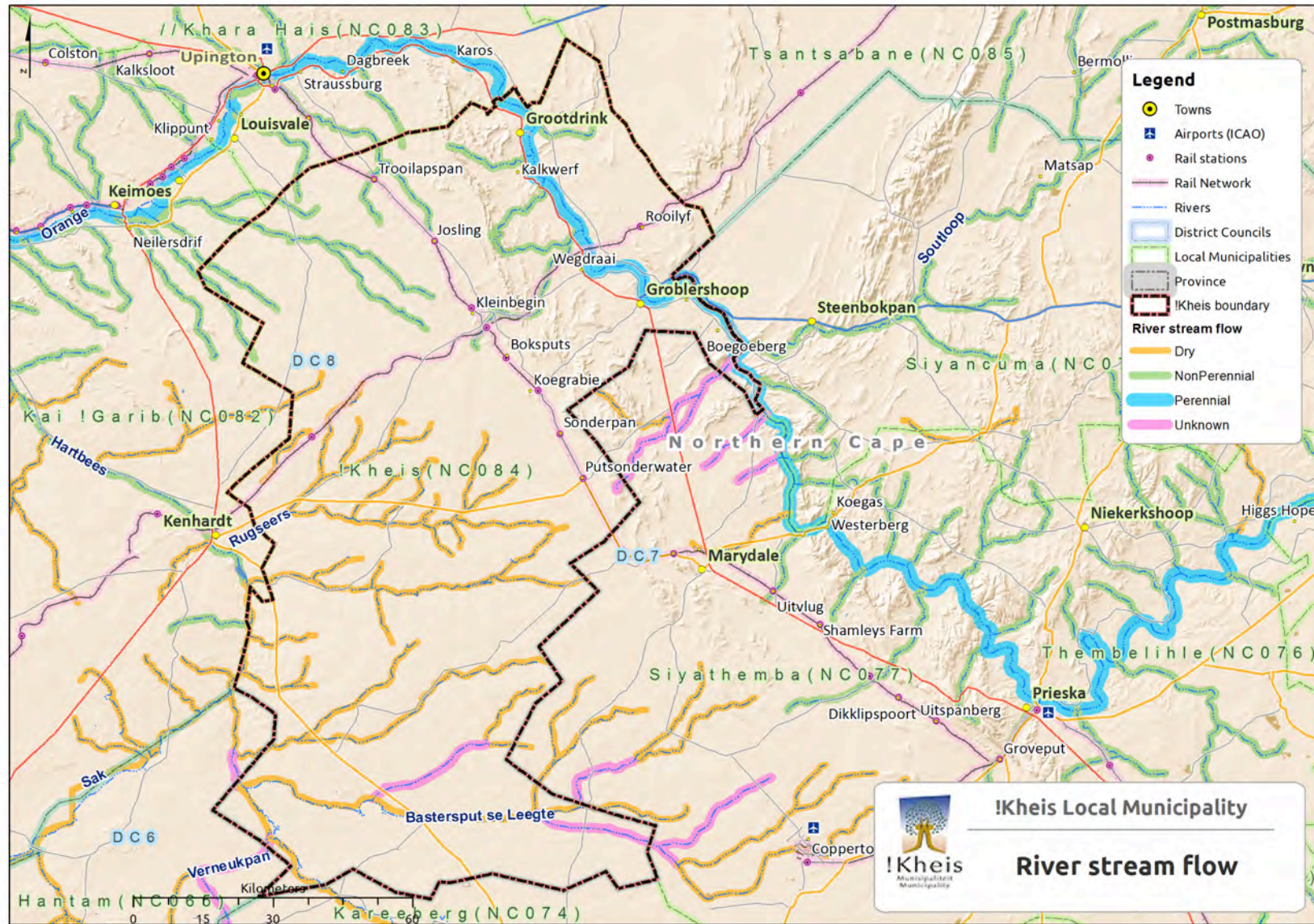
Map 17: River Order System in KLM



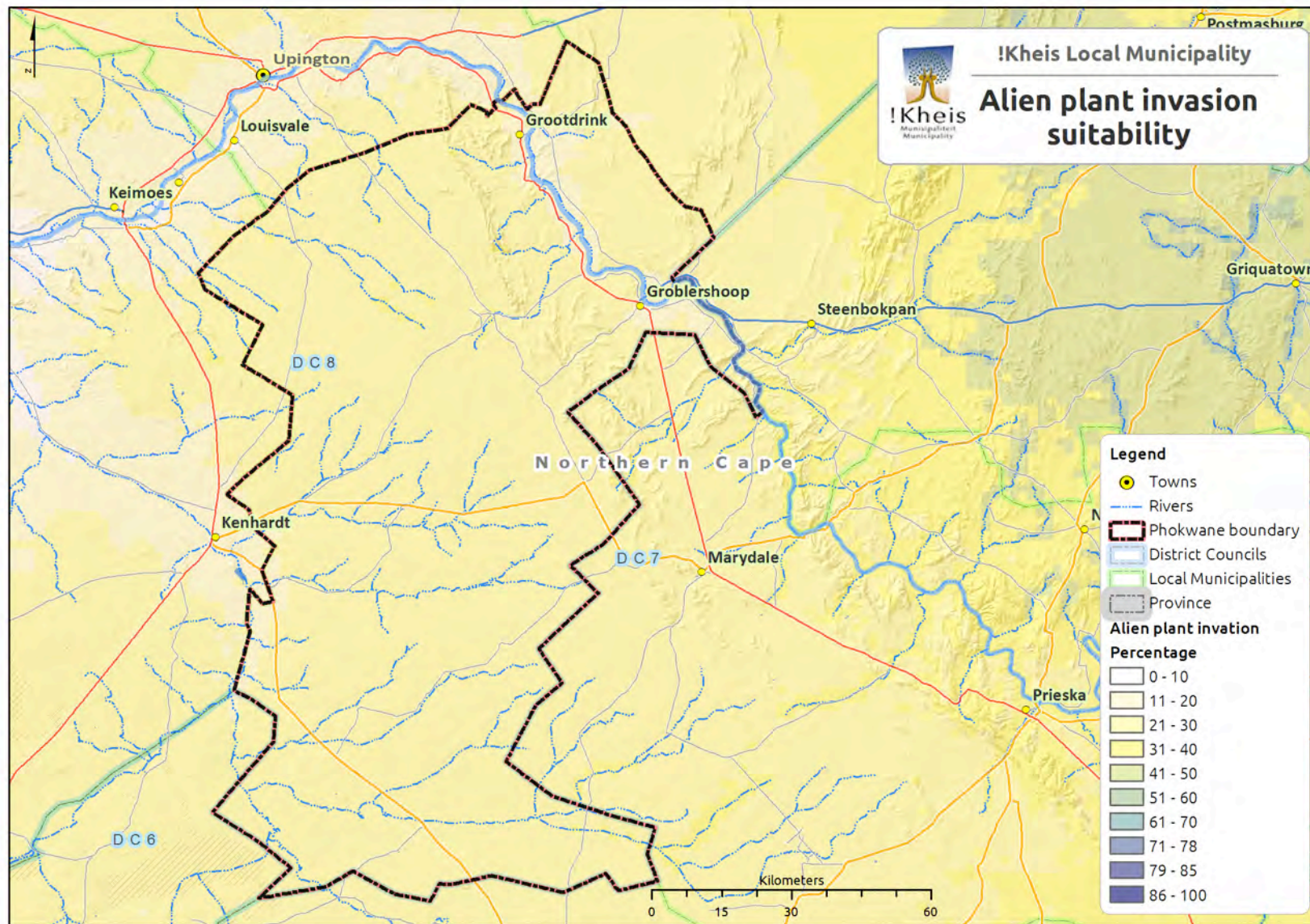
Map 18: Quaternary Water Catchments in KLM



Map 19: River Stream Flow in KLM

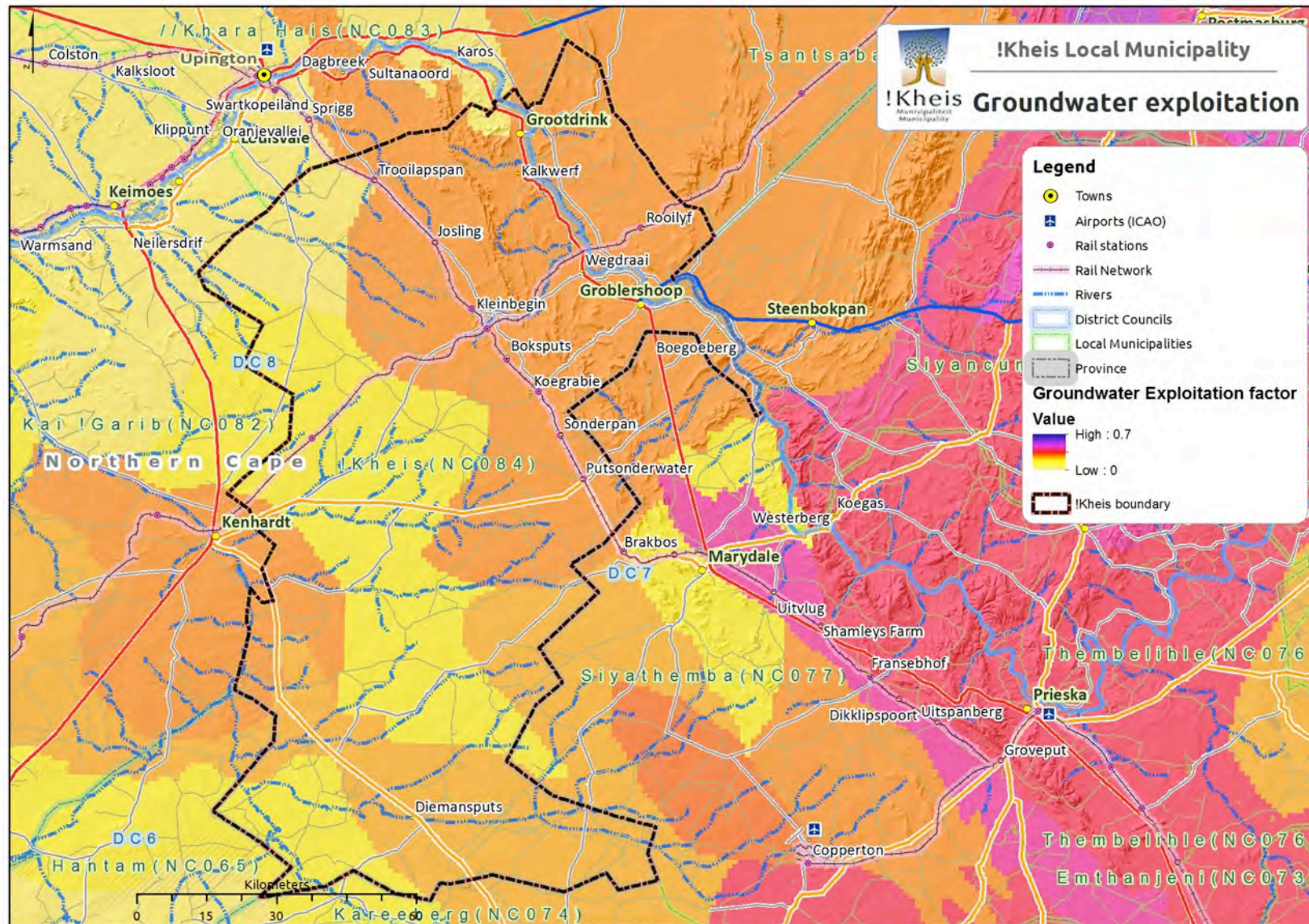


Map 20: Alien Plan Invasion Suitability in KLM

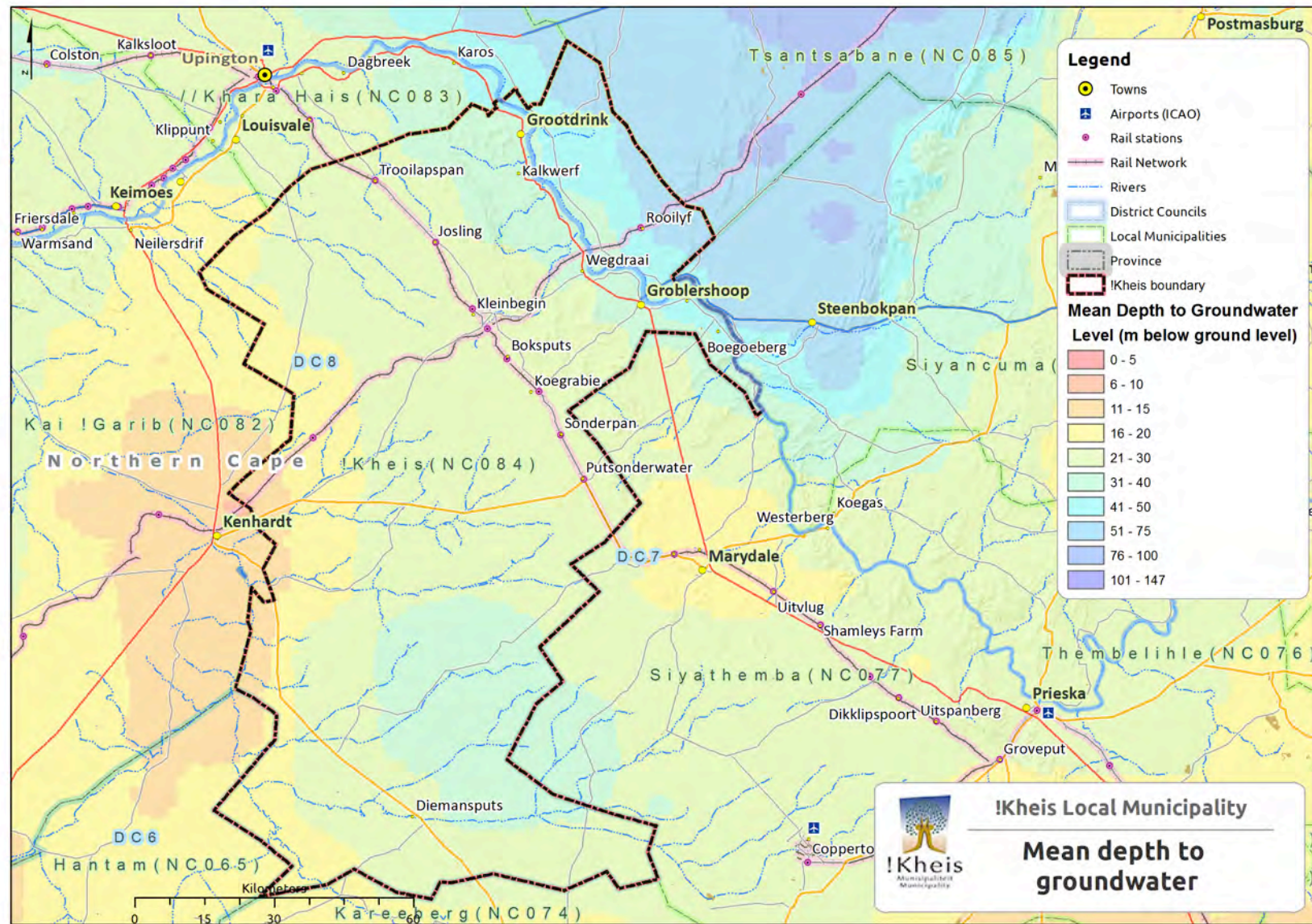


The map displays the !Kheis Local Municipality, which is outlined by a thick black dashed line. The municipality is situated in the Northern Cape province, bordered by the Free State to the north and east, and the Karoo region to the south. Major towns include Upington, Louisvale, Grootdrink, Groblershoop, Steenbokpan, Marydale, Kenhardt, and Prieska. The map shows a network of rivers, many of which are colored according to their conservation status: red for critically endangered, orange for endangered, yellow for vulnerable, and blue for not threatened. Key districts shown include DC 6, DC 7, and DC 8. Neighboring municipalities such as Hantam, Kareeberg, and Thembelihle are also labeled. A legend in the top right corner provides symbols for towns, airports, rail stations, rail networks, rivers, district councils, local municipalities, provinces, and the !Kheis boundary. It also details the river conservation status categories. A scale bar at the bottom left indicates distances up to 60 kilometers.

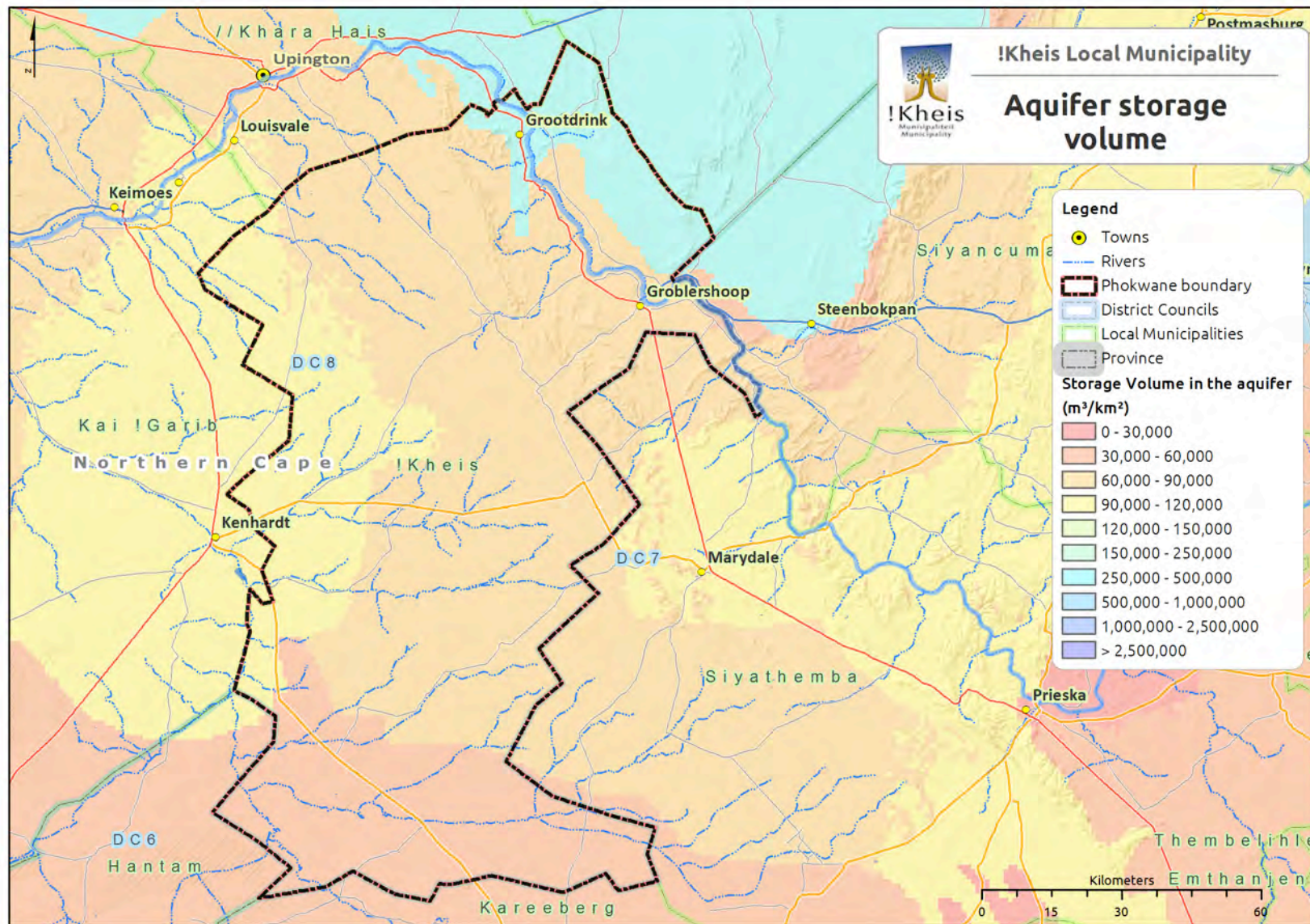
Map 22: Groundwater Exploitation in KLM



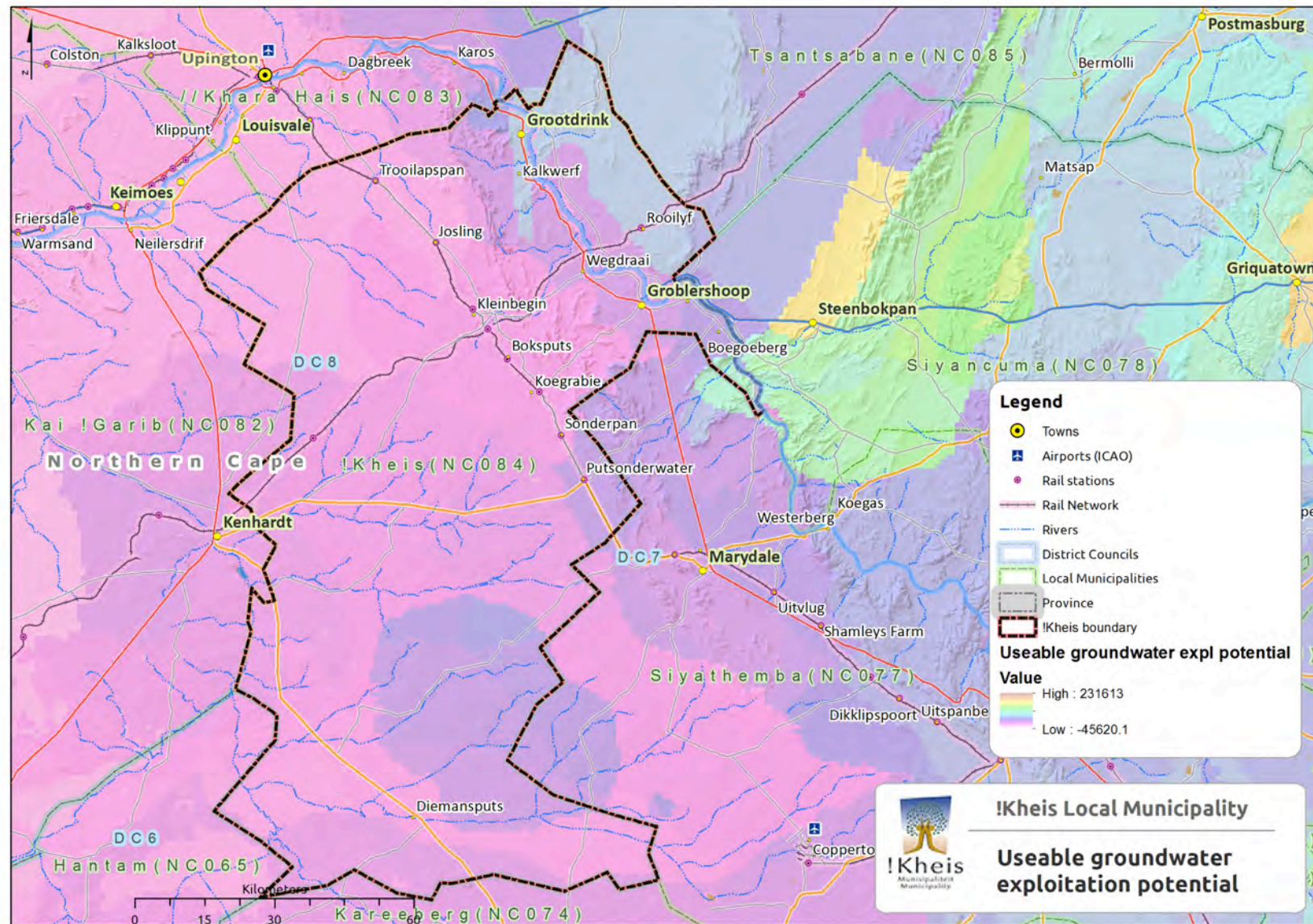
Map 23: Mean Depth to Groundwater in the KLM



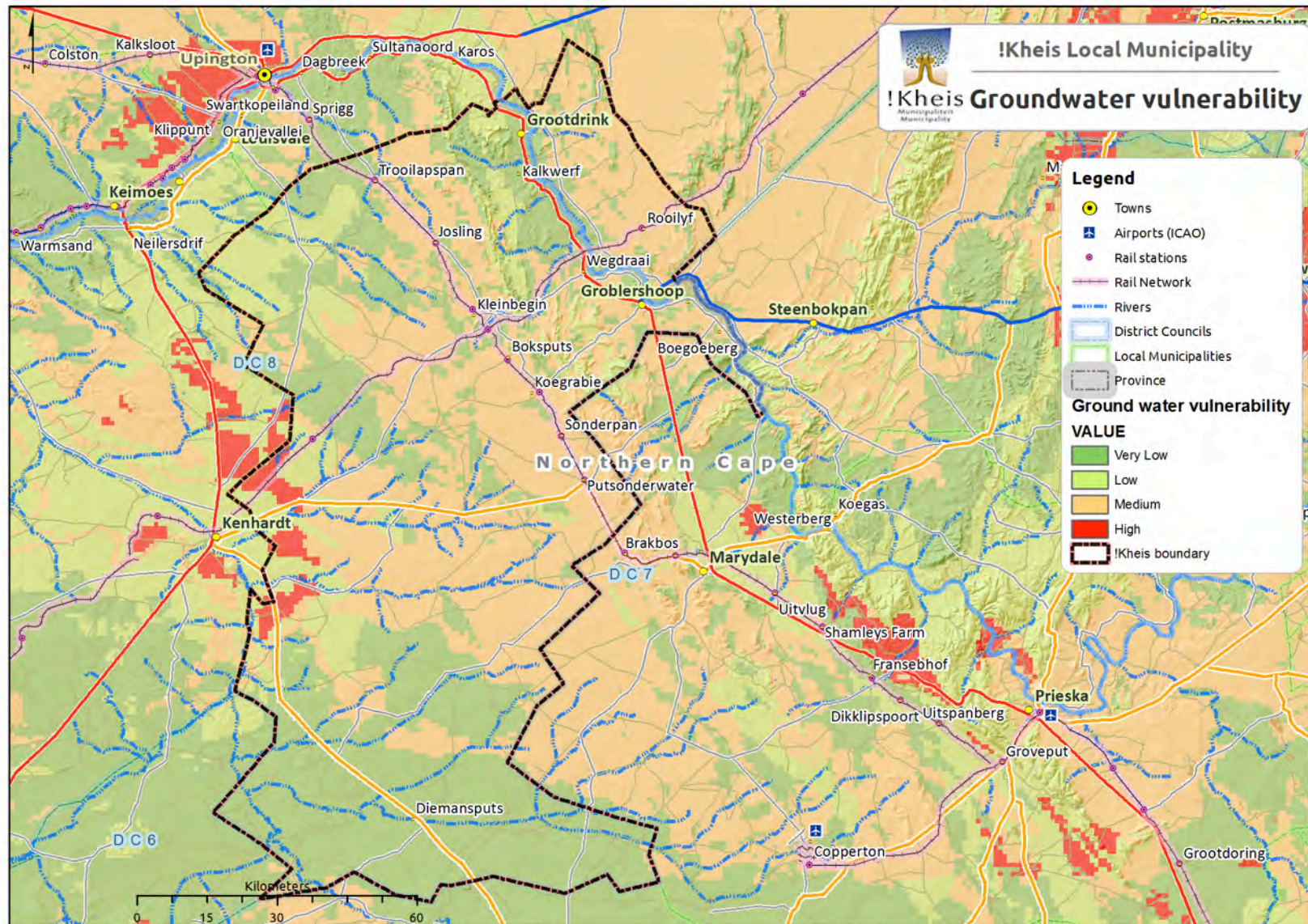
Map 24: Aquifer Storage Volume in the KLM



Map 25: Useable Groundwater Exploitation Potential in the KLM



Map 26: Groundwater Vulnerability in the KLM



3.3.7 Flora

The KLM falls predominantly within the 'Nama-Karoo biome', with smaller strips of 'Savanna' in the northern parts of KLM (see **Map 27**). Bushmanland Arid Grassland is the vegetation type that occurs in the majority of KLM, with Bushmanland Basin Shrubland in the southern parts and Gordonia Duneveld, and Lower Gariep Broken Veld around the Orange River (see **Map 28**). With regard to conservation, the majority of the KLM (falling within the grassland vegetation combination), has a medium level of conservation urgency, with some high priority areas located on the northern borders of the KLM receiving moderate protection (see **Map 29**). According to the ZFM DM EMF (2008) the Lower Gariep Alluvial Vegetation that develops in the floodplains of the Orange River is rated as having a very high level of conservation urgency. This vegetation type is considered to be endangered, with more than 50% already transformed by agriculture, burning and domestic livestock trampling, especially in the vicinity of Groblershoop. This transformation of indigenous land results in a higher chance of alien invasive species becoming established in the disturbed areas. The Prosopis Tree is one such alien invasive species threatening biodiversity and ecosystem services in the Northern Cape. Brought to South Africa at the turn of the century from Mexico and Chilli as a source of shade, wood and pods for fodder, it has now become a serious threat to the local ecosystems due to its ability to adapt to extreme weather conditions.

3.3.8 Fauna

The fauna of the Nama Karoo is relatively species-poor. Animals mostly endemic to the region are: Visagie's golden mole, Grant's rock mouse, Shortridge's rat, and the Riverine Rabbit. The Riverine Rabbit is classified as endangered in the South African Red Data Book because of habitat destruction by agriculture.

Among birds, the ferruginous lark and Sclater's lark are strictly endemic to the Nama Karoo. Other near-endemic species are the Karoo chat, tractrac chat,

red lark, Karoo scrub robin, redheaded cisticola and the Namaqua prinia. Other characteristic species of the Nama Karoo which are regarded as 'vulnerable' in South Africa are tawny and martial eagles, African marsh harrier, the blue crane, the kori, Ludwig's bustards, and the red lark.

3.3.9 Biodiversity

Biodiversity as 'the variety and variability of living organisms providing us with a range of ecosystem services that supports our economy and way of living', is threatened by habitat loss due to unmanaged use of natural resources, urban development and climate change. In the KLM, it is crucial that further development in the area does not endanger the current biodiversity. While the KLM has as yet not developed an Environmental Management Plan aligned to the ZFM DM EMF (2008), the KLM IDP has been aligned with the ZFM DM EMF, and this SDF will further assist in ensuring the protection of the biodiversity in KLM. According to the ZFM DM SDF (2012), future pressure and threats on biodiversity is to be expected from the expansion of crop agriculture, urban development, the introduction of invasive species, loss of habitat due to destruction or degradation, over-exploitation of species, over-exploitation of rivers and groundwater and climate change.

The following predicted impacts are expected on the eco-system as a result of the anticipated climate change, according to the ZFM DM SDF (2012:98):

- At a 2°C increase in temperature, up to 30% of species run the risk of becoming extinct;
- At 4°C increase in temperature, more than 40% of species run the risk of becoming extinct;
- It is anticipated that the following percentage of the original vegetation biomes will remain in South Africa by the year 2050:
 - Nama-Karoo: 28%; and
 - Succulent Karoo: 19%.

- The western half of South Africa is expected to experience the largest losses, with the complete loss of the Succulent Karoo biome containing 5500 endemic species by 2050.

As the majority of the KLM is made up of the Nama-Karoo biome, it can be expected that climate change will have a decided impact on the municipality, and it is crucial that areas outside conservation areas (there are none in KLM) be managed carefully and that stream-bank activities be regulated and managed correctly.

3.3.10 Agriculture

The Orange/Gariep River is the lifeblood of the Agricultural industry in KLM. Irrigation farming in the area was made possible by the construction of the Boegoeberg dam and water channels (see **Map 30**) in the early 1930s, and today the area is a main source of table grapes and sultanas, with the wine cellars in Groblershoop taking in 12 000 tons of grapes per annum¹.

The Orange River Producers Alliance is a table grape industry that is renowned as a supplier of fresh table grapes to Europe, with an output of more than 20 million cartons per annum.

More than 90% of Africa's total dried vine fruit production is produced through 1 250 sultana grape growers in the Northern Cape who produced more than 50,000 tones in 2010. The sultanas produced here comprise more than 80% of that which is exported primarily to Europe and other eastern countries (OABS, 2012).

SAD Vine Fruit Pty (Ltd) is located in Upington, and owns the largest dried vine fruit processing and packaging plant in South Africa, employing more than 350 persons. It has intakes at Groblershoop, Mylpaal, Louisvaleweg, Keimoes, Kakamas and Vredendal.

¹ Green Kalahari: <http://www.greenkalahari.co.za/index.php/groblershoop>

The Orange River Wine Cellars Co-op, also based in Upington, is the second largest winemaking cooperative in the world and has wine cellars at Groblershoop, Grootdrink, Upington, Keimoes and Kakamas. This co-op has more than 740 members who produce wine grapes, and 445 farmers who produce grape juice.

In addition to irrigated agriculture, livestock farming is also prevalent with a focus on sheep, cattle and goats. A number of game farms are also located in the area (see **Map 31 and 33**).

3.3.11 Mining

While mining used to be the mainstay of the ZFM DM's economy, it has seen a decline in recent years, with agriculture and tourism growing (ZFM DM EMF 2008). The KLM has a number of abandoned mines (see **Map 32**) and reference is made in the KLM IDP 2012-2017 to a feasibility study that is underway in the municipality to determine the potential for mining in the area. Based on current knowledge of the location and character of deposits, there is 'medium potential' for the mining of for Beryllium, Rare Earths, Tantalum/Niobium and Andalusite in the western parts of KLM.

It is, however, important to ensure that if mining is done, *it is undertaken in a socially and environmentally responsible way* to ensure that it does not limit the tourism potential of the area. The ZFM DM EMF (2008) makes several references to un-rehabilitated or poorly rehabilitated mining activities (current and closed) in the area that impact negatively on the scenic environment.

Legend

- Towns
- Airports (ICAO)
- Rail stations
- Rail Network
- Rivers
- District Councils
- Local Municipalities
- Province
- !Kheis boundary

Vegetation types

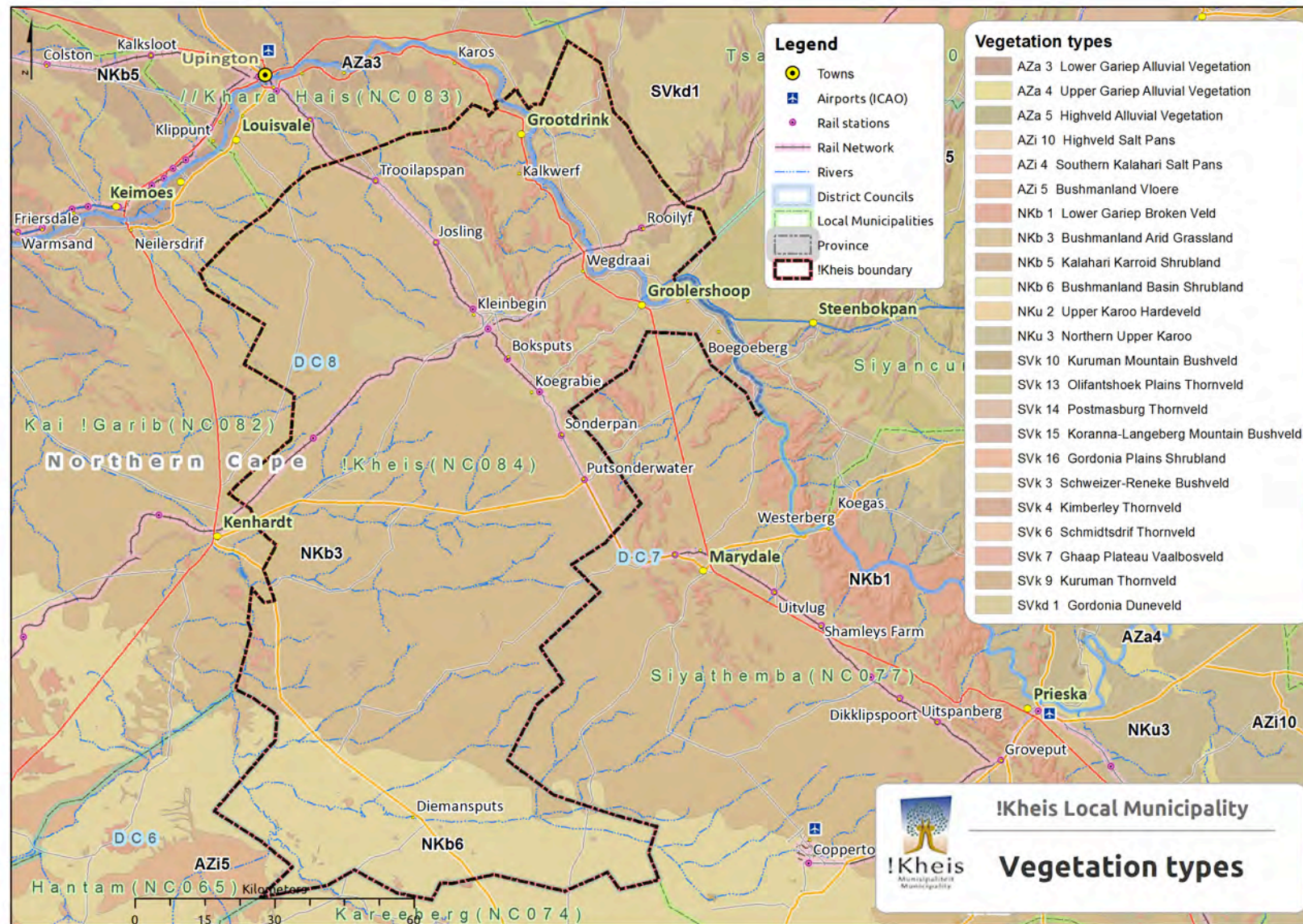
BIOME

- Azonal Vegetation
- Nama-Karoo Biome
- Savanna Biome

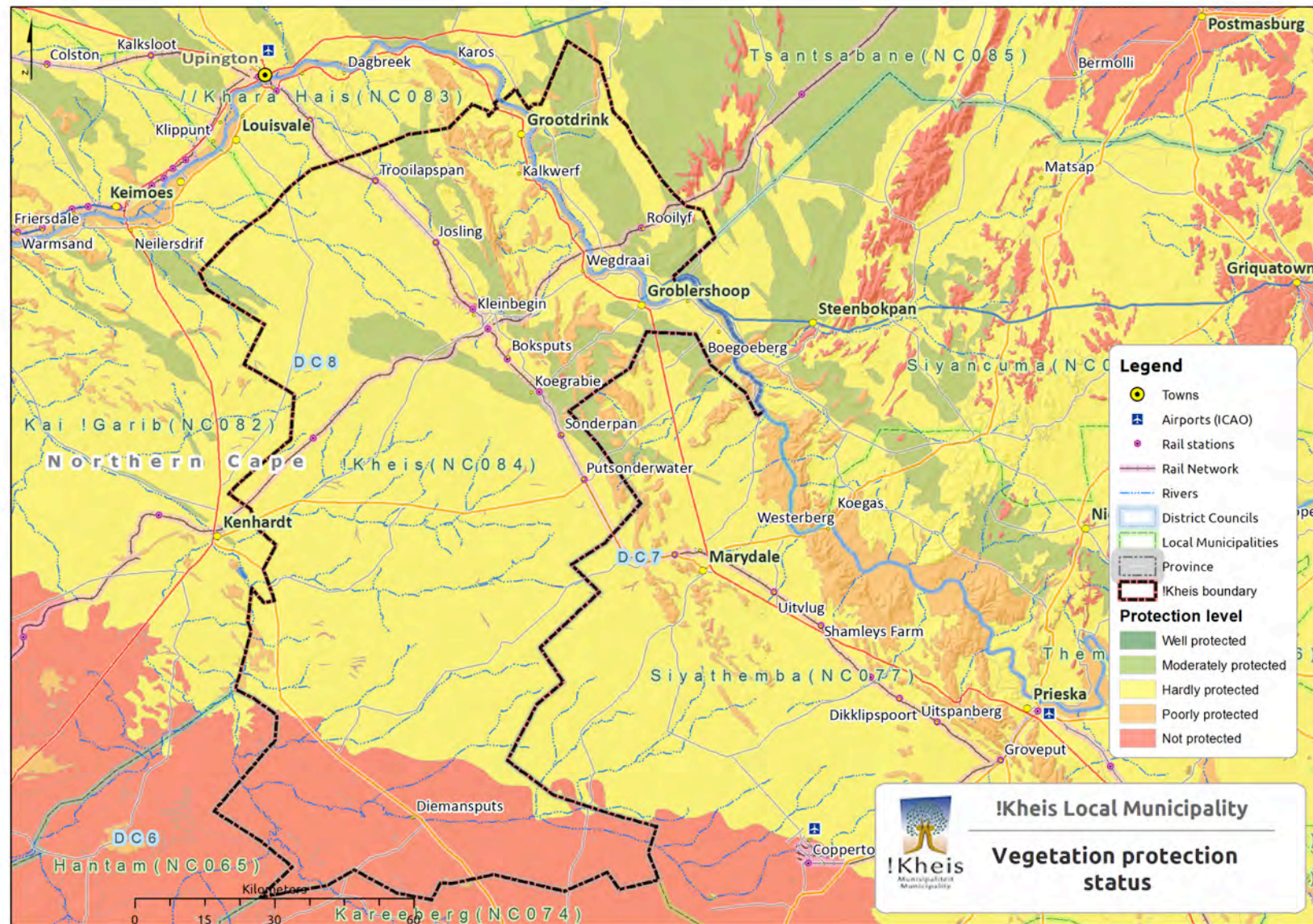
!Kheis Local Municipality

Biome

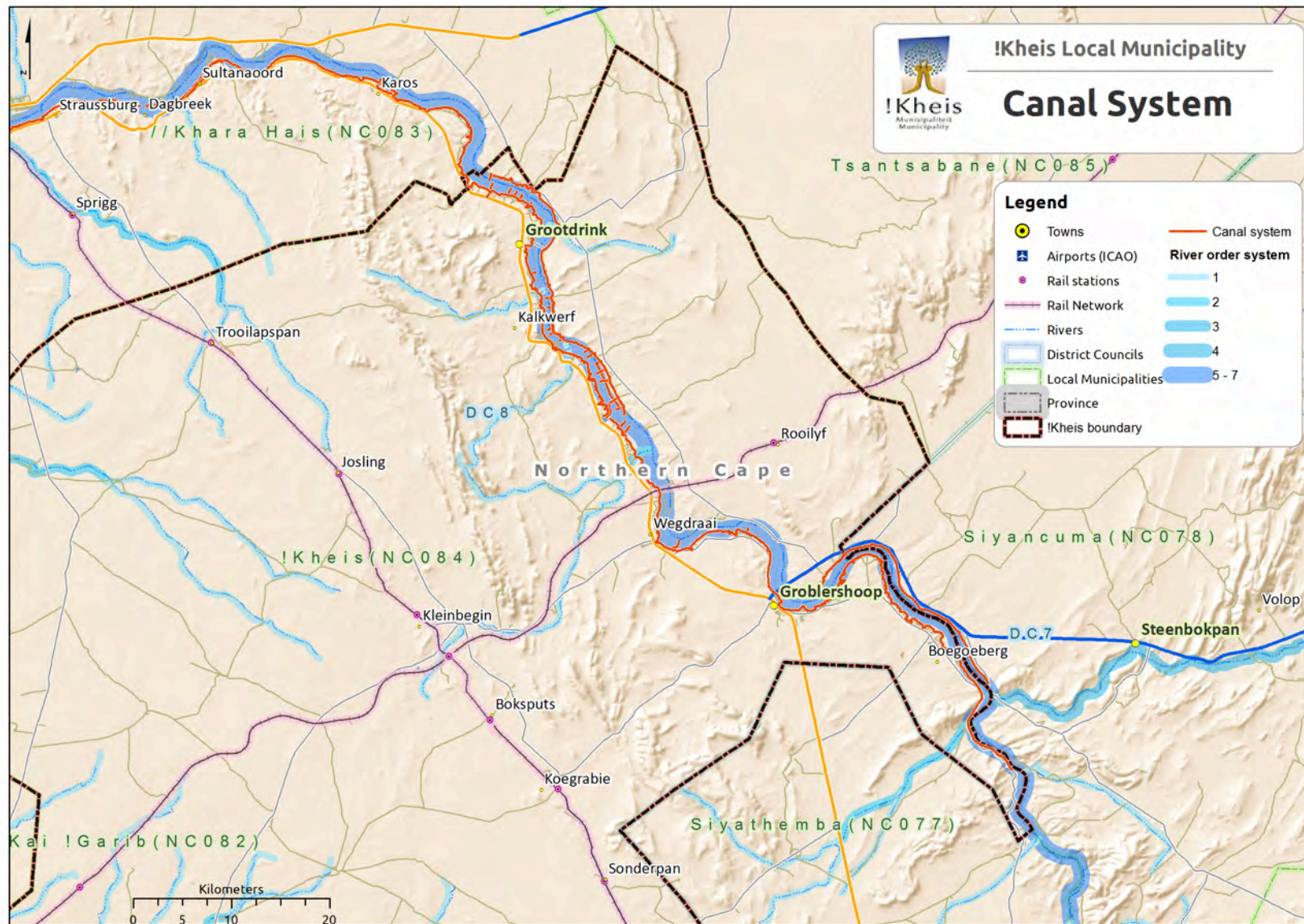
Map 28: Vegetation Types in the KLM



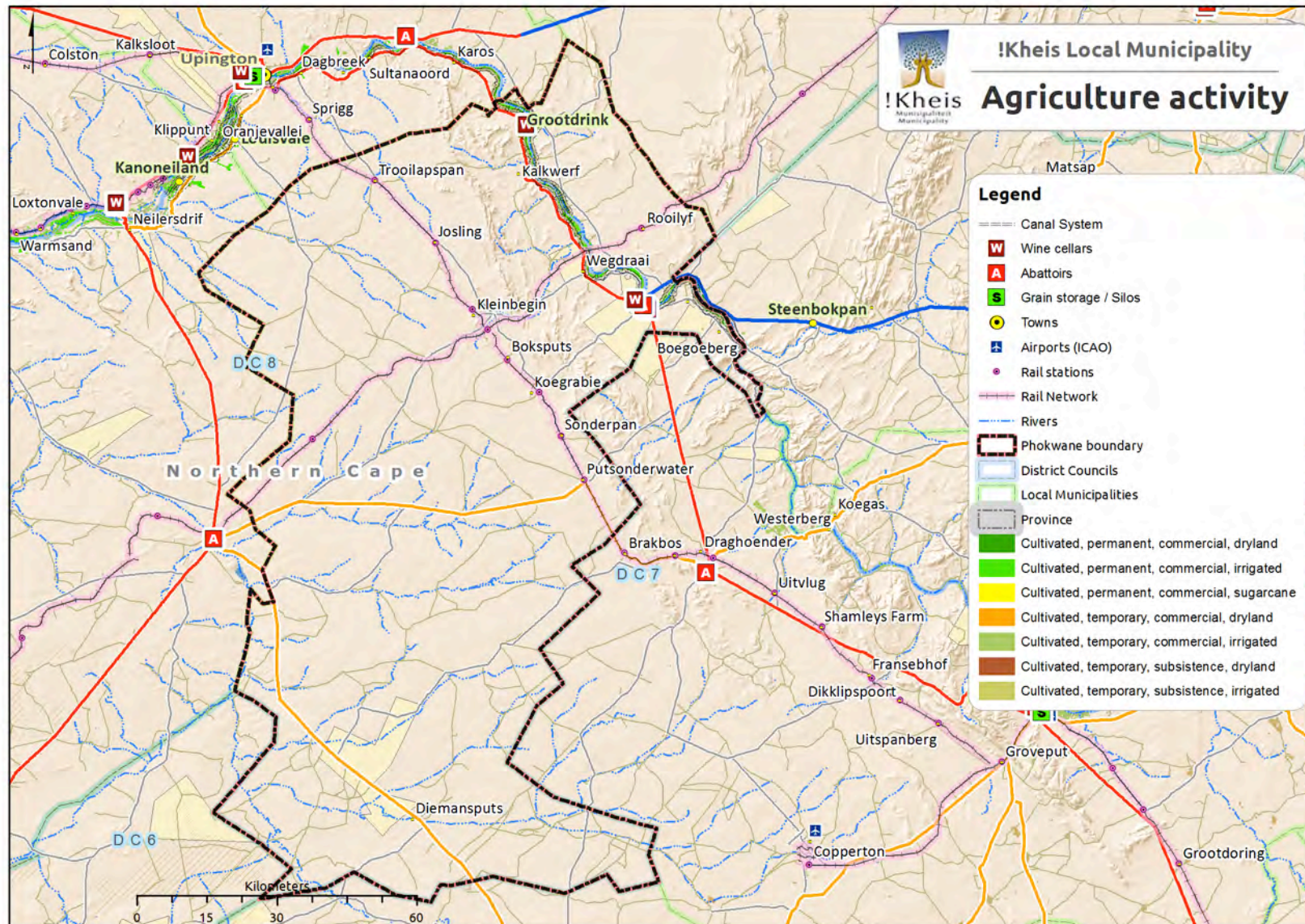
Map 29: Vegetation Protection Status in the KLM



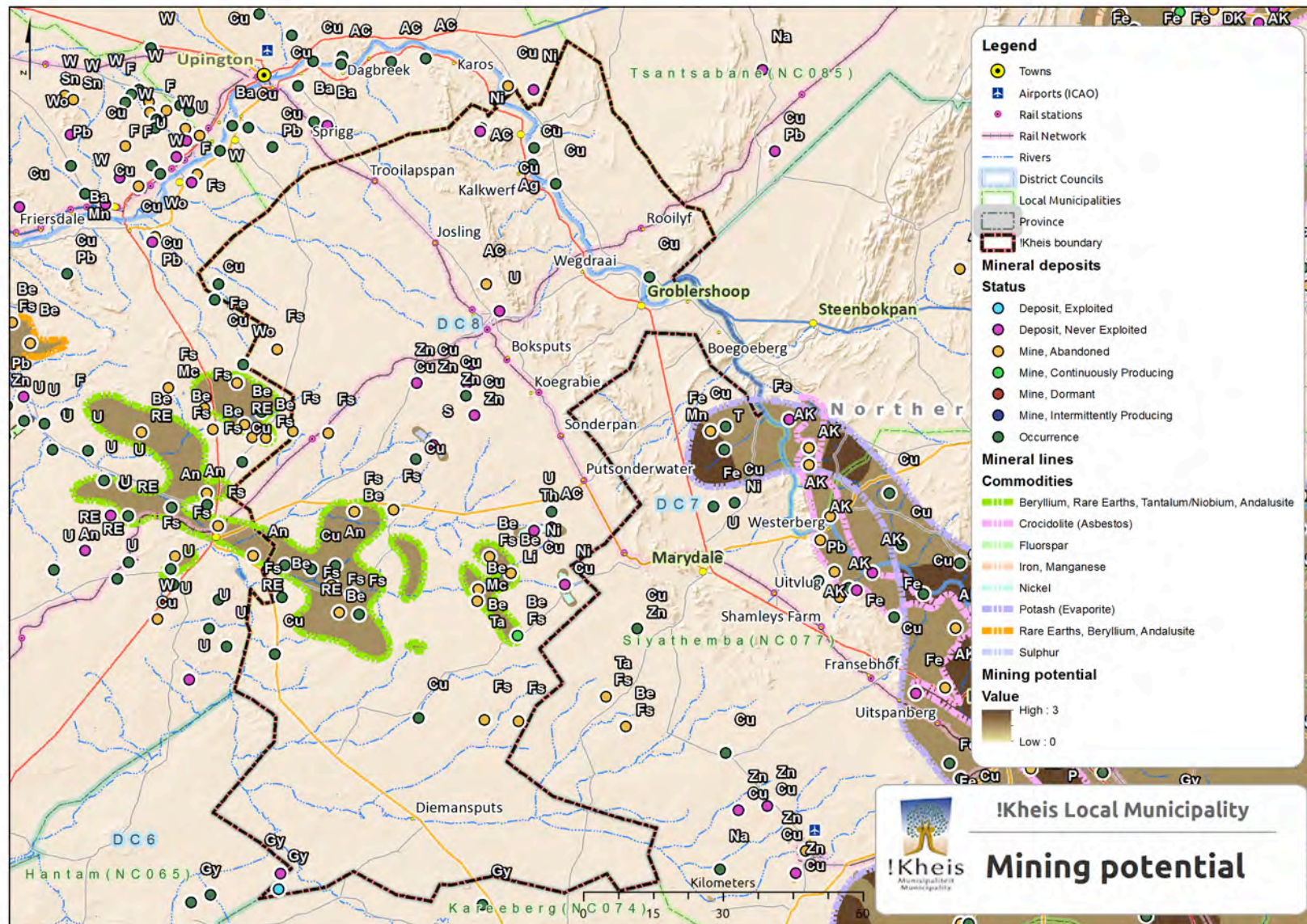
Map 30: Canal System in the KLM



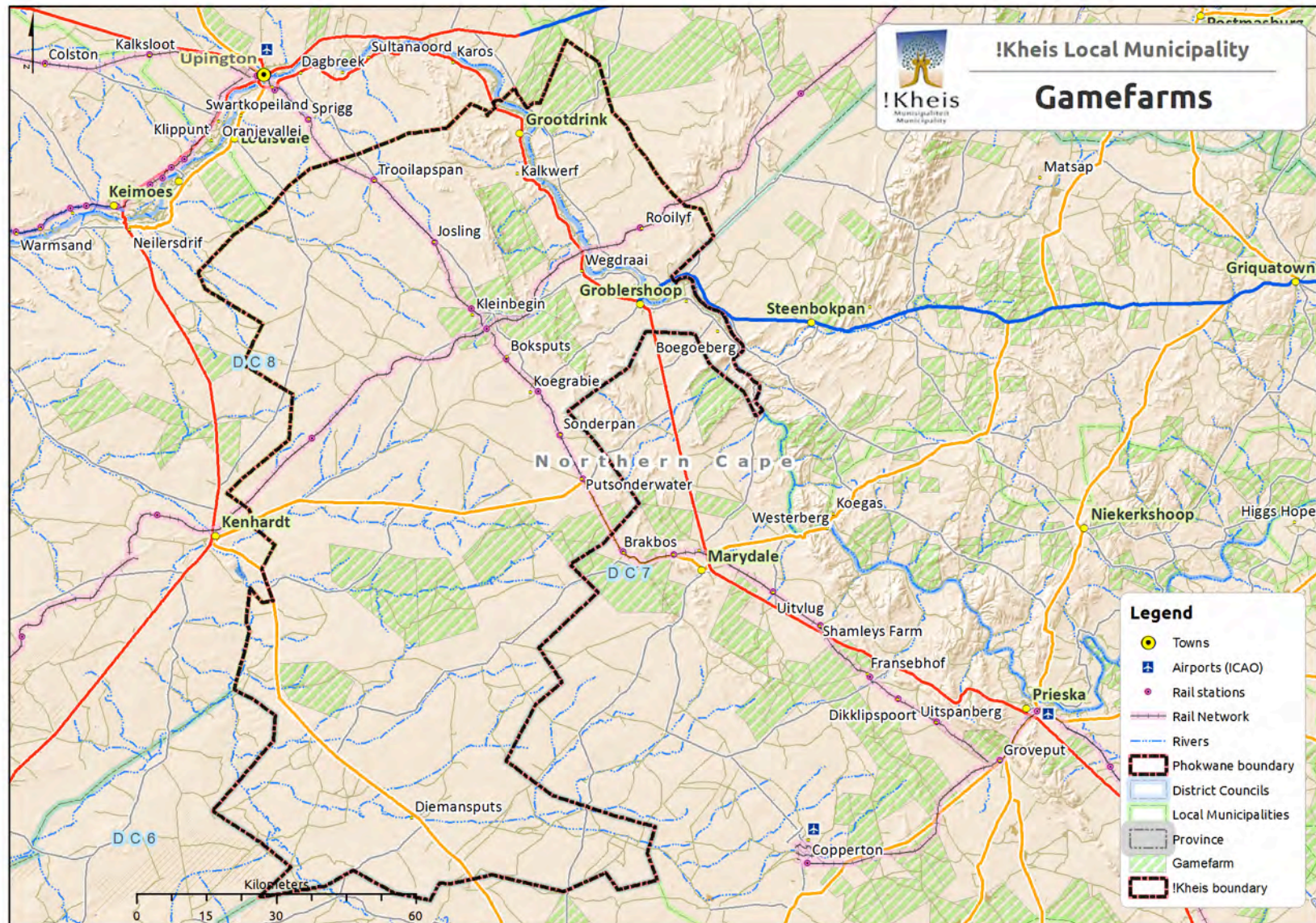
Map 31: Agricultural Activity in the KLM



Map 32: Mining Potential in the KLM



Map 33: Game farms in the KLM



3.4 SOCIO-ECONOMIC CONDITIONS

3.4.1	Overview of the Socio-Economic Conditions	p. 66
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3.4.4	Employment, Occupation and Income Levels	p. 72
3.4.5	Economy	p. 78
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3.4.1 Overview of the Socio-Economic Conditions

The KLM has a total population of 16 637, and only saw an increase of 0,6% in its population between 2001 and 2011. There are a total of 4 145 households in the KLM. The average household size in 2011 was 3,9, down from 4,6 in 2001.

The majority of the KLM population is located in five settlements, namely: Grootdrink, Topline, Wegdraai, Groblershoop and Boegoeberg, with the largest of those settlements being Groblershoop, Grootdrink and Wegdraai.

With regards to the functional age groups, 60% of KLM's population is of working age (15-64). Grootdrink (40%) and Boegoeberg (40%) have the highest percentages of population aged between 0 and 14, which is decidedly higher than the district percentage of 28%.

Education levels and school attendance have increased in KLM. Grootdrink has the lowest percentage individuals with Gr.12 at 9,1%, while Topline has the highest percentage of individuals with 'no schooling' at 17,5%. In comparison Groblershoop has the highest percentage of individuals with Gr.12 (18,5%) and individuals with higher education (1,7%).

The unemployment rate in KLM has increased from 21,6% in 2001 to 28,1% in 2011. Wegdraai (67,5%), Topline (57,2%) and Boegoeberg (48,3%) have the highest unemployment rates in KLM, as well as low levels of labour force participation. However, in total numbers, the largest percentage of the unemployed population is located in Groblershoop and Wegdraai. The 'Agriculture, hunting, forestry and fishing-sector' is the main contributor to employment in the form of elementary occupation, reflecting the dominant agriculture-based economy where work is often in the form of seasonal manual labour on farms. The GVA-figures of the municipality reflect this by being produced mainly along the Orange River where irrigated agriculture is practiced.

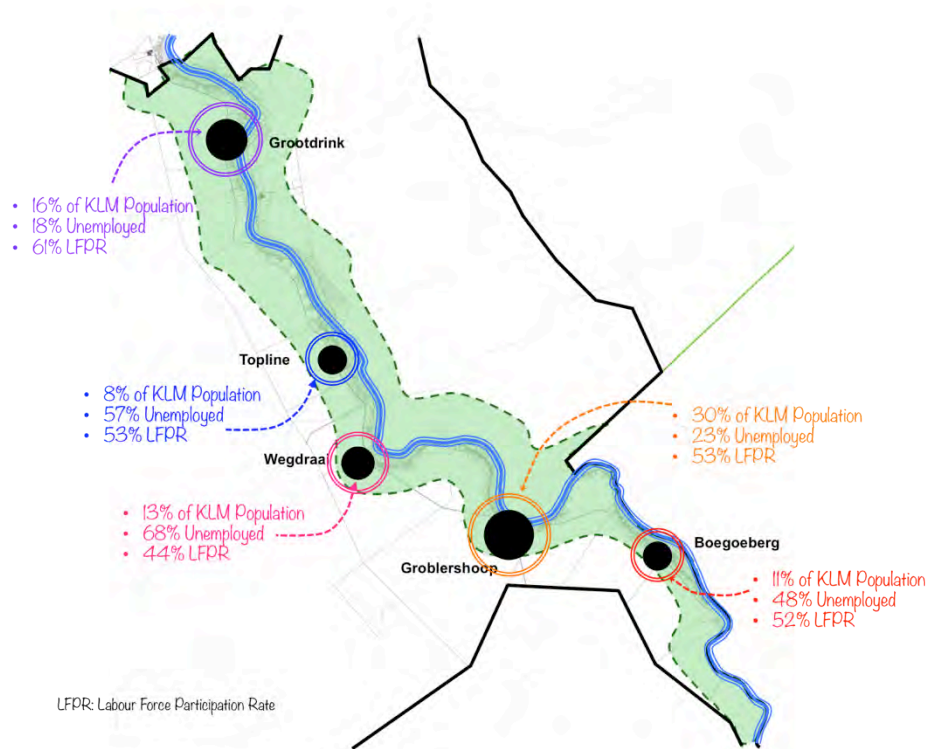
Opportunities:

- Expansion of the Agricultural economy and Agro-processing; and
- Expansion of tourism;

Challenges:

- The increase in the unemployment rate;
- Low levels of labour force participation in certain settlements;
- Although education levels are improving they are still relatively low; and
- The of pervasiveness elementary seasonal work.

Figure 4: Summary of Socio-economic Conditions



Ganspan Shop



Children playing soccer



Standard Bank ATM



Church



Children playing in street



Shop in informal settlement

3.4.2 A Note on South Africa Census Data

The demarcation-changes that have taken place in the wider area since 2001 makes comparison between the 2001 and 2011-statistics problematic. Stats-SA published the Northern Cape Municipal Report in 2012, where the figures were adjusted to the 2011 boundaries to allow for comparison between data-sets. This document makes use of this report when commenting on local, district and provincial statistic comparisons of the 1996, 2001 and 2011 statistics.

The *available* 2011 Sub-place Data is also used in this report, which allows for a description of the main settlements in KLM. However, once again there are clear differences between the demarcations of the Sub-places of 2001 and 2011 that makes comparisons between the 2001 and 2011-data-sets highly problematic. A good example of this is the Groblershoop statistics of 2001, which states that the town had a total population of 741 individuals due to the fact that areas of a certain density were classified as 'rural', and thus not included in the population of Groblershoop (see **Table 2** below). The 2011-data does, however, include these areas and states that the population of Groblershoop is 4 938. Making direct comparisons between these data sets will result in invalid conclusions being drawn about population growth and other settlement characteristics. Due to these data-issues, detailed analysis between 2001 and 2011-data has not been done on Sub-place level. In **Section 3.5.2**, population growth projections are made based on adjusted population figures for the settlements, in order to provide a more accurate description of population growth and possible future scenarios.

Table 2: 2001 and 2011 Statistics SA data without adjustments made for changes in demarcation

	2001	2011	2011 % of KLM Pop.
Grootdrink	2183	2645	15,9%
!Kheis NU	6277	3611	21,7%
Topline	959	1398	8,4%

	2001	2011	2011 % of KLM Pop.
Wegdraai	1556	2189	13,2%
Groblershoop	741	4938	29,7%
Boegoeberg	1581	1857	11,2%
KLM	16024	16637	100%
ZFM DM	209888	236783	NA

Lastly, Stats-SA makes use of the name 'Gannaput' to refer to Topline. For ease of understanding, this document makes use of the name 'Topline' in all instances where Stats-SA data refers to 'Gannaput'.

3.4.3 Demographic Profile

Overall Population

KLM had a total population of 16 637 individuals in 2011, up from 16560 in 2001. As such, it only saw an increase of 77 individuals according to the latest data from Stats-SA (2012), which adjusted the original 2001-figures to address the new municipal boundaries. The total number of households in the KLM is 4 145, with an average household size of 3,9 in 2011, down from 4,6 in 2001.

Table 3: Population increase 1996, 2001 and 2011 in ZFM DM

	1996	2001	% Increased	2011	% Increased
Mier LM	7027	7207	2,5	7003	-2,9
Kai! Garib	57905	58671	1,3	65869	10,9
!Khara Hais LM	80823	77910	-3,7	93494	16,7
!Kheis LM	15046	16538	9,0	16637	0,6
Tsantsabane	26567	27082	1,9	35093	22,8
Kgatelopele	16113	14743	-9,3	18687	21,1
ZFM DM	203482	202160	-0,7	236783	14,6
NCP	1011864	991919	-2,0	1145861	13,4

The majority of the KLM population is located in five settlements namely: Grootdrink, Topline, Wegdraai, Groblershoop and Boegoeberg with the largest of those settlements being Groblershoop, Grootdrink and Wegdraai.

Table 4: Male/Female Population per Settlement in the KLM (2011)

	Male	%	Female	%	Total
Grootdrink	1299	49	1346	51	2645
!Kheis NU	2003	55	1608	45	3611
Topline	729	52	669	48	1398
Wegdraai	1066	49	1122	51	2189
Groblershoop	2455	50	2483	50	4938
Boegoeberg	856	46	1001	54	1857
KLM	8408	51	8229	49	16637
ZFM DM	120168	51	116616	49	236783
NCP	564972	49	580889	51	1145861

Age Structure

Between 2001 and 2011, the area saw a slight decline in the population group between 0 and 4 years of age. In the older age groups, between 30 and 50 years of age, there are slightly less women than men in 2011. With regard to the Functional Age Groups in KLM, 60% of its population is aged between the ages of 15 and 64, in comparison to the 66% and 64% of ZFM DM and the Northern Cape Province respectively. Grootdrink (40%) and Boegoeberg (40%) have the highest percentages of population aged between 0 and 14, which is decidedly higher than the district percentage of 28% (see **Table 5**). For a more detailed description of the age distribution in KLM, please see **Figure 6**.

Figure 5: KLM Age Composition 2001 and 2011 (%)

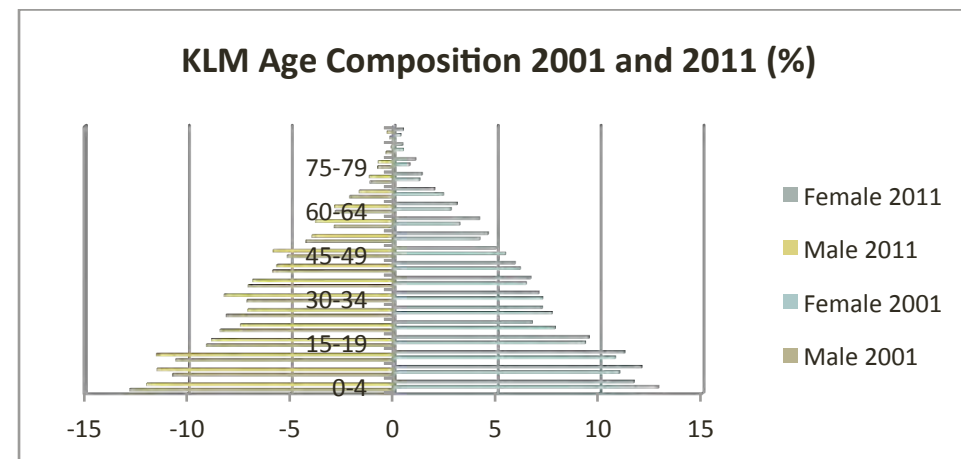
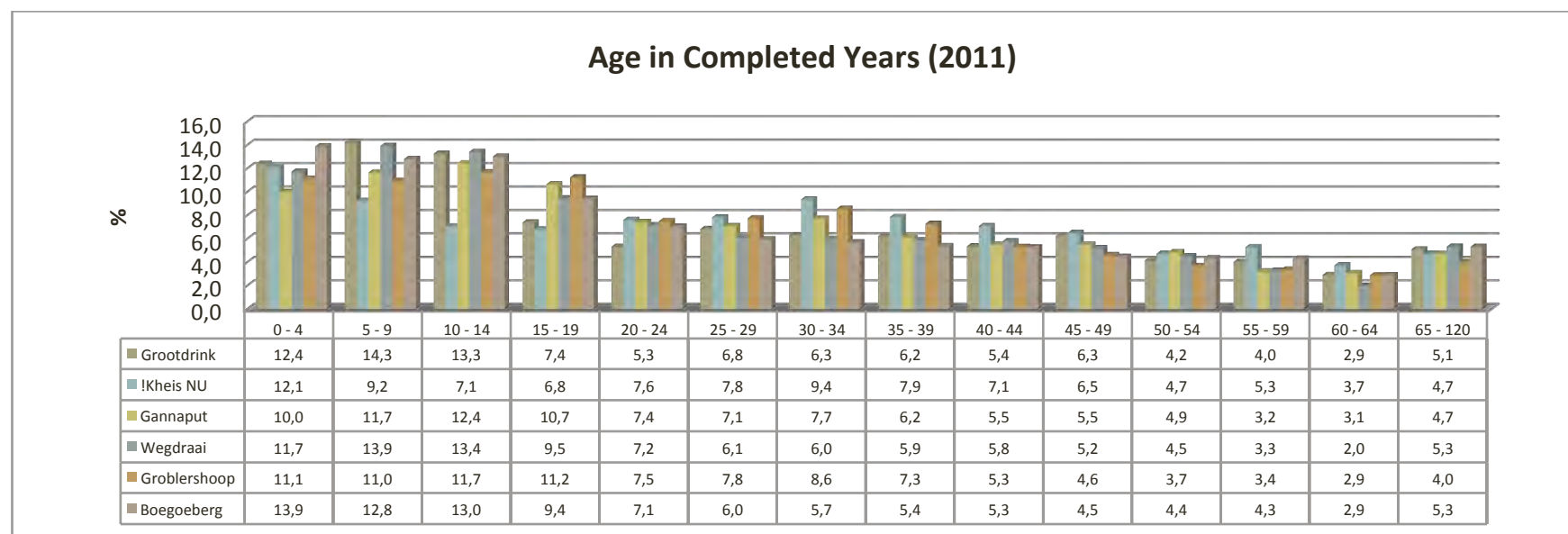


Table 5: Functional Age Group distribution in the KLM (%) (2011)

	0 - 14	15 - 64	65 and older
Grootdrink	40	55	5
!Kheis NU	28	67	5
Topline	34	61	5
Wegdraai	39	56	5
Grobliershoop	34	62	4
Boegoeberg	40	55	5
KLM	35	60	5
ZFM DM	28	66	5
NCP	30	64	6

Figure 6: Age in completed years per settlement in KLM (%) (2011)



Racial Composition

The dominant racial group in KLM is the Coloured population, at 86,5% of the total municipal population in 2011. In total numbers, however, there has been a decided increase in the Black population in the KLM between 2001 and 2011, while the Coloured population has remained almost unchanged, and the white population almost halved in size (see **Figure 7 and Table 6** below).

Figure 7: Racial group as % of Total Population in KLM 1996, 2001 and 2011

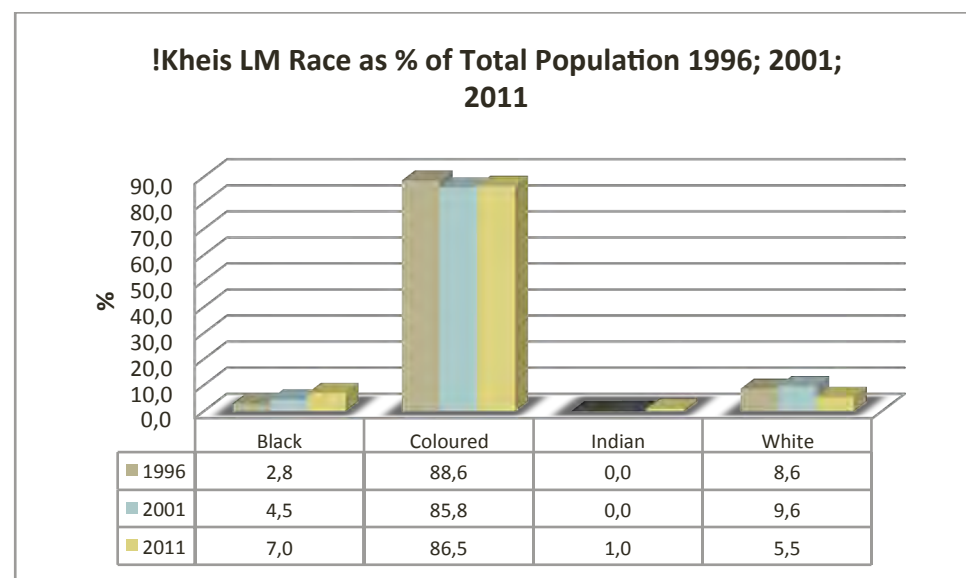


Table 6: Racial composition of KLM 1996, 2001 and 2011

KLM	1996	2001	2011
Black	423	745	1144
Coloured	13189	14198	14200
Indian	0	6	167
White	1279	1590	901

Education

Between 1996 and 2001, the KLM saw a strong decline in individuals aged 20 years and older with no schooling, while at the same time, the number of individuals with Grade 12 and Higher education, also increased (see **Table 7**). School attendance also shows a significant increase between 2001 and 2011 from 54,2% to 69,8% (see **Table 8**).

Table 7: Percentage of the population aged 20 years and older by education level attained

	1996	2001	2011
KLM			
No schooling	26,8	22,2	13,3
Complete primary	11,6	10,8	9,8
Grade 12	6,6	10,4	13,8
Higher	4,0	3,8	4,5
ZFM DM			
No schooling	19,8	16,5	9,4
Complete primary	5,9	9,3	7,3
Grade 12	6,5	15,8	21,3
Higher	3,9	4,7	3,2
Northern Cape			
No schooling	22,7	19,3	11,1
Complete primary	8,5	8,0	6,4
Grade 12	11,1	15,8	22,2
Higher	6,2	5,9	7,5

Table 8: Percentage of the population aged 5-24 years by school attendance (2011)

KLM	1996	2001	2011
Attending	58,5	54,2	69,8
Not attending	41,5	45,8	30,2

The KLM has a decidedly lower percentage of individuals with Grade 12 (13,8%) in comparison to the ZFM DM (21,3%) and the Northern Cape Province (22,2%). Grootdrink has the lowest percentage individuals with Gr.12 at 9,1%. It also has one of the highest levels of ‘no schooling-figures’ at 14,2%. With regard to ‘no schooling’, Topline has the highest percentage, at 17,5%. In comparison, Groblershoop has the highest percentage of individuals with Gr.12 (18,5%) and individuals with higher education (1,7%).

Table 9: Highest level of education (20 years and older) (2011)

	Gade 0 - Grade 7 / Std 5/ ABET 3	Grade 8 / Std 6 / Form 1 - Grade 11 / Std 9 / Form 4	Grade 12 / Std 10 / Form 5	NTC I / N1/ NIC/ V Level 2 - Diploma with Grade 12 / Std 10	Higher Diploma - Higher Degree Masters / PhD	No schooling
Grootdrink	40,5	33,6	9,1	1,6	0,9	14,2
!Kheis NU	35,6	26,0	13,3	3,0	5,0	14,8
Topline	46,2	22,5	12,2	1,0	0,5	17,5
Wegdraai	36,1	36,7	12,4	1,8	1,2	11,6
Groblershoop	26,6	33,6	18,5	4,3	1,7	11,3
Boegoeberg	39,3	36,1	10,8	0,8	0,1	12,0
KLM	35,0	31,4	13,8	2,6	2,1	13,3
ZFM DM	25,0	35,7	21,3	3,7	3,1	9,4
Northern Cape	23,0	33,5	22,2	4,5	3,5	11,1

3.4.4 Employment, Occupation and Income Levels

Employment Levels

While the ZFM DM and the Northern Cape Province saw a decrease in their unemployment rate, KLM’s unemployment rate increased from 20,1% in 2001 to 28,1% in 2011.

Table 10: Unemployment rate in 1996, 2001 and 2011

Unemployment Rate	1996	2001	2011
KLM	21,6	20,1	28,1
ZFM DM	24,5	26,5	21,0
NCP	32,4	35,7	28,1

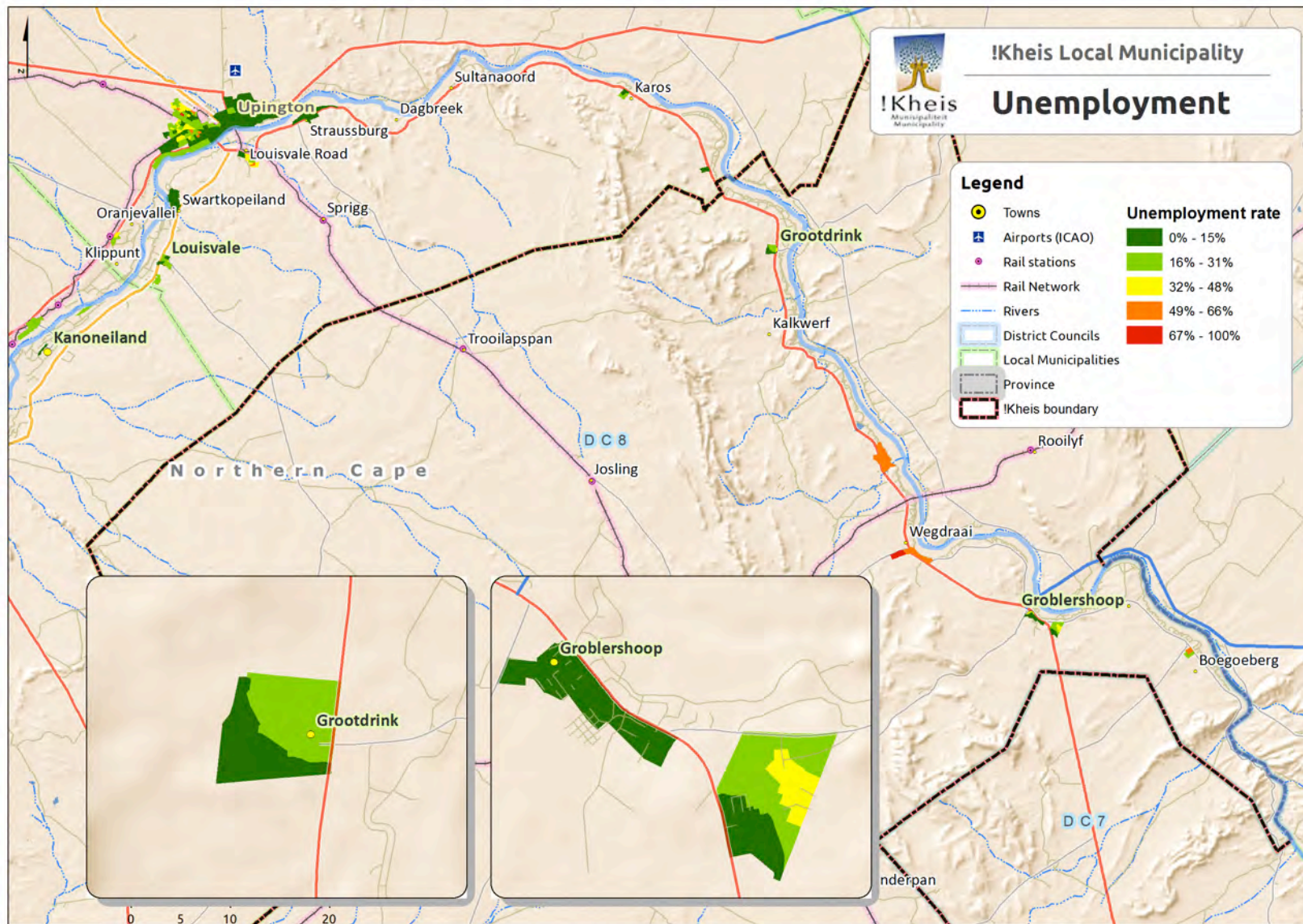
Wegdraai (67,5%), Topline (57,2%) and Boegoeberg (48,3%) have the highest unemployment rates in KLM, as well as low levels of labour force-participation. In comparison, Grootdrink and !Kheis NU have relatively high levels of labour force participation rates, at 60,5% and 66,5% respectively, which is higher than the labour force participation rates of the KLM (56%), ZFM DM (58,6%) and the Northern Cape Province (52,9%) (see **Table 11 and Map 34**).

Table 11: Unemployment and labour force participation rates per settlement in KLM (2011)

	Employed	Unemployed	Labour force	Unemploy- ment rate	LFPR*
Grootdrink	723	156	879	17,7%	60,5%
!Kheis NU	1435	170	1605	10,6%	66,5%
Topline	193	258	451	57,2%	52,7%
Wegdraai	173	359	532	67,5%	43,8%
Groblershoop	1252	373	1625	23,0%	52,9%
Boegoeberg	272	254	526	48,3%	51,6%
KLM	4047	1570	5617	28,0%	56,0%
ZFM DM	74449	17696	92145	19,2%	58,6%
Northern Cape	282791	106723	389514	27,4%	52,9%

*LFPR: Labour Force Participation Rate

Map 34: Unemployment distribution in KLM



The !Kheis NU (non-urban areas of KLM) and Grootdrink have the highest percentage of employed individuals, at 59% and 50% respectively. On the whole, !Kheis NU, which is generally composed of the farming community, also has the lowest percentage of unemployed persons (11%), discouraged work-seekers (3%) and others not economically active (30%). In comparison Wegdraai has the lowest percentage of employed individuals, at 14,% and the highest percentage of unemployed persons (30%), discouraged work-seekers (9%) and others not economically active (47%).

Table 12: Official employment status of those aged between 15 and 64 per settlement in KLM (%) (2011)

Settlement	Employed (%)	Unemployed (%)	Discouraged work-seeker	Other not economically active*
Grootdrink	82,3	17,7	4	35
!Kheis NU	89,4	10,6	3	30
Topline	42,8	57,2	6	41
Wegdraai	32,5	67,5	9	47
Grobbershoop	77,0	23,0	6	41
Boegoeberg	51,7	48,3	6	42
KLM	72	28,0	5	39
ZFM DM	80,8	19,2	3	38
Northern Cape	72,6	27,4	5	42

* 'Other not economically active': People aged between 15 and 64 who are not available for work such as full-time scholars and students, full-time homemakers, those who are retired and those who are unable or unwilling to work

However, in terms of actual numbers, !Kheis NU (35,5%) and Groblershoop (30,9%) have the largest percentage of the employed population in KLM. In addition to this, Groblershoop also has the largest percentage of the unemployed population of KLM at 23,8%, the discouraged work-seekers at 33,9%, and others not economically active, at 32,6%.

Table 13: Distribution of the employed and unemployed across KLM (%) (2011)

Settlement	Employed	Unemployed	Discouraged work-seeker	Other not economically active
Grootdrink	17,9	9,9	11,3	13,2
!Kheis NU	35,5	10,8	14,2	18,9
Topline	4,8	16,4	9,3	9,2
Wegdraai	4,3	22,9	19,4	14,9
Grobbershoop	30,9	23,8	33,9	32,6
Boegoeberg	6,7	16,2	12,0	11,1
KLM	100	100	100	100

Future Employment Trends

According to the projected population growth figures (see **Table 14** below and **section 3.5.2**), rural KLM (!Kheis NU) is depopulating with its' residents moving mainly into Groblershoop, Wegdraai and Grootdrink. Based on this trend and the data as set out in **Table 12-13** above, it can be assumed that these settlements will be experiencing the highest pressure to provide employment over the next few years. While Groblershoop (with an 23% unemployment rate and 23,8% of all unemployed individuals in KLM) will be experiencing the highest demand, Wegdraai, which already has a 67,5% unemployment rate and is home to 22,9% of all unemployed individuals in KLM, will most likely struggle the most to provide jobs for the projected 18,3% population growth by 2020.

Table 14: KLM Population Projections

	% Population Change between 2001 and 2011	% Change 2011 and 2020 based on the exponential change rate
Grootdrink	21,3	14,5
!Kheis NU	-43,9	-33,3
Topline	19,9	13,5
Wegdraai	27,1	18,3
Groblershoop	42,3	28
Boegoeberg	17,0	11,6
KLM	0,5	0,3
ZFM DM	17,1	11,7
NCP	15,5	10,6

In terms of absolute numbers, !Kheis NU (24,9%) and Groblershoop (23,7%) have the highest percentage of households with no income. These two settlements also have the highest percentage of households in the lower income groups, with only Grootdrink (25,9%) having a higher percentage of individuals in the R1 to R400 income group (see **Table 18**).

Industry and Occupation of Employed Individuals

In the KLM 32,5% of the employed population is active in the 'Agriculture, hunting, forestry and fishing', while all other industries contribute relatively little to employment (see **Table 15**). In terms of occupation, 29,9% of the employed population in the KLM is employed in elementary occupations (see **Table 16**). The industry and occupation figures reflect the dominant agriculture based economy where work is often in the form of elementary seasonal work.

Annual Income of Households

The annual household incomes are relatively low, with the majority of the households (28,3%), receiving between R1 601 and R3 200 per annum. Topline has the highest percentage (13,8%) of households with no income, while Groblershoop households tend to have a slightly higher income than the rest of KLM and !Kheis NU the highest percentage of households falling within the higher income groups (see **Table 17**).

Table 15: The type of industry employed individuals are active in (2007 Household Survey)

	Agriculture; hunting; forestry and fishing	Mining and quarrying	Manufacturing	Electricity; gas and water supply	Construction	Wholesale and retail trade	Transport; storage and communication	Financial; insurance; real estate and business services	Community; social and personal services	Other and not adequately defined	Unspecified	Institutions
KLM	32,5	0,0	6,8	0,9	1,8	9,1	1,6	4,4	8,1	9,4	23,1	2,3
ZFDM	26,2	4,4	9,0	1,0	5,3	10,7	3,4	4,4	12,2	7,8	11,2	4,3
NCP	13,9	6,7	8,1	0,7	5,0	11,1	3,5	6,7	16,8	8,8	13,5	5,2

Table 16: Occupation of employed individuals (2007 Household Survey)

	Legislators; senior officials and managers	Professionals	Technicians and associate professionals	Clerks	Service workers; shop and market sales workers	Skilled agricultural and fishery workers	Craft and related trades workers	Plant and machine operators and assemblers	Elementary occupations	Occupations unspecified and not elsewhere classified	Institutions
KLM	6,4	6,6	0,9	3,6	5,5	3,6	4,3	6,7	29,9	30,3	2,3
ZFM DM	8,3	6,6	3,1	7,4	6,7	10,6	11,2	6,8	22,3	12,7	4,3
NCP	8,2	8,8	4,1	8,2	8,6	6,9	10,9	6,3	18,6	14,2	5,2

Table 17: Household Income in the KLM per settlement (2011)

	No income	R 1 - R 400	R 401 - R 800	R 801 – R 1 600	R 1 601 – R 3 200	R 3 201 – R 6 400	R 6 401 – R 12 800	R 12 801 – R 25 600	R 25 601 – R 51 200	R 51 201 – R 102 400	R 102 401 - R 204 800	R 204 801 or more
Grootdrink	7,0	6,1	7,5	22,1	35,2	15,8	3,7	2,3	0,4	0,0	0,0	0,0
!Kheis NU	6,4	1,7	5,0	28,2	28,8	13,5	5,1	4,9	3,6	1,5	0,5	0,8
Topline	13,8	2,6	9,9	19,1	31,6	13,5	6,9	2,0	1,0	0,0	0,0	0,0
Wegdraai	7,9	5,1	14,3	24,7	27,7	10,6	5,5	4,0	0,2	0,0	0,0	0,0
Grobbershoop	6,7	2,7	5,4	14,1	22,3	22,6	13,5	7,7	3,5	0,9	0,4	0,1
Boegoeberg	11,1	3,6	6,8	25,8	32,1	15,9	2,9	0,5	0,5	0,0	0,0	0,2
KLM	7,7	3,3	7,0	22,2	28,3	16,2	7,1	4,6	2,3	0,7	0,3	0,3
ZFM DM	9,4	2,6	4,6	19,1	22,7	16,8	11,2	7,9	3,9	1,0	0,4	0,3
Northern Cape	12,0	3,7	6,3	19,2	21,2	14,7	10,4	7,3	3,7	1,0	0,3	0,2

Table 18: Distribution of Household Income brackets across the KLM (2011)

	No income	R 1 - R 400	R 401 – R 800	R 801 – R 1 600	R 1 601 – R 3 200	R 3 201 – R 6 400	R 6 401 – R 12 800	R 12 801 – R 25 600	R 25 601 – R 51 200	R 51 201 – R 102 400	R 102 401 - R 204 800	R 204 801 or more
Grootdrink	12,5	25,9	14,8	13,7	17,1	13,4	7,1	6,8	2,1	0,0	0,0	0,0
!Kheis NU	24,9	15,6	21,6	38,4	30,9	25,2	21,6	32,6	47,9	67,9	50,0	76,9
Topline	13,1	5,9	10,3	6,3	8,2	6,1	7,1	3,2	3,2	0,0	0,0	0,0
Wegdraai	11,5	17,8	23,0	12,6	11,1	7,5	8,8	10,0	1,1	0,0	0,0	0,0
Grobbershoop	23,7	22,2	21,0	17,4	21,5	38,2	51,7	45,8	42,6	35,7	41,7	7,7
Boegoeberg	14,3	11,1	9,6	11,6	11,3	9,8	4,1	1,1	2,1	0,0	0,0	7,7
KLM	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

3.4.5 Economy

GVA Contribution

Maps 35 to 45 spatially represent the Gross Value Added (GVA) per annum in the KLM. The GVA in KLM occurs mainly along the Orange River, and largely in the vicinity of Groblershoop (see **Map 35**). The railway line running through the center of the KLM also contributes to the economy, and GVA production is evident in Kleinbegin and Sonderpan. The importance of the Orange River to the local economy is clearly visible in **Map 37**, which indicates the location of GVA in agriculture. The GVA in community, social and personal services and financial intermediation, insurance, real estate and business services is centralised around Groblershoop and to a lesser degree around Groodrink and Wegdraai (see **Map 41 and 42**). The GVA (1) in manufacturing mainly takes place in Groblershoop and Wegdraai (**Map 38**); (2) in infrastructure services and transport, in Groblershoop, Wegdraai, Grootdrink and Kleinbegin (**Map 39**); and (3) in transport, storage and communication, in Groblershoop and Kleinbegin (**Map 44**).

Agriculture

According to the ZFM DM SDF (2012:107):

- The total annual contribution from crops to Agriculture in the DM is R735,5 million, i.e. 10% of the total agricultural contribution to the GVA. Table grapes and wine grapes contribute R1 585,3 million (79,38%) and R134,0 million (18,22%) respectively to income from crops.
- The total contribution from livestock and animal product sales is R851 million, i.e. 54% of the total agricultural contribution to the DM GVA. Sheep and wool contribute R607 million (71,29%) and R2,0 million (0,23%) to the income from livestock and animal products, respectively.

- Livestock contributes 53% to the DM GVA, followed by horticulture, which contributes 45%. The total annual contribution for Agriculture to the economy of the DM is R1,586 billion.

Tourism

According to the ZFM DM EMF (2008), if tourism continues to grow at current rates in the district, it is foreseen that in ten years' time it can be the third largest sector of the economy after mining and agriculture. The KLM is currently in the process of developing an Integrated Tourism Plan, which will promote the development of this sector.

Tourism opportunities are:

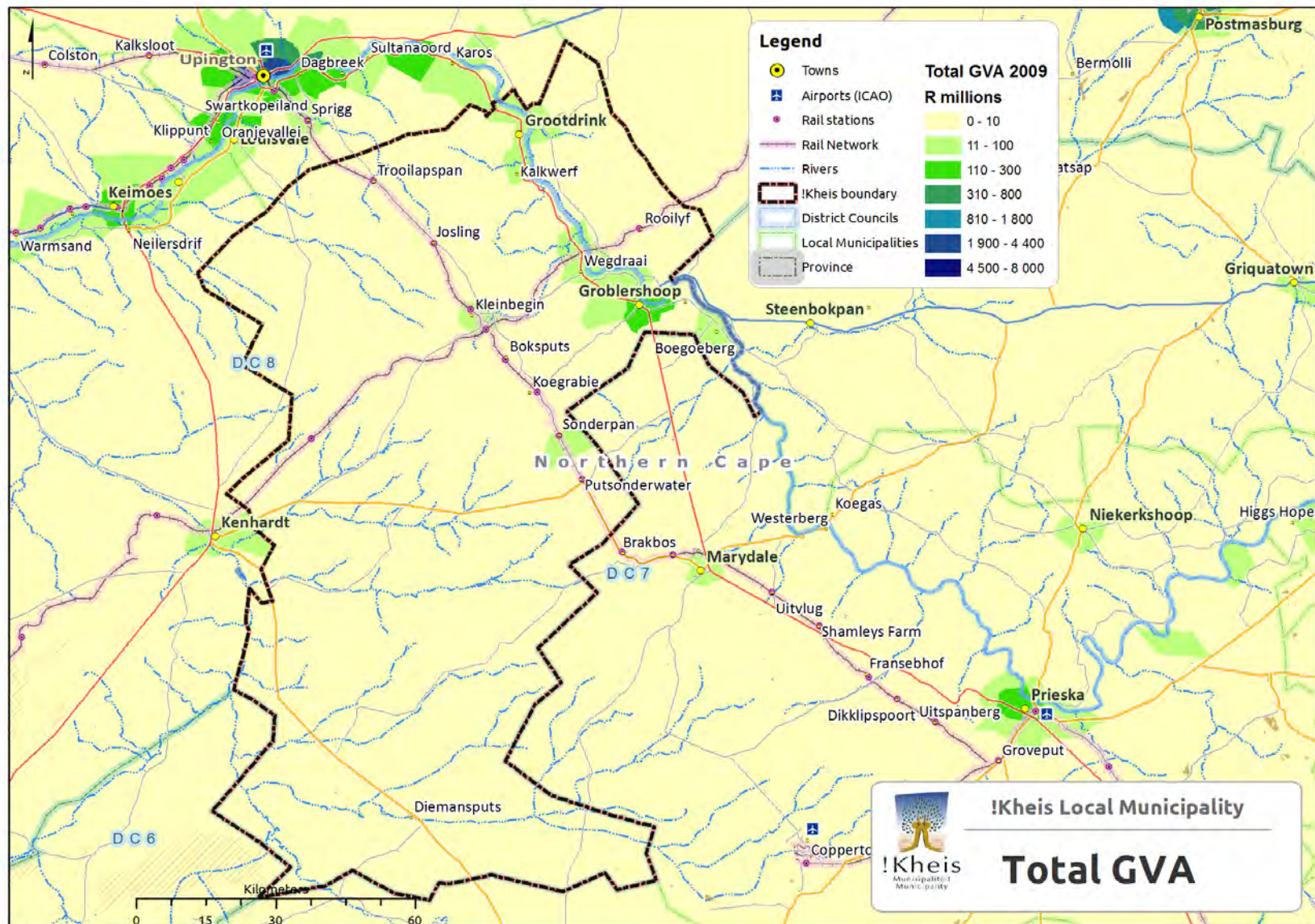
- The Orange River and related water activities;
- Agricultural tourism;
- The 'Green Kalahari' – this zone is being actively marketed through a website where Groblershoop is identified as one of the main towns in the Green Kalahari and information provided on activities and accommodation opportunities in the area;
- Boegoeberg Dam (according to the IDP (2012-2017) the Boegoeberg Dam Resort will be upgraded);
- Development of the Volgraafsig Dam (IDP 2012-2017);
- Cultural Tourism: Remnants of the various groups that migrated through or stayed in KLM e.g. German war graves and San, Korannas and Griekwa cultural remnants;
- Adventure tourism in and around the Orange River (ensuring however that 4x4 activity and water sports do not negatively impact on the natural environment);
- A Tourism Office at Groblershoop;
- Mountains, hills and large open spaces; and
- Game farms.

Spatial Economic Projections/Trends

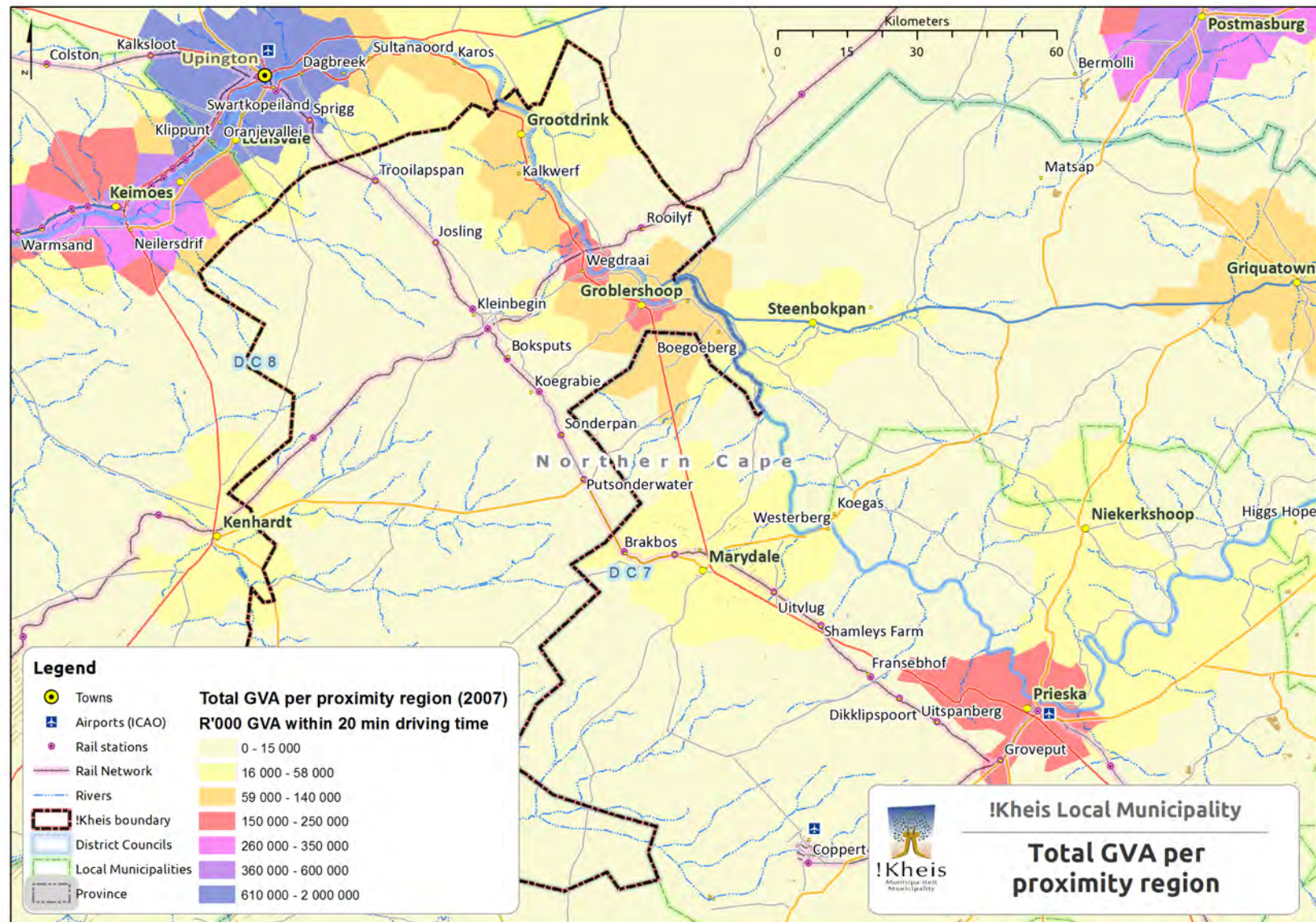
Based on spatial economic trends (notably the location of economic activities and migration patterns in the wider region) over the last decade, it is envisaged that the current concentration of economic activities in the KLM will continue as is, for the foreseeable future. It is envisaged that Groblershoop will experience sizeable growth, due to (1) the solar boom in the area, (2) an anticipated growth in retail and manufacturing activities, (3) an expansion in tourism in the wider region, and (4) continued government infrastructure investment and development spending in the town. Without focused government intervention, the slack economic growth in Grootdrink, Topline, Wegdraai and Boegoeberg is set to continue. Whether government intervention will enable the development of economic nodes in the latter four settlements, is uncertain. What could be achieved with such intervention would be the development of small-scale locally-focused economic development.

A detailed spatial economic study of the KLM (scale, spatial location and trends) would be useful in providing more detailed information for planning purposes.

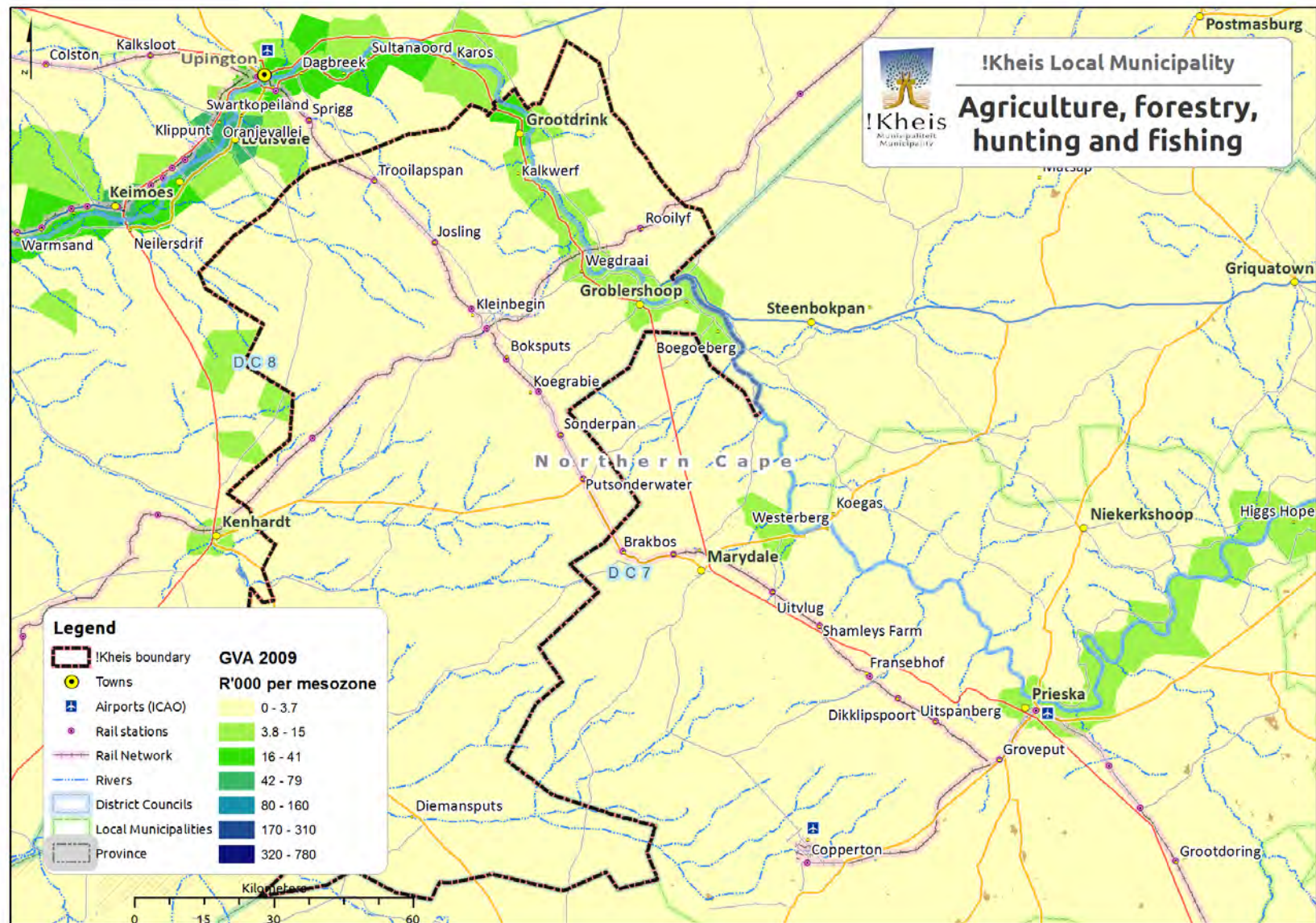
Map 35: Location of Total GVA in the KLM



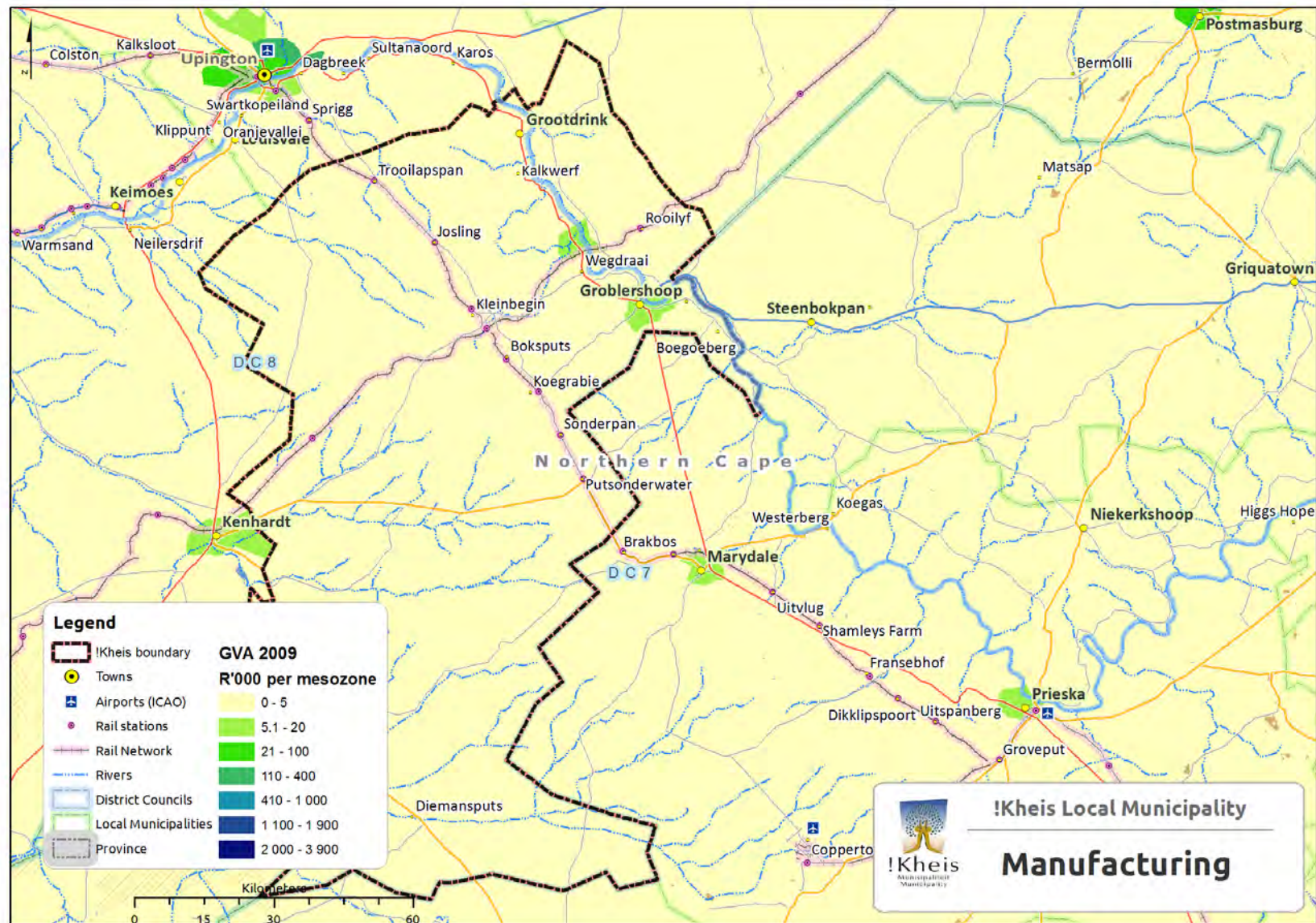
Map 36: Location of GVA per Proximity Region



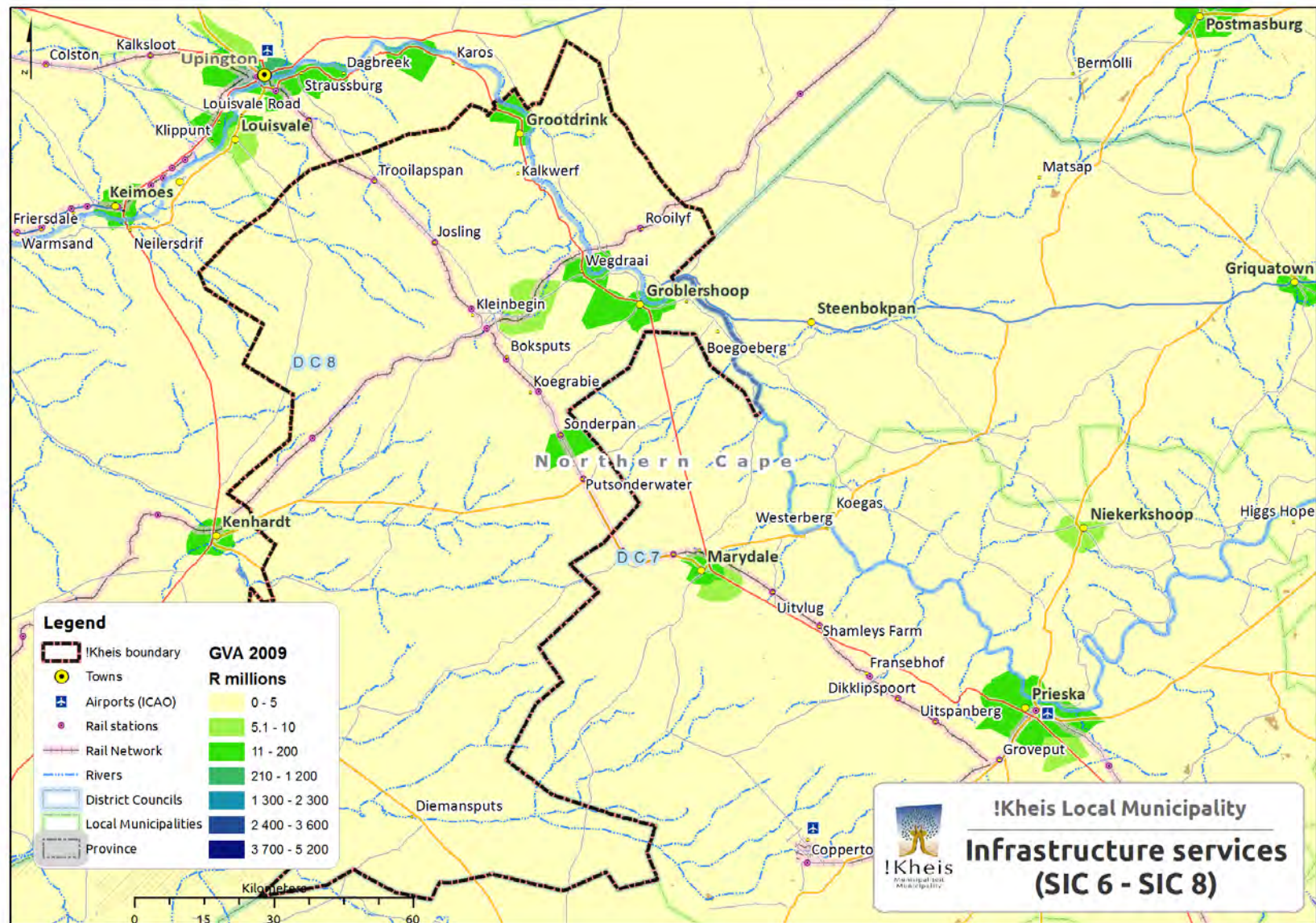
Map 37: Location of GVA in Agriculture



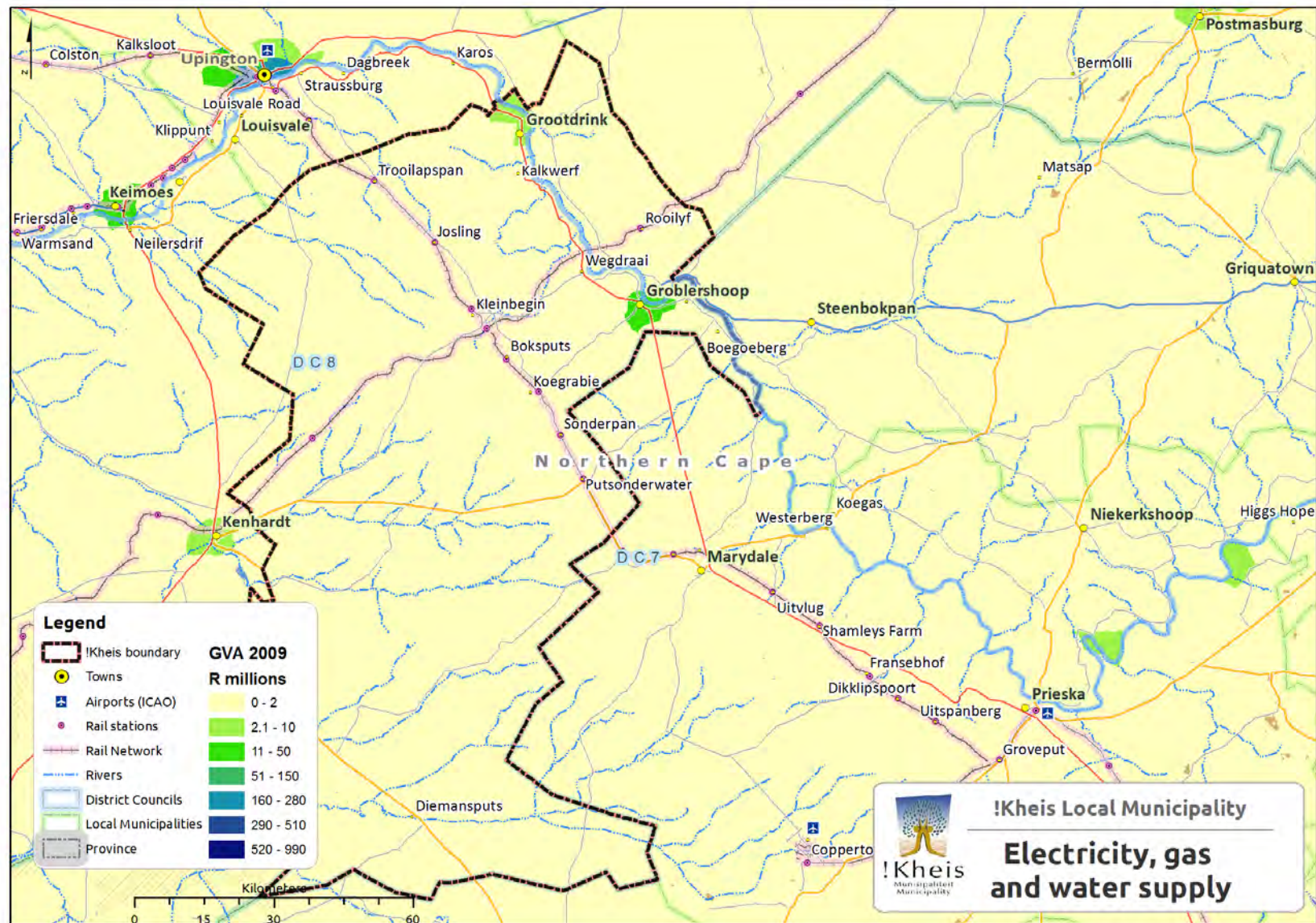
Map 38: Location of GVA in Manufacturing



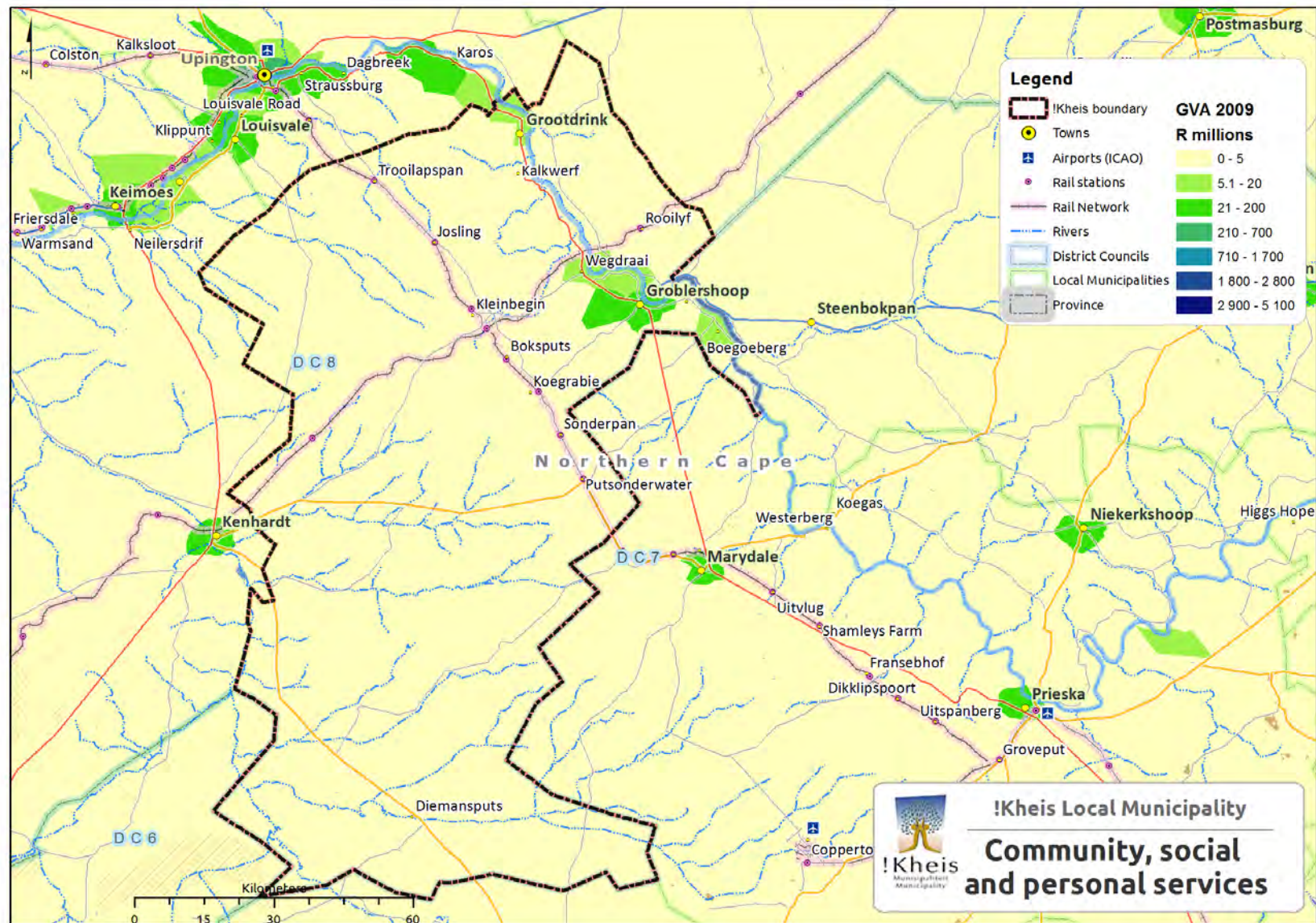
Map 39: Location of GVA in Infrastructure Services



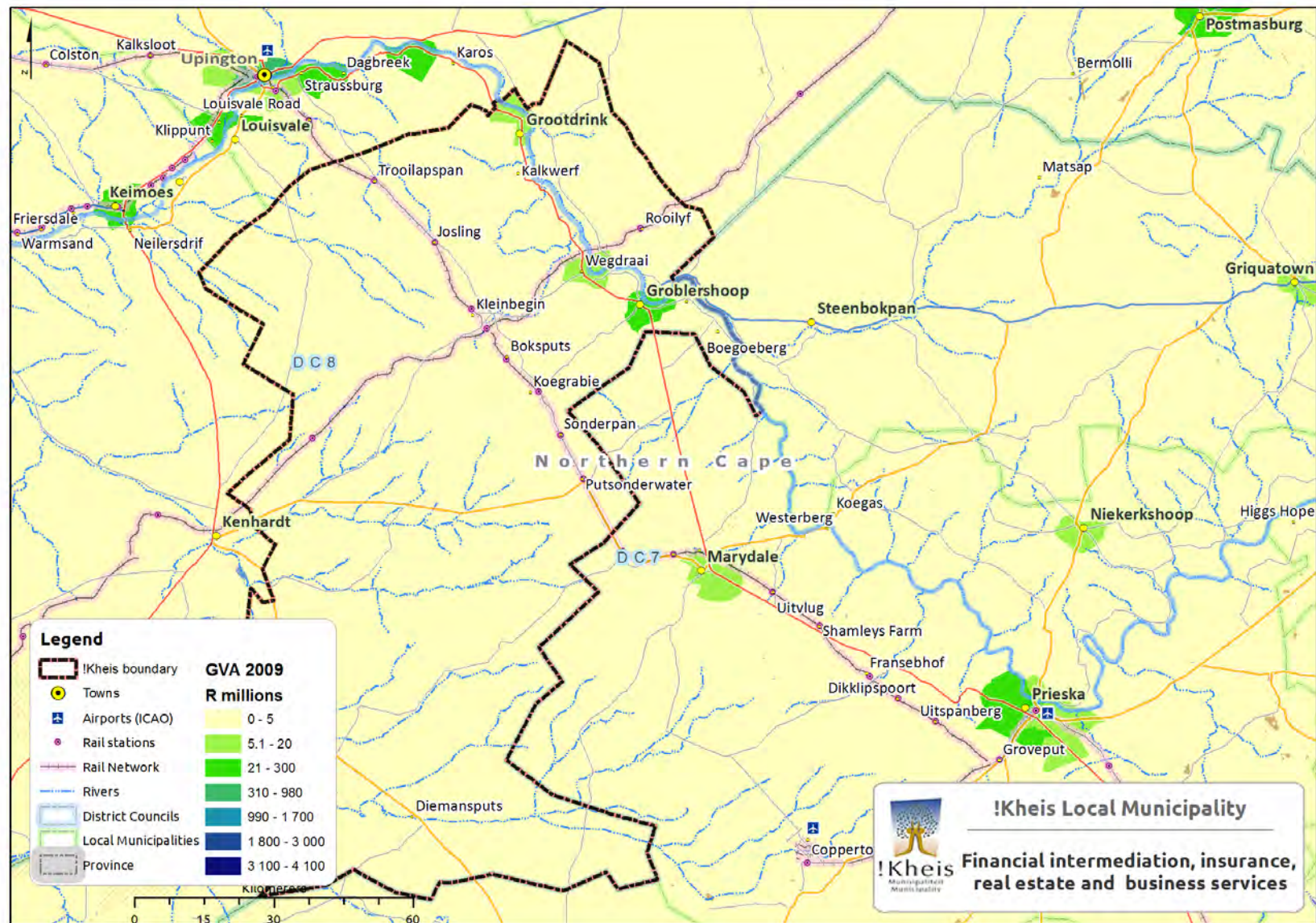
Map 40: Location of GVA in Electricity, Gas and Water Supply



Map 41: Location of GVA in Community, Social and Personal Services



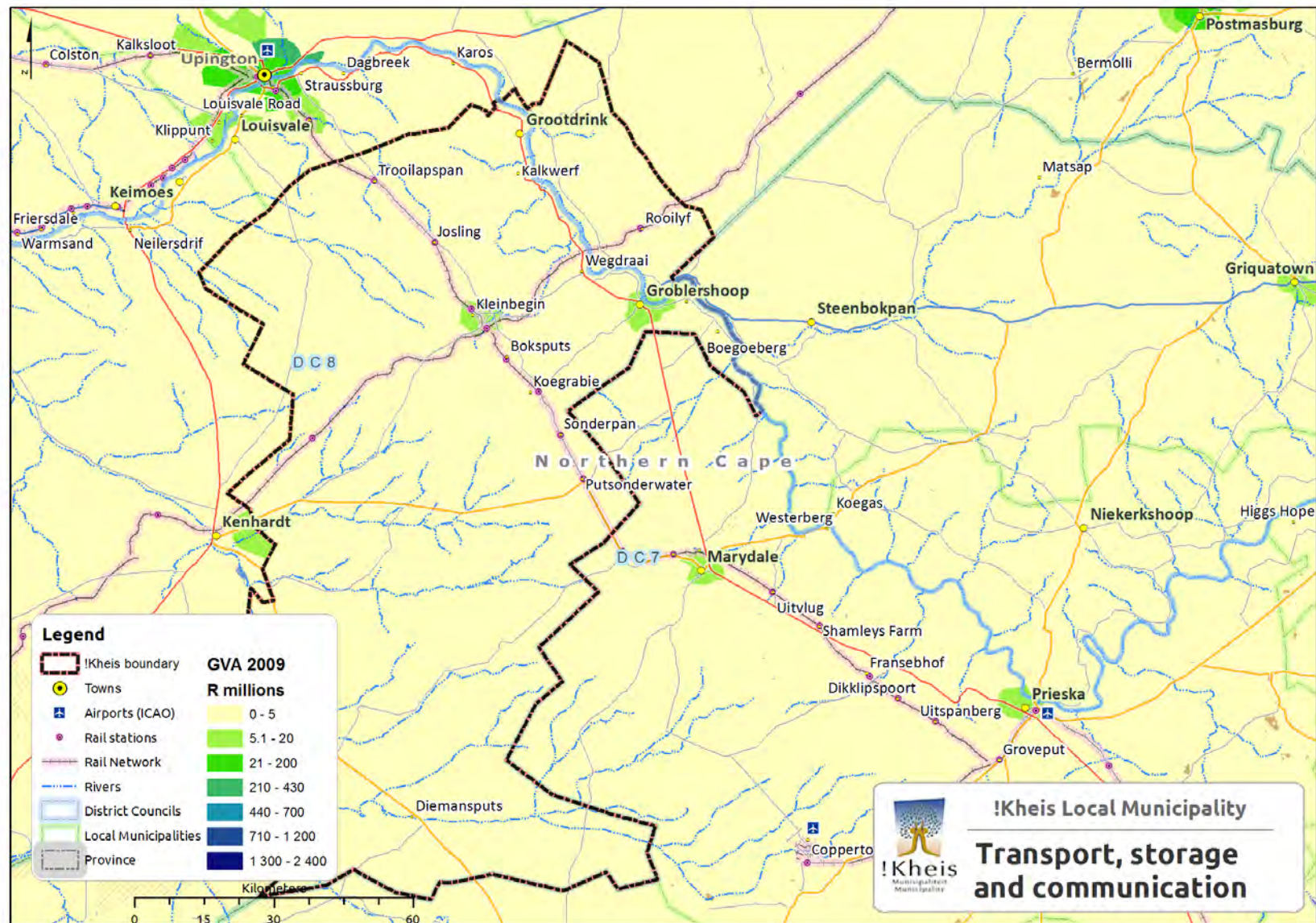
Map 42: Location of GVA in Financial Intermediation, Insurance, Real Estate and Business Services



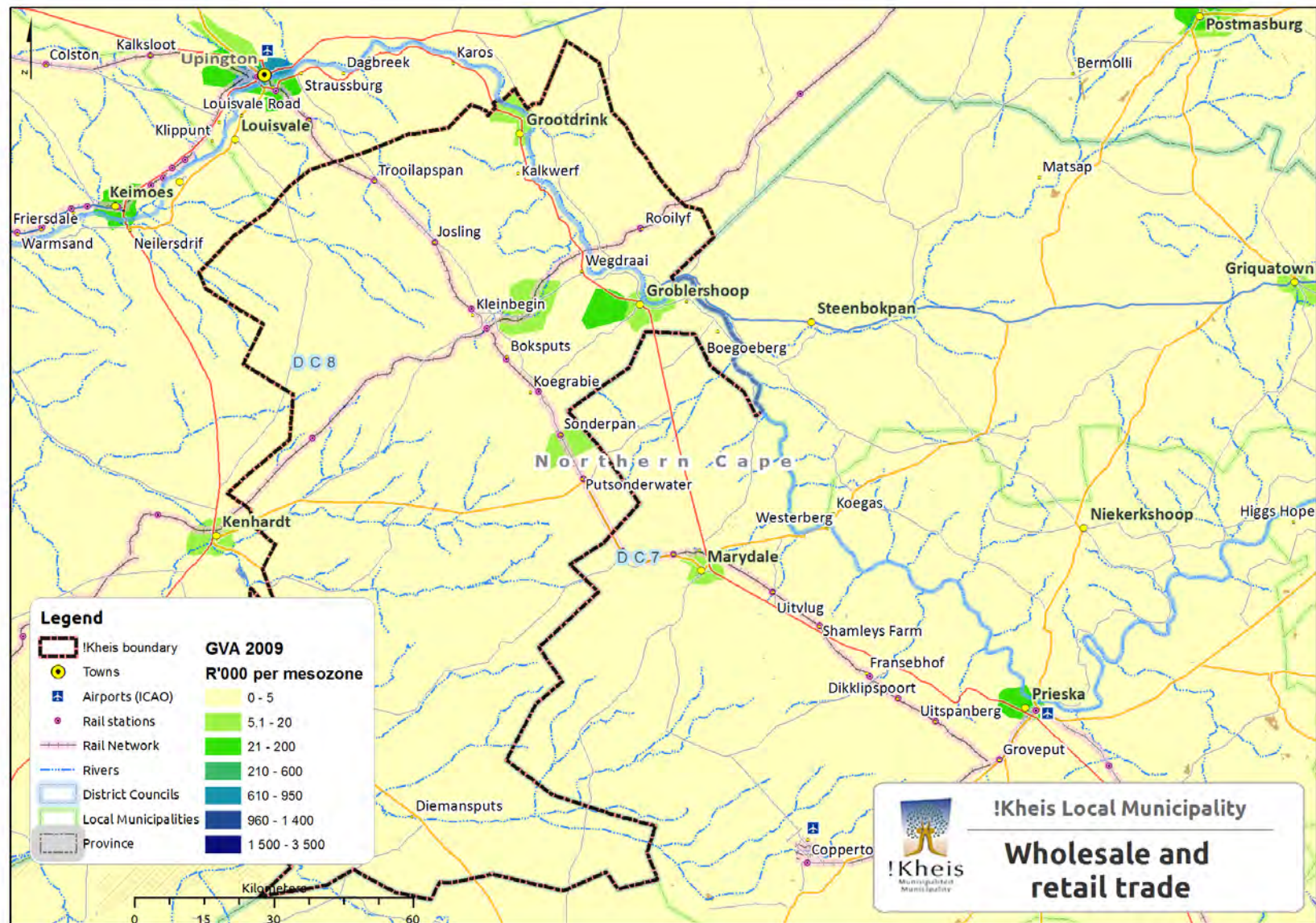
Map 43: Location of GVA in Mining



Map 44: Location of GVA in Transport, Storage and Communication



Map 45: Location of GVA in Wholesale and Retail Trade



3.4.6 Land Reform

The KLM has relatively few Land Reform Projects in comparison to the wider ZFM DM. The following projects are listed in the IDP 2012-2017(p.19):

- The farm 'Dassiekop' was bought according to the governments' Land Reform Programme;
- In Wegdraai, Topline, Grootdrink and Boegoeberg township establishment took place;
- At Wegdraai. commonage land was bought according to the Land Reform Programme;
- In Gariep and Opwag improvements in the provision of services are being explored and planned for; and
- At Opwag, formal township establishment is being investigated.

Please see **Map 46** for more detail.

3.4.7 Crime

The KLM has one Police Station in Groblershoop, but in reality is covered by two police precincts: (1) Groblershoop precinct and (2) Kenhardt precinct. Due to the fact that the majority of the KLM's population live in the Groblershoop precinct, this SDF only looks at Groblershoop's crime statistics. Crime in Groblershoop has been in decline over the last ten years, with the most prominent crime being "assault with the intent to inflict grievous bodily harm" and theft, especially the stock-theft and burglary at residential premises (see **Table 19**).

3.4.8 Property Market Patterns and Growth Pressures

Very little formal development by the private sector is taking place in the KLM, with non-residential development basically being non-existent and residential development only taking place in the form of single dwelling house

development. No flat or townhouse developments took place between 2007 and 2011 (see **Table 20**).

3.4.9 Municipal Finances

The KLM covers an area of close to 7,225 km², but only has a population of 16 637 with a relatively low level of income. This means that the municipality and its inhabitants are highly dependent on national government's Equitable Share allocation as a source of income: 37,82% of the 2010/2011 and 38,59% of the 2011/2011 municipal income came from the Equitable Share allocation.

The approved operational budget for 2011/2012 was R24 810 715. This figure increased to R 31 499 365 in 2012/2013. The operational budget was compiled taking various increases in expenditure into consideration, and the average consumer had to pay +/-R20,00 more per month. Provision was also made in the budget for the provision of free basic services to the value of R2 817 662.

The approved capital budget for 2011/2012 amounted to R17 079 000 and increased to R16 935 000 in 2012/2013, which represents a decrease of 0,84%.

The major capital projects are:

- Development of UDS Toilets;
- Sports Grounds in Boegoeberg and Gariep;
- Two Sewerage Removal Trucks;
- Upgrading of access road and streets; and
- Upgrading of municipal satellite offices.

Map 46: Land Reform Projects

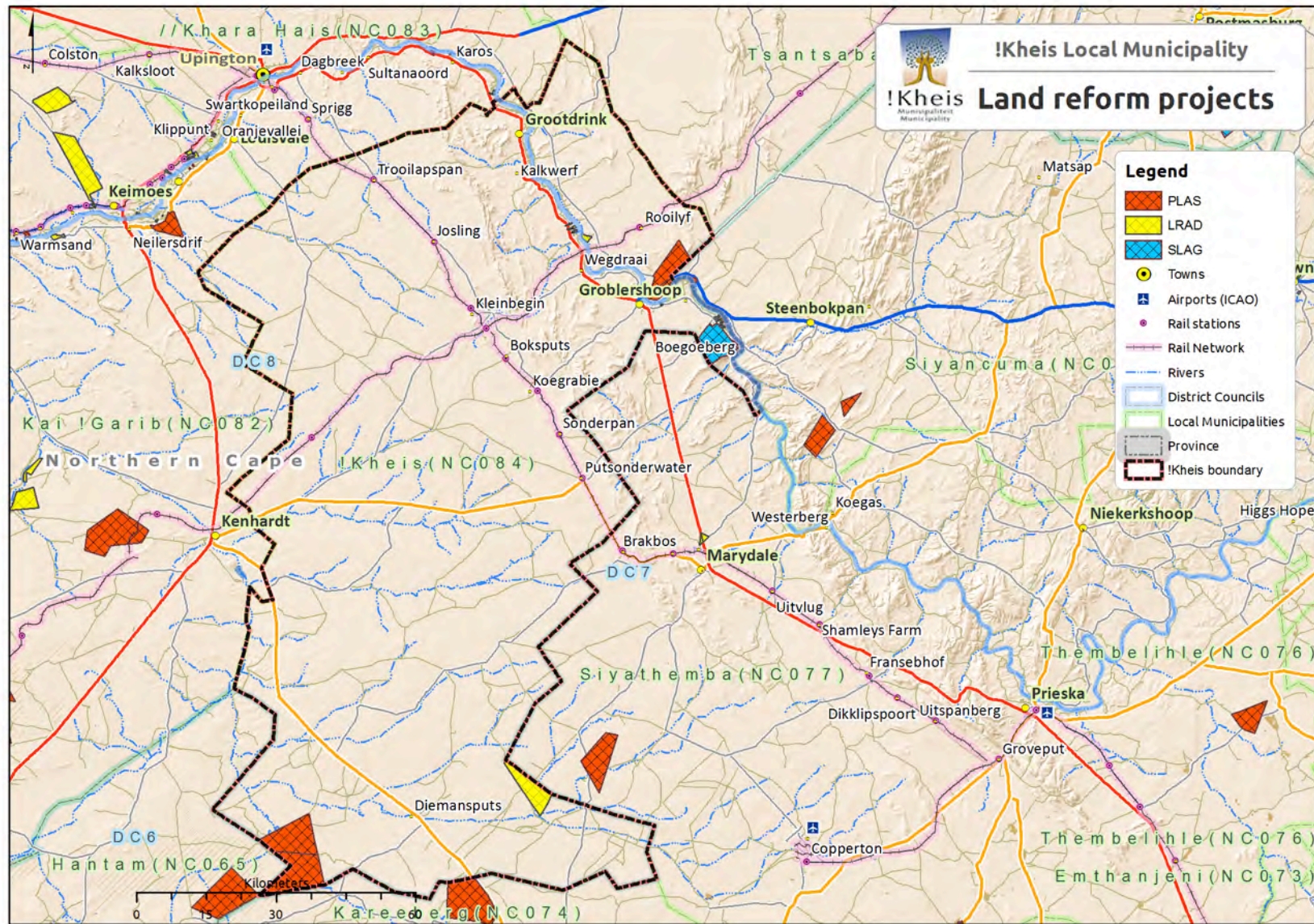


Table 19: Crimes in Groblershoop from April to March 2003/2004 - 2012/2013 (South African Police Service 2013)

Crime Category	April 2003 to March 2004	April 2004 to March 2005	April 2005 to March 2006	April 2006 to March 2007	April 2007 to March 2008	April 2008 to March 2009	April 2009 to March 2010	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013
CONTACT CRIME (CRIMES AGAINST THE PERSON)										
Murder	19	12	9	13	8	11	13	11	7	9
Total Sexual Crimes	61	53	42	33	29	24	38	37	33	38
Attempted murder	19	21	29	15	14	3	7	9	1	10
Assault with the intent to inflict grievous bodily harm	412	404	283	296	187	135	147	148	163	192
Common assault	211	171	95	130	79	34	30	25	60	36
Common robbery	27	15	13	17	9	1	3	2	2	3
Robbery with aggravating circumstances	0	3	3	2	0	0	0	1	2	4
CONTACT-RELATED CRIMES										
Arson	10	6	12	13	5	2	2	2	5	2
Malicious damage to property	116	91	96	79	56	37	28	38	33	39
PROPERTY-RELATED CRIMES										
Burglary at non-residential premises	29	8	21	45	19	18	30	18	15	18
Burglary at residential premises	158	151	126	93	58	36	52	41	37	46
Theft of motor vehicle and motorcycle	4	1	4	8	2	0	0	2	2	3
Theft out of or from motor vehicle	27	11	15	17	7	3	4	5	5	3
Stock-theft	149	117	81	84	55	50	77	62	51	42
CRIMES HEAVILY DEPENDENT ON POLICE ACTION FOR DETECTION										
Illegal possession of firearms and ammunition	4	6	2	1	1	1	0	2	0	1
Drug-related crime	27	35	37	45	66	63	31	32	24	19
Driving under the influence of alcohol or drugs	8	13	6	5	10	19	10	8	14	11
OTHER SERIOUS CRIMES										
All theft not mentioned elsewhere	217	220	130	111	79	60	58	51	40	58
Commercial crime	12	6	8	5	3	3	1	1	5	2
Shoplifting	10	10	33	15	1	5	10	4	2	1
SUBCATEGORIES OF AGGRAVATED ROBBERY FORMING PART OF AGGRAVATED ROBBERY ABOVE										
Carjacking	0	0	0	0	0	0	0	0	0	0
Truck hijacking	0	0	0	0	0	0	0	0	1	0
Robbery at residential premises	0	0	1	0	0	0	0	0	0	0
Robbery at non-residential premises	0	0	0	0	0	0	0	1	1	4
OTHER CRIME CATEGORIES										
Culpable homicide	6	10	5	1	7	4	11	7	8	6
Public violence	0	1	0	0	0	0	1	0	0	0
Crimen injuria	21	60	33	26	9	9	11	12	12	19
Neglect and ill-treatment of children	8	3	2	2	1	1	1	3	0	0
Kidnapping	0	0	1	0	1	0	0	0	0	0

Table 20: Number, square metres and value of residential buildings, non-residential buildings and additions and alterations reported as completed in the KLM (Stats SA 2013)

Year	Residential buildings			Non-residential buildings			Additions and alterations			Buildings reported as completed to municipalities	
	Number of dwelling houses	Total square meters	Total value R'000	Number of buildings	Total square meters	Total value R'000	Number of plans	Total square meters	Total value R'000	Total square meters	Total value R'000
2007	3	323	645	2	253	505	5	428	856	1004	2006
2008	3	312	760	1	56	140	14	846	2115	1214	3015
2009	5	517	1324	0	0	0	10	810	2074	1327	3398
2010	8	760	2332	0	0	0	14	2641	7931	3401	10263
2011	3	760	2332	0	0	0	14	2641	7931	3401	10263

3.5 URBAN SETTLEMENT PATTERNS

3.5.1	Overview of the Settlement Patterns	p. 96
3.5.2	Settlement Patterns	p. 98
3.5.3	Settlement Characteristics	p. 108
3.5.4	Projected Housing and Service Needs	p. 114
3.5.5	Main Settlement Locations and Statistics	p. 118

3.5.1 Overview of the Settlement Patterns

The KLM has five main settlements, which are in order of largest number of households: (1) Groblershoop, (2) Grootdrink, (3) Wegdraai, (4) Boegoeberg, and (5) Topline. Groblershoop and Grootdrink are also the densest settlements in the KLM, while a number of much smaller settlements are spread across rural KLM, especially along the railway lines running through the municipality.

Changes in population figures between 2001 and 2011 point towards the depopulation of the rural KLM, with these individuals moving towards Groblershoop, Wegdraai and Grootdrink. If the current trends in population growth continues, the larger settlements, especially Groblershoop, will face serious challenges with regard to service provision.

The KLM saw an increase in the number of informal dwellings between 2001 and 2011 from 15,1% to 31,8%. !Kheis NU (82,5%), Groblershoop (60,2%) and Boegoeberg (70,3%) have the highest percentages of houses built on a single stand or farm, with Grootdrink (54,1%), Topline (51,6%) and Wegdraai having the largest percentage of informal dwellings.

Access to electricity increased between 2001 and 2011 in KLM. However, 30,4% of households still make use of candles for lighting. Groblershoop (65,7%) has the lowest percentage of households using electricity for lighting, while !Kheis NU (43,3%) has the highest percentage of households using candles for lighting.

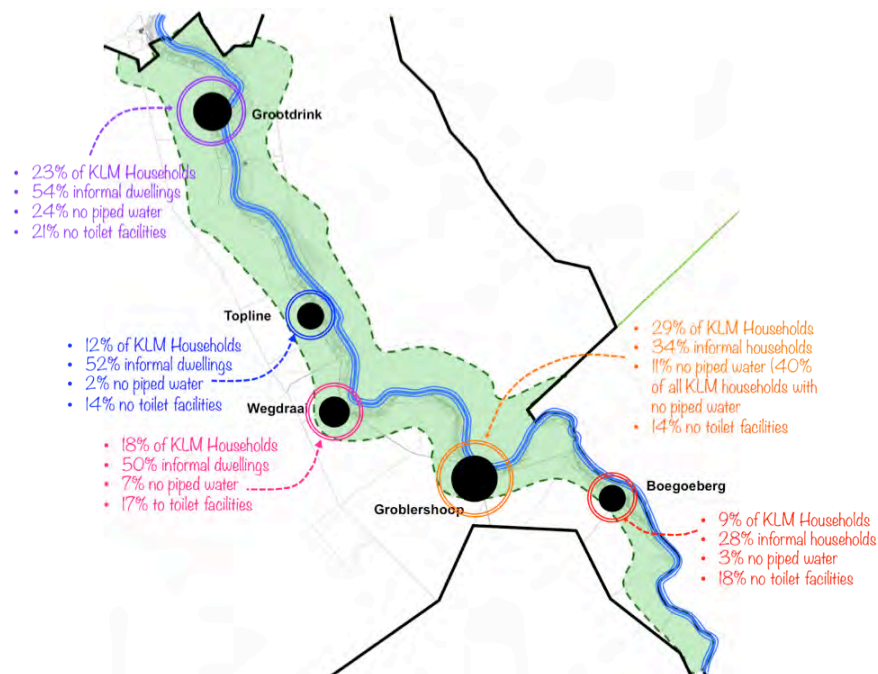
The provision of piped water in KLM is generally of a lower standard than that of ZFM DM and the Northern Cape Province as a whole, with 67,5% of the total population accessing water through a tap in their yards, and only 16,7% doing so directly in their dwellings. The same can be said for access to toilet facilities, although the number of households with no access has decreased. Rural KLM has the lowest level of toilet facilities, while households in Wegdraai make predominantly use of pit toilets without ventilation. The number of households with no access to refuse removal services has increased drastically

between 2001 and 2011, from 2,4% to 15,8%. Although the smaller settlements such as Wegdraai and Topline generally have lower service standards, the highest need in total numbers tend to be located in Groblershoop and Grootdrink, with the exception of !Kheis NU.

Challenges:

- Depopulation of rural KLM limits financial feasibility of providing services to these region;
- The movement of people into Groblershoop and Grootdrink places increasing pressure on these settlements to provide basic services;
- The extensive use of candles for lighting and wood for cooking increases the risk of shack fires and overexploitation of firewood in KLM; and
- The low level of piped water and access to quality toilet facilities.

Figure 8: KLM Settlement Pattern Summary



KLM Housing



School



Informal Housing



Toilet Facilities



Streetscape



Commercial Buildings

3.5.2 Settlement Patterns

Settlement Distribution

The KLM has five main settlements, which are in order of largest number of households: (1) Groblershoop, (2) Grootdrink, (3) Wegdraai, (4) Boegoeberg, and (5) Topline. Groblershoop and Grootdrink are also the densest settlements in KLM (see **Map 47 and 48**), while a number of much smaller settlements are spread across rural KLM, especially along the railway lines running through the municipality. Making use of kernel density it is possible to map the changes in density in a more fine-grained way (see **Map 49-52**), these maps once again show the density around Grootdrink and Groblershoop, but also lifts out Trooilapspan (a settlements that developed around a railway station). Accessibility is relatively limited in the KLM, with a majority of the settlements having relatively high density, but little access in term of road systems and public transport (see **Map 53-55**).

Population Projections

The following population projections are based on adjusted populations numbers provided by 'City Populations'² that address the demarcation differences in the Sub-Place classifications used by Statistics SA in 2001 and 2011 (see **Section 3.4.3** for a detailed discussion of these discrepancies).

Table 21: Population Projections for KLM based on Individual Settlement Growth

	2001	2011	Exponential Change Rate 2001 to 2011	2020	% Change 2011 and 2020	2030	% Change 2011 and 2030
Grootdrink	2180	2645	0,01933	3028	14,5	3674	38,9
!Kheis NU	6434	3611	-0,0578	2409	-33,3	1352	-62,6
Topline	1166	1398	0,01815	1587	13,5	1903	36,1
Wegdraai	1722	2189	0,024	2589	18,3	3292	50,4

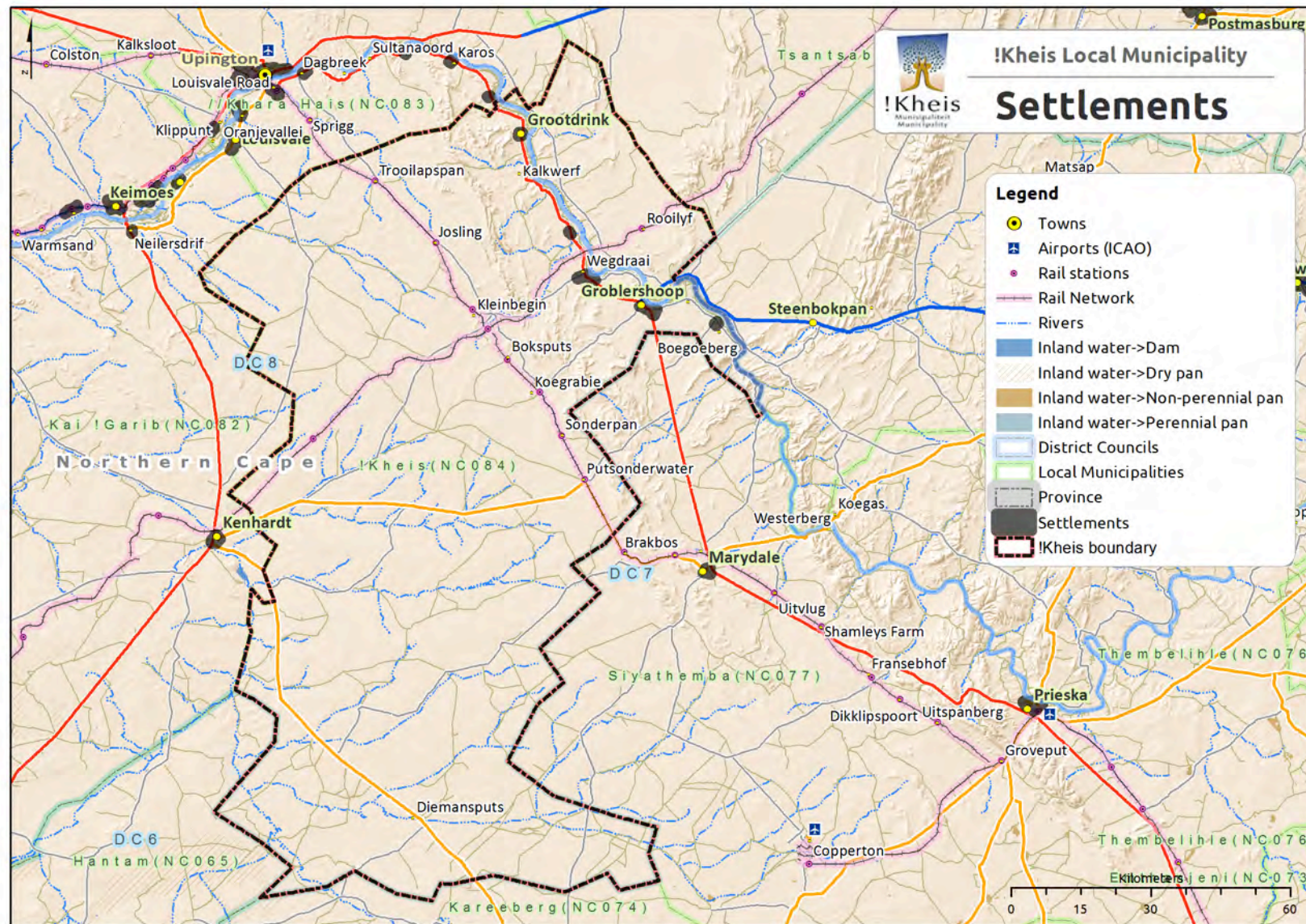
² <http://www.citypopulation.de>

	2001	2011	Exponential Change Rate 2001 to 2011	2020	% Change 2011 and 2020	2030	% Change 2011 and 2030
Groblershoop	3471	4938	0,03525	6320	28,0	8991	82,1
Boegoeberg	1587	1857	0,01571	2073	11,6	2426	30,6
KLM	16560	16638	0,00047	16693	0,3	16772	0,8
ZFM DM	202160	236783	0,0158	264474	11,7	309743	30,8
NCP	991919	1145861	0,01443	1267652	10,6	1464430	27,8

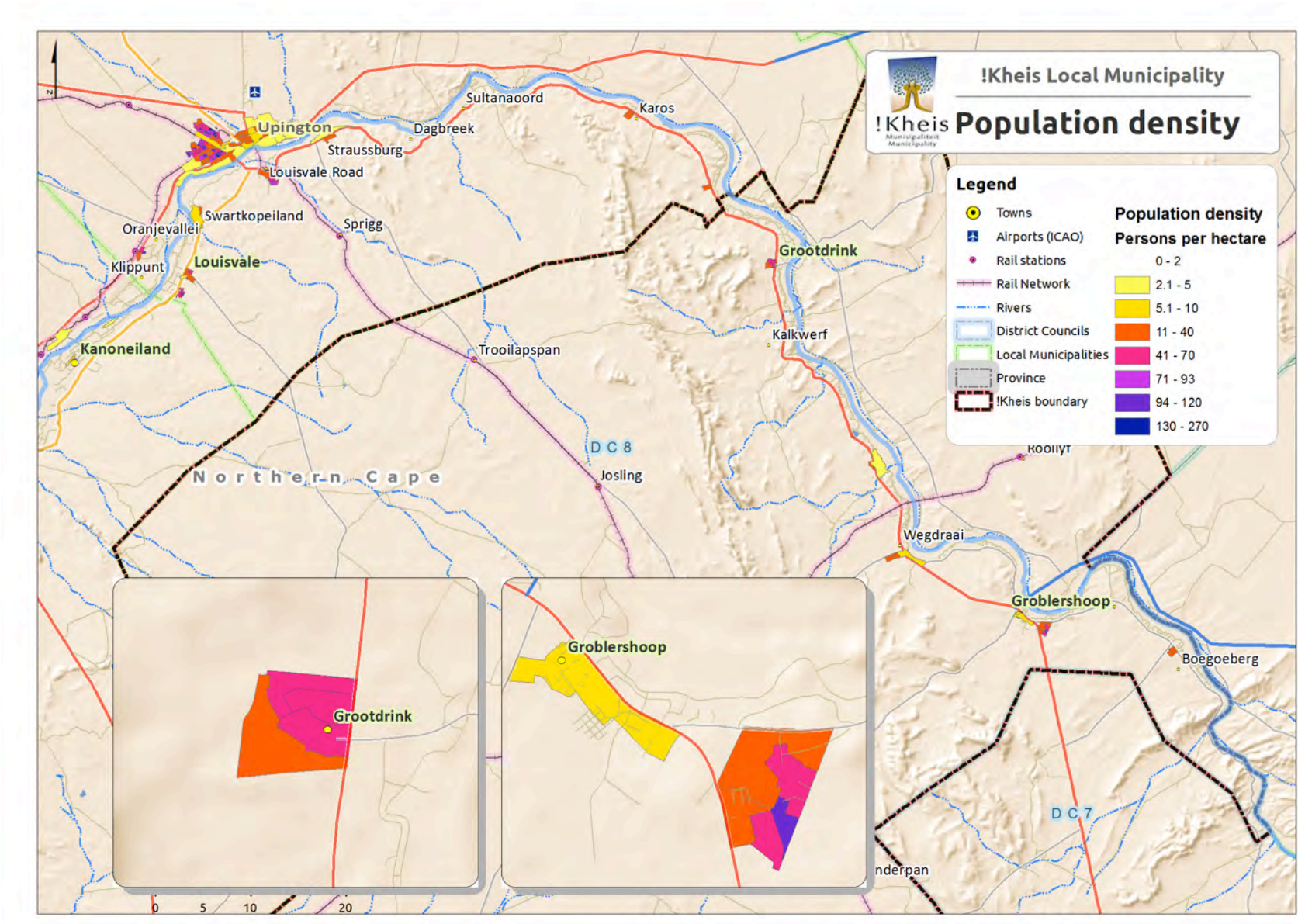
From **Table 21** above it is apparent that although there has been no decided increase in the total population of KLM there has been a decided movement of people inside KLM. !Kheis NU (rural KLM) had a negative growth and if this continues, it will have lost 33,3% of its population by 2020, and 62,6% by 2030. The KLM population appears to be moving towards the larger settlements such as Groblershoop, Wegdraai and Grootdrink, most probably in order to access services and better employment opportunities.

The depopulation of !Kheis NU asks serious questions about extending basic services into these areas, especially in light of the limited municipal budget. If the current trends in population growth continues, the larger settlements, especially Groblershoop, will face serious challenges with regard to service provision.

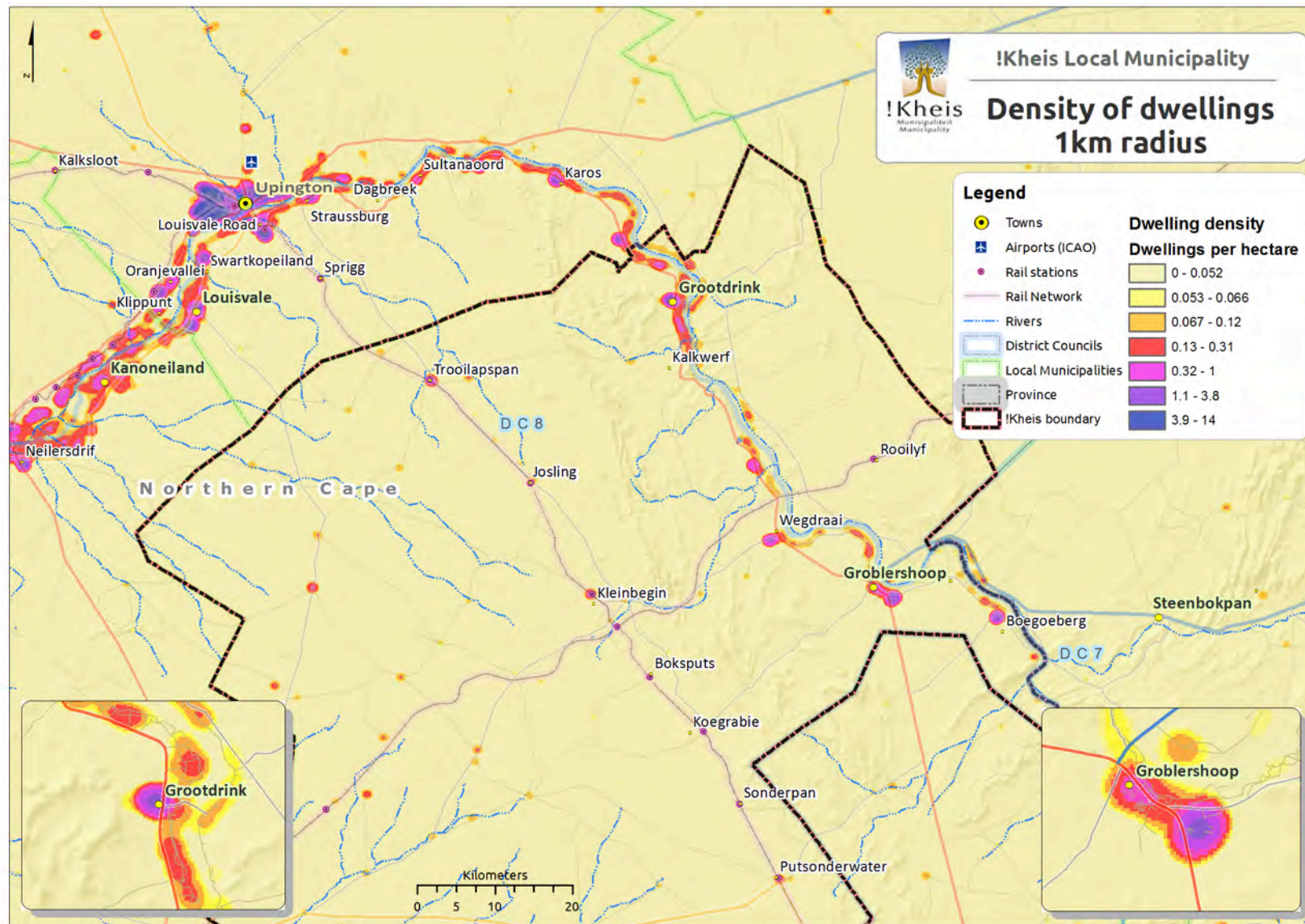
Map 47: Settlement Pattern in KLM



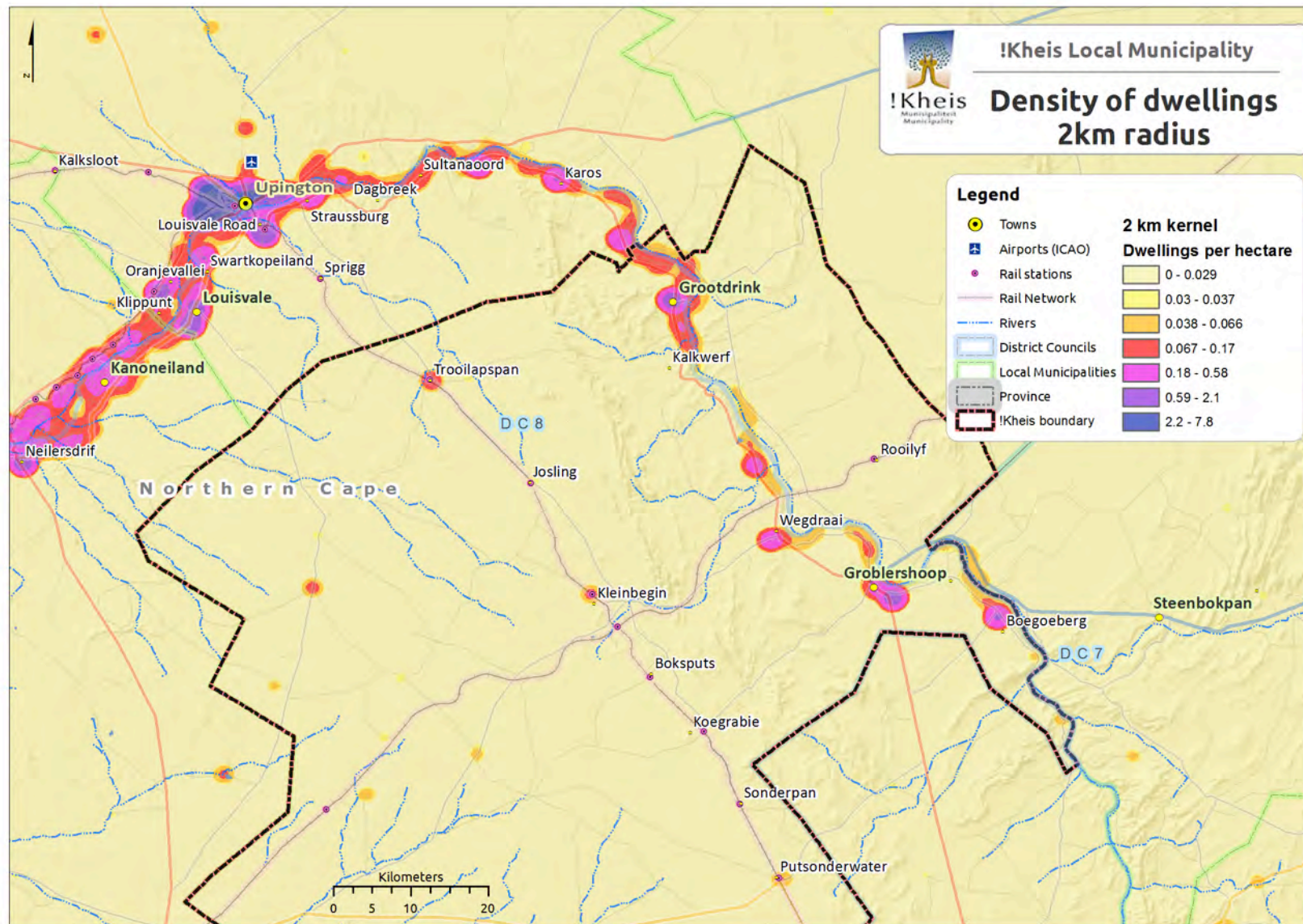
Map 48: Settlement Densities in KLM



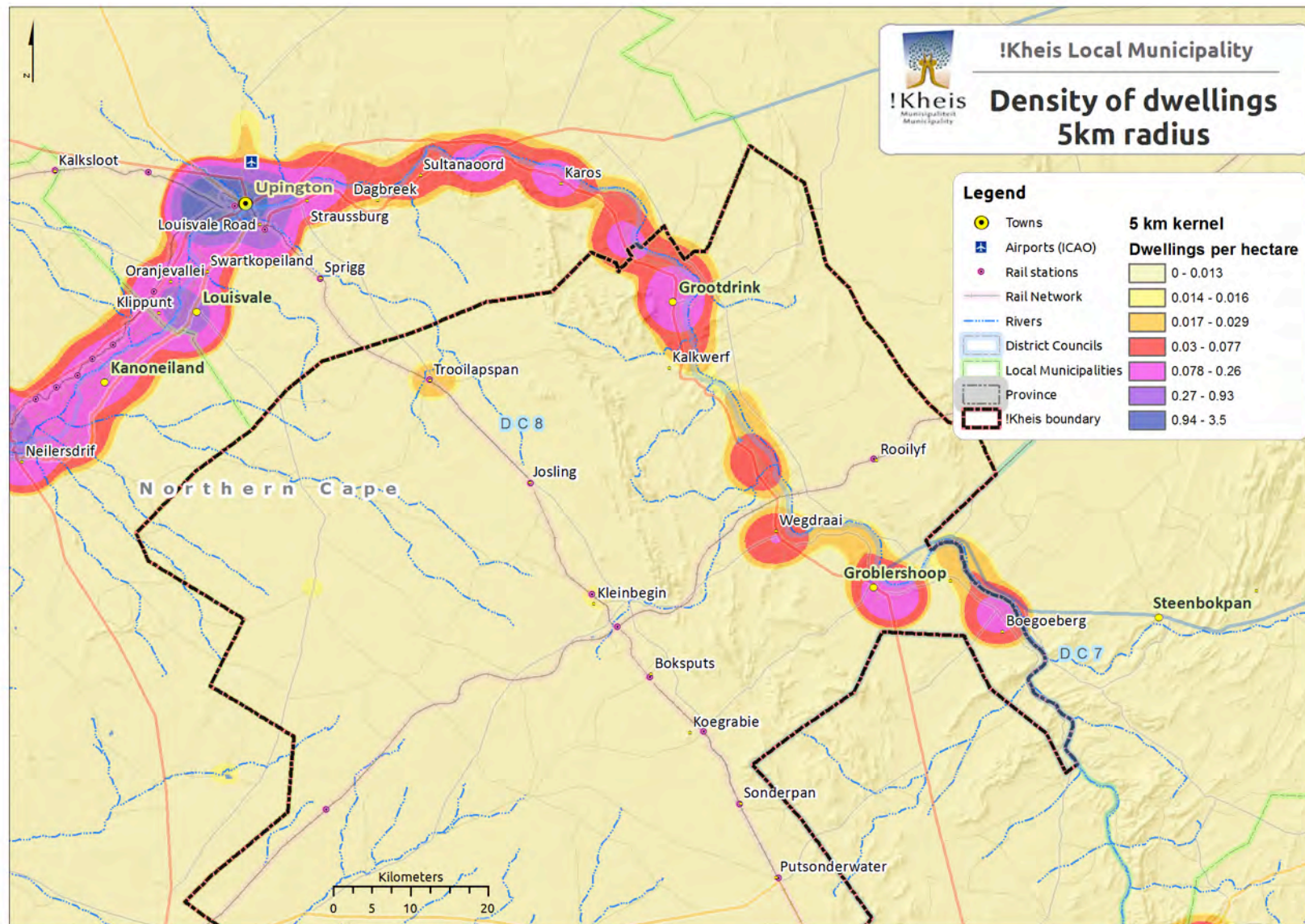
Map 49: Density of Dwellings (1km radius)



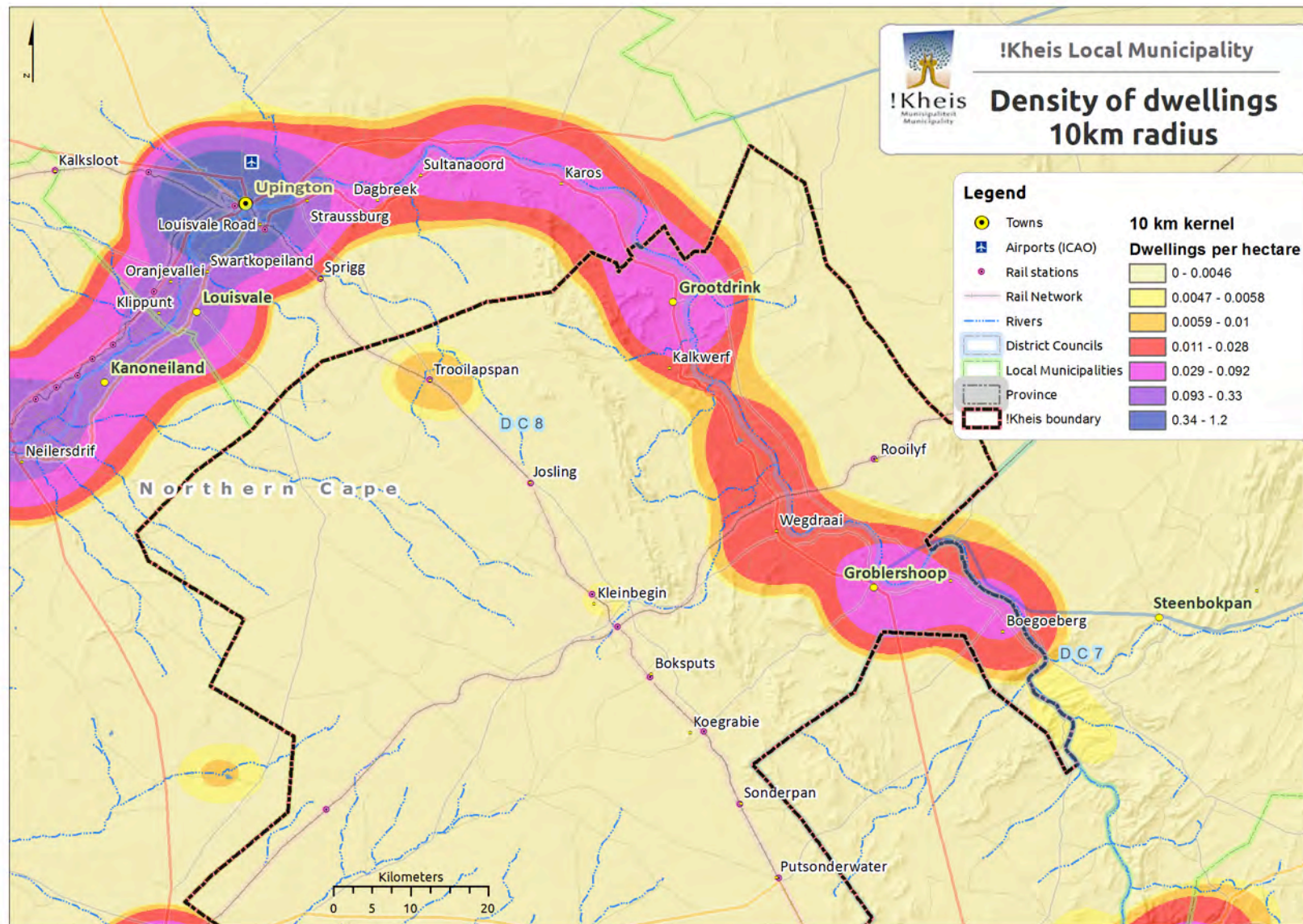
Map 50: Density of Dwelling (2km radius)



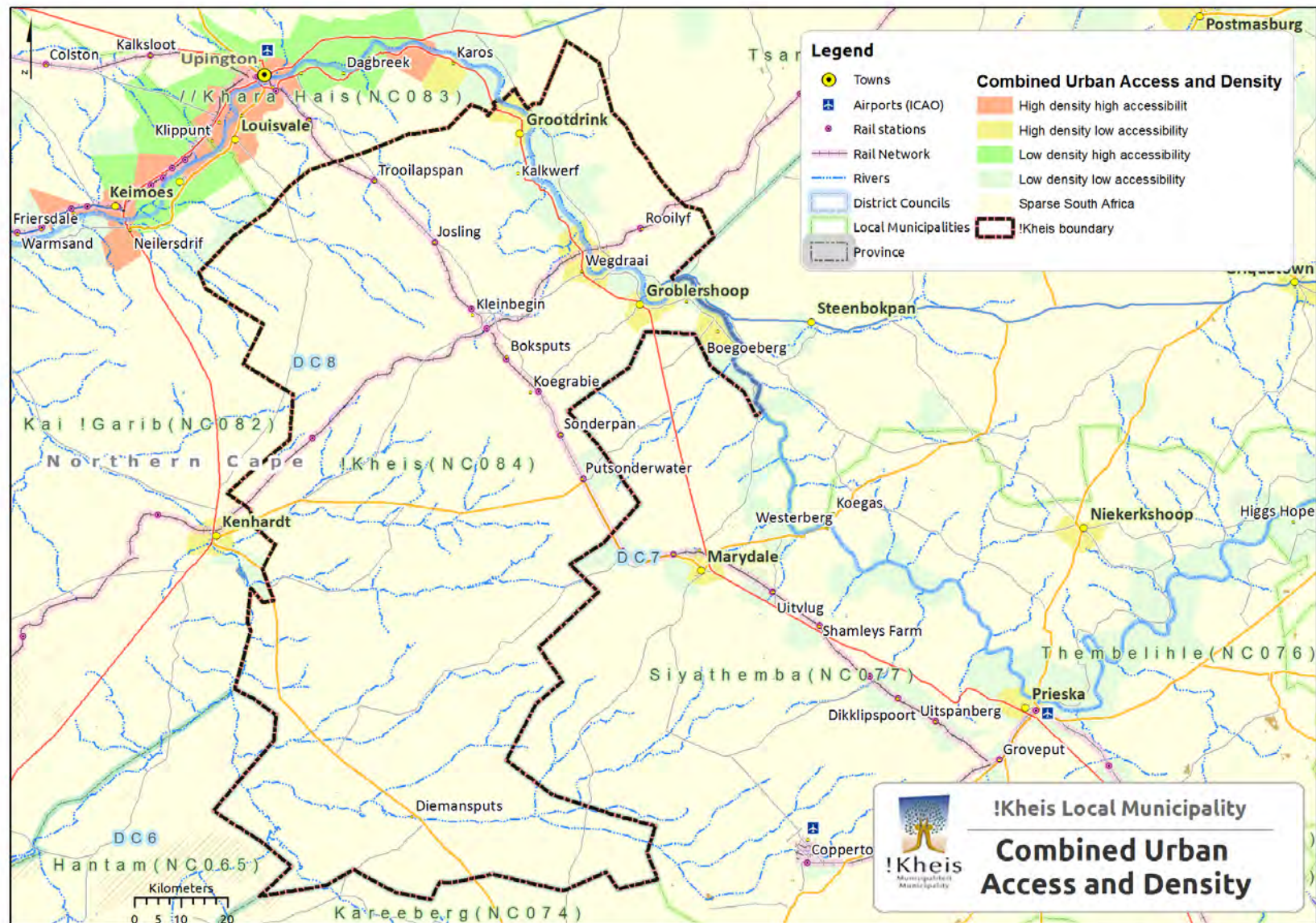
Map 51: Density of Dwellings (5km radius)



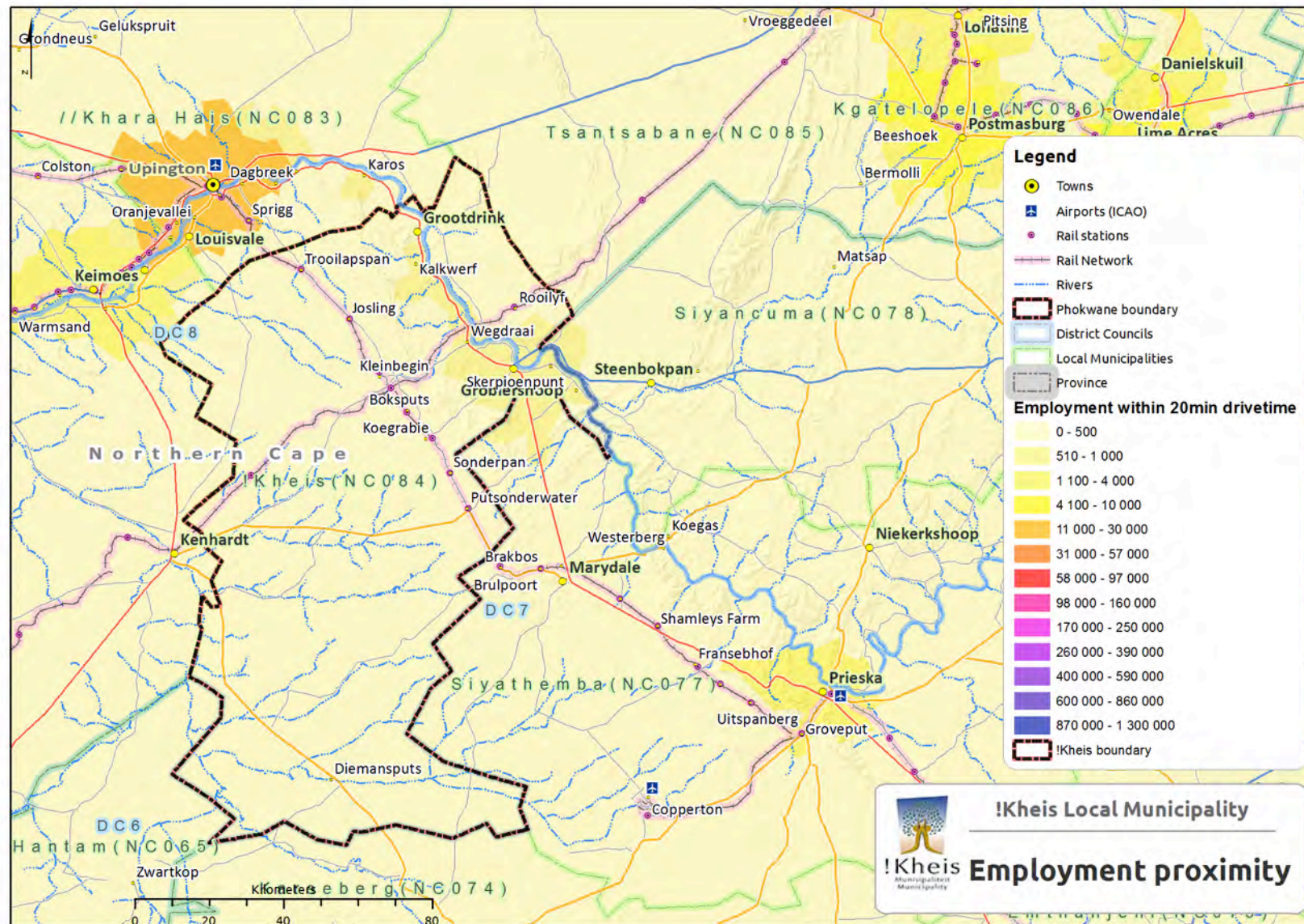
Map 52: Density of Dwellings (10km radius)



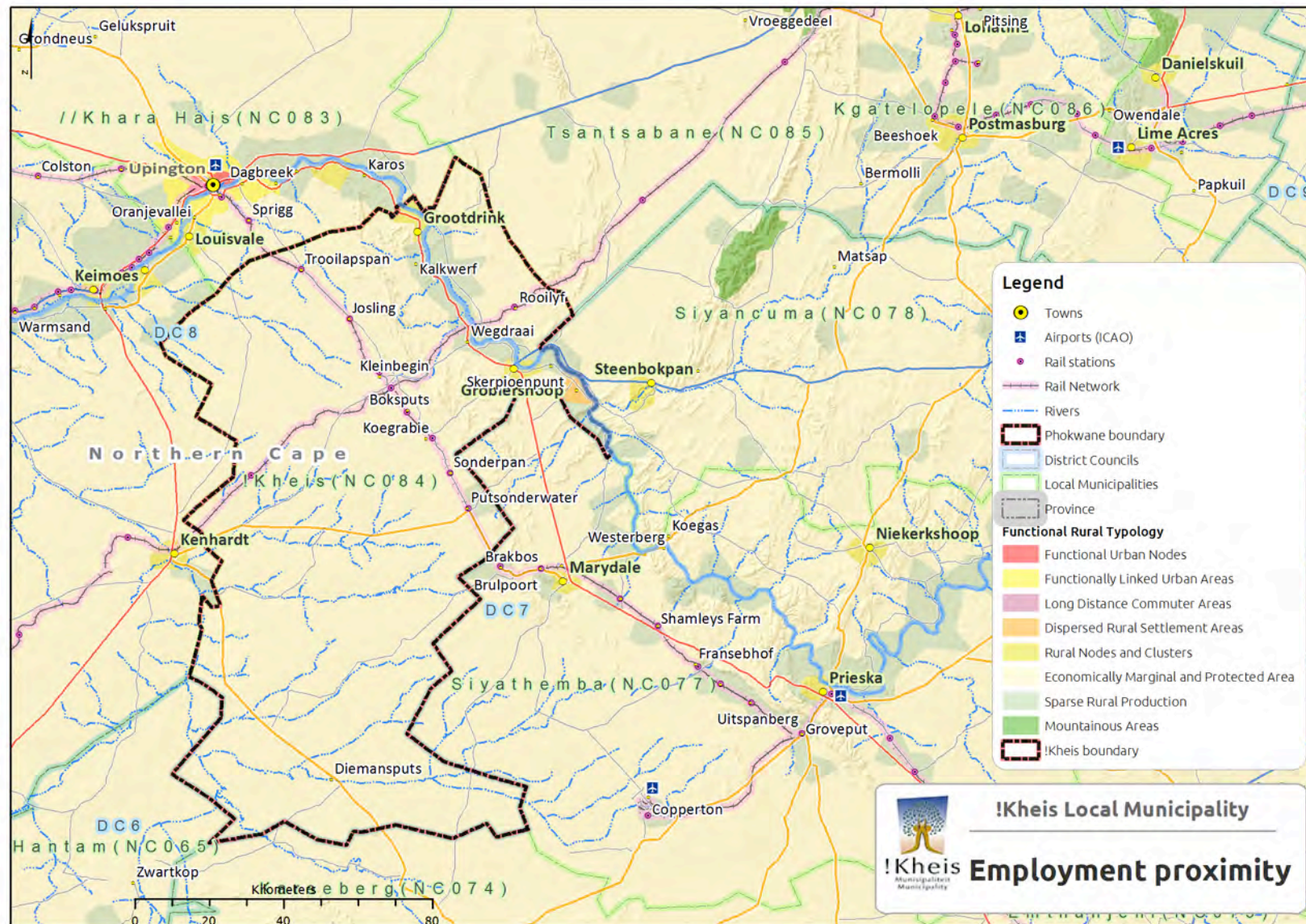
Map 53: Combined Urban Access and Density



Map 54: Employment Proximity in KLM



Map 55: Employment Proximity – Functional Rural Typology



3.5.3 Settlement Comparisons

Composition Characteristics of Households

The KLM only saw a 1,6% increase in the number of households between 2001 and 2011, with the majority of the households being located in !Kheis NU (30,3%) and Groblershoop (27,3%) (see **Tables 22 and 23**). In 34% of the households a female is the head of the household. The average household size is 3,9 individuals (see **Figure 9**). Groblershoop is the only settlement that has predominantly single-individual households (22%), similar to the ZFM DM (23%) and the Northern Cape Province (23%). The majority of the settlements have large percentages of households composed of two individuals, with !Kheis NU consisting of 30% of two-individual households (see **Table 24**).

Table 22: Total number of dwellings 1996, 2001 and 2011 in KLM

	Total Number of Dwellings			
Year	1996	2001	2011	Increase between 2001 and 2011 (%)
KLM	3202	4080	4146	1,6
ZFM DM	42276	48100	61097	27,0
NCP	218339	245086	301406	23,0

Table 23: Number of Households in KLM (2011)

	Total	Distribution of Households across KLM
Grootdrink	571	13,8
!Kheis NU	1257	30,3
Topline	302	7,3
Wegdraai	470	11,3
Groblershoop	1133	27,3
Boegoeberg	413	10,0
KLM	4145	100
ZFM DM	61097	NA
NDP	301406	NA

Figure 9: Gender of head of household in KLM per settlement (2011)

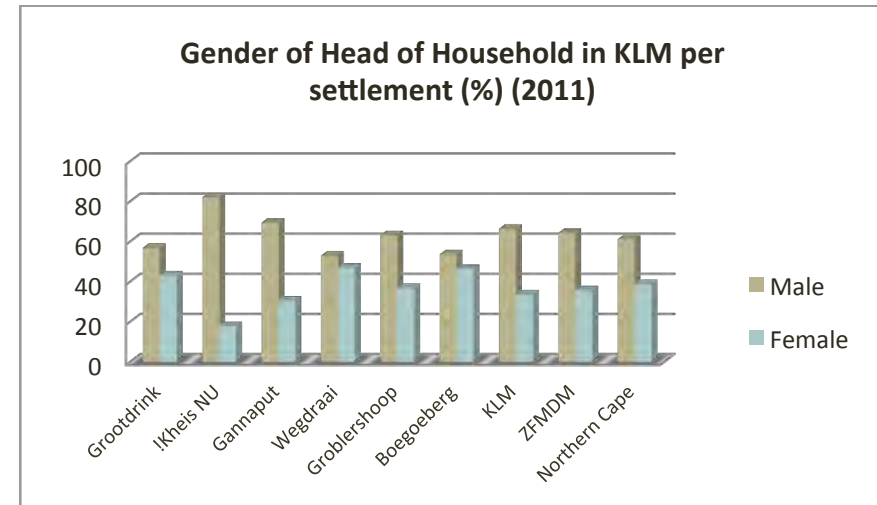


Table 24: Household size per settlement in KLM (2011)

	1	2	3	4	5	6	7	8	9	10+
Grootdrink	13	17	15	15	14	8	7	4	3	5
!Kheis NU	23	30	18	15	7	2	3	1	1	1
Topline	13	18	14	14	12	12	10	3	2	4
Wegdraai	11	15	16	16	13	10	7	4	3	5
Groblershoop	22	15	14	16	9	7	6	3	4	4
Boegoeberg	14	16	15	14	15	9	7	4	2	5
KLM	18	20	16	15	10	7	6	3	2	3
ZFM DM	23	21	15	15	10	6	4	2	2	2
NCP	23	20	16	15	10	6	4	3	2	2

Household Dwelling Type

The KLM saw an increase in the number of informal dwellings from 15.1% in 2001 to 31,8% in 2011. During this same period, traditional dwellings declined from 5,7% to 1%. It can hence be assumed that households leaving the more rural regions of KLM, where they make use of traditional dwellings, have moved into the towns where they move into informal dwellings. The number of formal households also decreased from 78,8% in 2001 to 66,3% in 2011 (see **Table 25**). !Kheis NU (82,5%), Groblershoop (60,2%) and Boegoeberg (70,3%) have the highest percentages of houses built on a single stand or farm, with Grootdrink (54,1%), Topline (51,6%) and Wegdraai having the largest percentages of informal dwellings. As the biggest settlement in the KLM, Groblershoop has the largest number of flats, which constitute 4,5% of the total number of dwellings (see **Tables 26 and 27**). Groblershoop (36,2%) has the highest percentage of dwellings consisting of only one room. The bulk of the dwellings in the settlements in the KLM consist of between two and four rooms (see **Table 28**). With regard to tenure status, 53,2% of dwellings in KLM are 'owned and fully paid off'. Dwellings in Grootdrink are predominantly (74,4%) "owned but not yet paid off" and 43,2% of the dwellings in !Kheis NU are "occupied rent free", which might indicate housing provided for farm workers (see **Table 29**).

Table 25: Dwelling Type in KLM 1996, 2001 and 2011

	Total Number of Dwellings			Formal Dwellings (%)			Informal Dwellings (%)			Traditional Dwellings (%)		
	1996	2001	2011	1996	2001	2011	1996	2001	2011	1996	2001	2011
KLM	3202	4080	4146	74,9	78,8	66,3	13,4	15,1	31,8	11,0	5,7	1,0
ZFM DM	42276	48100	61097	82,9	83,9	79,4	11,1	12,1	17,7	4,7	3,5	1,2
NCP	218339	245086	301406	77,8	81,0	82,4	12,7	11,3	13,1	7,6	7,0	3,2

Table 26: Household Dwelling Type per settlement in KLM (2011)

	House or brick/ concrete block structure on a separate stand or yard or on a farm	Traditional dwelling/hut /structure made of traditional materials	Flat or apartment in a block of flats	Cluster house in complex	Townhouse (semi-detached house in a complex)	Semi-detached house	House/flat/room in backyard	Informal dwelling (shack; in backyard)	Informal dwelling (shack; not in backyard; e.g. in an informal/squatter settlement or on a farm)	Room/ flatlet on a property or larger dwelling/servants quarters/granny flat	Caravan /tent	Other	Total
Grootdrink	252	0	1	0	0	0	3	0	309	0	0	7	571
!Kheis NU	1036	36	14	3	2	0	2	6	116	19	6	17	1256
Topline	136	2	2	1	0	0	4	0	157	0	2	0	304
Wegdraai	234	0	0	0	0	0	0	0	233	3	0	0	469
Groblershoop	681	3	51	0	0	0	11	8	372	2	0	3	1132
Boegoeberg	291	0	4	0	0	0	0	23	93	0	0	2	414
KLM	2629	42	72	4	2	0	19	37	1279	24	8	30	4146
ZFM DM	43752	748	2417	187	121	657	980	1363	9469	373	146	885	61097
NCP	229818	9505	6592	725	773	5040	3738	9558	30047	1626	661	3322	301405

Table 27: Household Dwelling Type per settlement (%) (2011)

	House or brick/concrete block structure on a separate stand or yard or on a farm	Traditional dwelling/hut/structure made of traditional materials	Flat or apartment in a block of flats	Cluster house in complex	Townhouse (semi-detached house in a complex)	Semi-detached house	House/flat/room in backyard	Informal dwelling (shack; in backyard)	Informal dwelling (shack; not in backyard; e.g. in an informal/settlement or on a farm)	Room/flatlet on a property or larger dwelling/servants quarters/granny flat	Caravan/tent	Other
Grootdrink	44,1	0,0	0,2	0,0	0,0	0,0	0,5	0,0	54,1	0,0	0,0	1,2
!Kheis NU	82,5	2,9	1,1	0,2	0,2	0,0	0,2	0,5	9,2	1,5	0,5	1,4
Topline	44,7	0,7	0,7	0,3	0,0	0,0	1,3	0,0	51,6	0,0	0,7	0,0
Wegdraai	49,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	49,7	0,6	0,0	0,0
Grobbershoop	60,2	0,3	4,5	0,0	0,0	0,0	1,0	0,7	32,9	0,2	0,0	0,3
Boegoeberg	70,3	0,0	1,0	0,0	0,0	0,0	0,0	5,6	22,5	0,0	0,0	0,5
KLM	63,4	1,0	1,7	0,1	0,0	0,0	0,5	0,9	30,8	0,6	0,2	0,7
ZFM DM	71,6	1,2	4,0	0,3	0,2	1,1	1,6	2,2	15,5	0,6	0,2	1,4
NCP	76,2	3,2	2,2	0,2	0,3	1,7	1,2	3,2	10,0	0,5	0,2	1,1

Table 28: Number of rooms per dwelling per settlements in KLM (2011)

	1	2	3	4	5	6 - 9	10 - 20
Grootdrink	5,3	21,9	19,8	34,9	12,1	6,1	0,2
!Kheis NU	14,6	24,0	16,6	14,3	8,3	21,0	1,1
Topline	6,6	12,5	20,7	37,8	8,9	12,8	0,3
Wegdraai	4,1	32,2	24,5	19,4	11,9	8,1	0,0
Grobbershoop	36,2	11,9	13,2	9,8	12,0	16,0	0,8
Boegoeberg	0,0	42,5	20,5	23,2	7,0	6,3	0,2
KLM	16,0	22,4	17,7	19,1	10,2	14,1	0,6
ZFM DM	11,9	17,3	15,9	20,3	13,1	19,6	1,8
NCP	9,0	14,5	16,7	22,4	13,4	21,9	2,0

Figure 10: Number of rooms per dwelling per settlement in the KLM (2011)

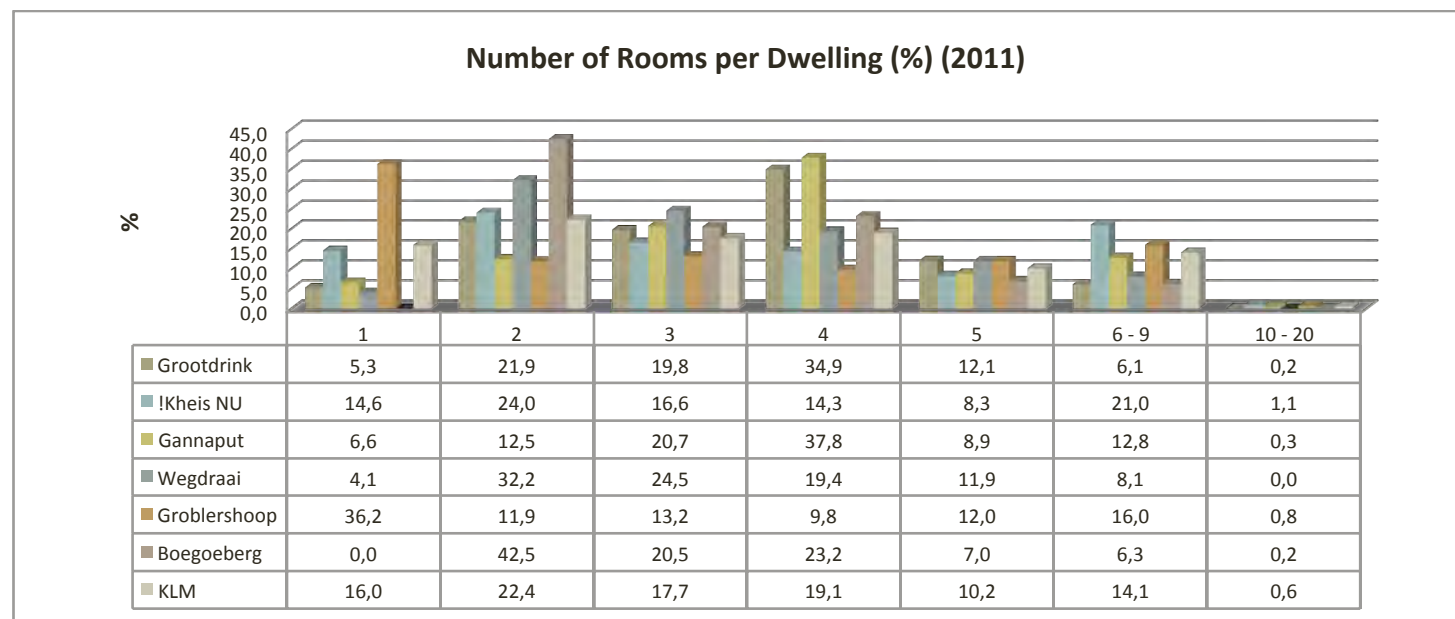


Table 29: Tenure status of dwellings per settlement in the KLM (2011)

	Rented	Owned but not yet paid off	Occupied rent-free	Owned and fully paid off	Other
Grootdrink	4,0	74,4	2,6	18,6	0,4
!Kheis NU	21,7	7,6	43,2	24,3	3,3
Topline	6,3	0,0	13,5	79,3	0,7
Wegdraai	8,1	2,3	2,1	87,4	0,0
Groblershoop	22,4	3,5	4,1	68,9	1,1
Boegoeberg	7,7	1,9	1,7	87,4	1,2
KLM	15,4	14,0	15,9	53,2	1,5
ZFM DM	24,2	8,6	23,0	40,4	3,7
NCP	18,8	8,2	20,9	46,9	5,3

Access to Services

Access to electricity in the KLM increased between 2001 and 2011, with the use of electricity for lighting increasing from 58,9% in 2001 to 64% in 2011. However, 30,4% of households still make use of candles for lighting. Groblershoop (65,7%) has the lowest percentage of households using electricity for lighting, while !Kheis NU (43,3%) has the highest percentage of households using candles for lighting.

Table 30: Use of electricity for lighting in the KLM 1996, 2001 and 2011 (%)

	Use of Electricity for Lighting		
	1996	2001	2011
KLM	58,2	58,9	64,0
ZFM DM	64,6	71,7	86,6
NCP	64,2	72,4	85,4

Table 31: Use of electricity for lighting per settlement in the KLM (%) (2011)

	Electri-city	Gas	Paraffin	Candles (not a valid option)	Solar	None
Grootdrink	445	0	10	112	3	3
!Kheis NU	570	4	22	543	102	14
Topline	245	1	1	51	3	2
Wegdraai	346	0	18	105	0	0
Groblershoop	743	2	26	350	4	6
Boegoeberg	306	1	3	98	1	5
KLM	2655	9	81	1259	113	30
ZFM DM	52910	114	526	6420	883	243
NCP	257255	667	5112	33995	3383	994

Table 32: Use of electricity for lighting per settlement in the KLM (%) (2011)

	Electri-city	Gas	Paraffin	Candles (not a valid option)	Solar	None
Grootdrink	77,7	0,0	1,7	19,5	0,5	0,5
!Kheis NU	45,4	0,3	1,8	43,3	8,1	1,1
Topline	80,9	0,3	0,3	16,8	1,0	0,7
Wegdraai	73,8	0,0	3,8	22,4	0,0	0,0
Groblershoop	65,7	0,2	2,3	30,9	0,4	0,5
Boegoeberg	73,9	0,2	0,7	23,7	0,2	1,2
KLM	64,0	0,2	2,0	30,4	2,7	0,7
ZFM DM	86,6	0,2	0,9	10,5	1,4	0,4
Northern Cape	85,4	0,2	1,7	11,3	1,1	0,3

Access to piped water inside dwelling/yard rose slightly between 2001 and 2011 from 70,4% to 74,2%. However, 'no access to piped water' also rose during this period, up from 10,7% to 11,8%. The provision of piped water in KLM is generally of a lower standard than that of the ZFM DM, and the Northern Cape Province as a whole, with 67,5% of the total population accessing water through a tap in their yards and only 16,7% directly in their dwelling (see **Tables 35-37**).

With regard to access to toilet facilities, the KLM is not performing well in comparison to the ZFM DM and the Northern Cape Province (see **Table 38**). However, 'no access' to toilet facilities decreased from 33,2% in 2001 to 24,7% in 2011. !Kheis NU (43,5%) has the highest percentage of households with no access to toilet facilities, while in Grootdrink and Wegdraai 23,8% and 34% of the households make use of pit toilets without ventilation (see **Table 39 and 40**).

The number of households with no access to refuse removal services increased between 2001 and 2011 from 2,4% to 15,8%. The !Kheis NU (78,6%) settlement has the highest percentage of households who have their own refuse dumps, while Wegdraai (26,7%) and Boegoeberg (20,3%) had the highest percentages of households with no access to rubbish disposal (see **Tables 41-44**).

3.5.4 Projected Housing and Service Needs

Due to changes in the demarcation of sub-places between the 2001 and 2011 Censuses, it is not possible to look at changes in housing and service trends between 2001 and 2011. Below is an approximation of the exponential growth of the KLM settlements based on the aggregation of reasonable 'urban areas' of the 2001-statistics. It is evident from the growth rate between 2001 and 2011 that rural !Kheis is depopulating, with its' inhabitants moving mainly towards Groblershoop, Wegdraai and Grootdrink, most probably in order to access services and in search of job opportunities.

Table 33: KLM Population Projections

	2001	2011	Exponential Change Rate 2001 to 2011	2020	% Change 2011 and 2020	2030	% Change 2011 and 2030
Grootdrink	2180	2645	0,01933	3028	14,5	3674	38,9
!Kheis NU	6434	3611	-0,0578	2409	-33,3	1352	-62,6
Topline	1166	1398	0,01815	1587	13,5	1903	36,1
Wegdraai	1722	2189	0,024	2589	18,3	3292	50,4
Groblershoop	3471	4938	0,03525	6320	28,0	8991	82,1
Boegoeberg	1587	1857	0,01571	2073	11,6	2426	30,6
KLM	16560	16638	0,00047	16693	0,3	16772	0,8
ZFM DM	202160	236783	0,0158	264474	11,7	309743	30,8
NCP	991919	1145861	0,01443	1267652	10,6	1464430	27,8

Table 34: Housing and Service Needs

	No Piped Water	No Toilet Facilities	Informal Dwelling
Grootdrink	135	120	309
!Kheis NU	180	546	116
Topline	7	43	157
Wegdraai	31	81	233
Groblershoop	120	161	380
Boegoeberg	14	75	116
KLM	488	1026	1316

In general, !Kheis NU has the lowest level of services, but with regard to the more urban settlements, Groblershoop and Grootdrink have the highest need in absolute numbers (see **Table 34** above). Combining this with the growth rates discussed in **sections 3.4.4** and **3.5.2** it can be safely assumed that Groblershoop, Grootdrink and Wegdraai will be experiencing the highest demand for additional services and the formalisation of informal settlements.

Table 35: Access to piped water in the KLM: 1996, 2001 and 2011

	Total Number of Dwellings			Piped water inside dwelling/yard			Piped water on communal stand			No access to Piped water		
Date	1996	2001	2011	1996	2001	2011	1996	2001	2011	1996	2001	2011
KLM	3202	4080	4146	73,3	70,4	74,2	11,2	18,9	14,0	15,3	10,7	11,8
ZFM DM	42276	48100	61097	81,9	79,4	86,2	5,1	15,5	9,5	12,6	5,1	4,3
NCP	218339	245086	301406	73,4	72,0	78,0	15,2	22,0	19,3	11,1	6,1	2,6

Table 36: Access to Piped Water per settlement in the KLM (2011)

	Piped (tap) water inside dwelling/institution	Piped (tap) water inside yard	Piped (tap) water on community stand: distance less than 200m from dwelling/institution	Piped (tap) water on community stand: distance between 200m and 500m from dwelling/institution	Piped (tap) water on community stand: distance between 500m and 1000m (1km) from dwelling /institution	Piped (tap) water on community stand: distance greater than 1000m (1km) from dwelling/institution	No access to piped (tap) water
Grootdrink	58	318	61	0	0	0	135
!Kheis NU	368	514	122	47	6	18	180
Topline	16	259	16	4	0	1	7
Wegdraai	19	372	46	0	0	0	31
Groblershoop	218	540	156	85	11	0	120
Boegoeberg	12	380	6	1	0	0	14
KLM	691	2385	407	138	17	19	488
ZFM DM	29613	23039	3880	869	812	232	2652
NCP	137938	97256	38442	12453	4933	2434	7950

Table 37: Access to Piped Water per settlement in the KLM (%) (2011)

	Piped (tap) water inside dwelling/institution	Piped (tap) water inside yard	Piped (tap) water on community stand: distance less than 200m from dwelling/institution	Piped (tap) water on community stand: distance between 200m and 500m from dwelling/institution	Piped (tap) water on community stand: distance between 500m and 1000m (1km) from dwelling /institution	Piped (tap) water on community stand: distance greater than 1000m (1km) from dwelling/institution	No access to piped (tap) water
Grootdrink	10,1	55,6	10,7	0,0	0,0	0,0	23,6
!Kheis NU	29,3	41,0	9,7	3,7	0,5	1,4	14,3
Topline	5,3	85,5	5,3	1,3	0,0	0,3	2,3
Wegdraai	4,1	79,5	9,8	0,0	0,0	0,0	6,6

	Piped (tap) water inside dwelling/institution	Piped (tap) water inside yard	Piped (tap) water on community stand: distance less than 200m from dwelling/institution	Piped (tap) water on community stand: distance between 200m and 500m from dwelling/institution	Piped (tap) water on community stand: distance between 500m and 1000m (1km) from dwelling /institution	Piped (tap) water on community stand: distance greater than 1000m (1km) from dwelling/institution	No access to piped (tap) water
Grobbershoop	19,3	47,8	13,8	7,5	1,0	0,0	10,6
Boegoeberg	2,9	92,0	1,5	0,2	0,0	0,0	3,4
KLM	16,7	57,5	9,8	3,3	0,4	0,5	11,8
ZFM DM	48,5	37,7	6,4	1,4	1,3	0,4	4,3
NCP	45,8	32,3	12,8	4,1	1,6	0,8	2,6

Table 38: Access to Toilet facilities in the KLM: 1996, 2001 and 2011

	Flush/Chemical Toilets			Pit Latrines			Bucket Toilets			None		
Date	1996	2001	2011	1996	2001	2011	1996	2001	2011	1996	2001	2011
KLM	45,2	48,1	49,0	17,3	18,1	20,8	8,1	0,5	2,0	29,2	33,2	24,7
ZFM DM	62,5	69,4	72,6	13,4	10,7	10,6	10,6	6,7	5,5	13,2	13,2	10,3
NCP	52,6	58,6	66,5	20,0	18,4	19,9	15,6	10,0	4,0	11,6	13,1	8,0

Table 39: Access to Toilet facilities per settlement in the KLM (2011)

	None	Flush toilet (connected to sewerage system)	Flush toilet (with septic tank)	Chemical toilet	Pit toilet with ventilation (VIP)	Pit toilet without ventilation	Bucket toilet	Other
Grootdrink	120	35	149	0	128	136	1	2
!Kheis NU	546	276	224	8	82	55	22	42
Topline	43	46	159	17	0	2	0	37
Wegdraai	81	62	26	1	87	159	53	0
Grobbershoop	161	504	240	0	158	7	0	62
Boegoeberg	75	198	85	1	46	3	5	0
KLM	1026	1121	883	27	501	363	82	144
ZFM DM	6291	39034	5058	246	3094	3412	3359	603
NCP	24218	181081	17744	1748	27563	32376	11950	4726

Table 40: Access to Toilet facilities per settlement in the KLM (%) (2011)

	None	Flush toilet (connected to sewerage system)	Flush toilet (with septic tank)	Chemical toilet	Pit toilet with ventilation (VIP)	Pit toilet without ventilation	Bucket toilet	Other
Grootdrink	21,0	6,1	26,0	0,0	22,4	23,8	0,2	0,3
!Kheis NU	43,5	22,0	17,8	0,6	6,5	4,4	1,8	3,3
Topline	14,2	15,2	52,5	5,6	0,0	0,7	0,0	12,2
Wegdraai	17,3	13,2	5,6	0,2	18,6	34,0	11,3	0,0
Grobiershoop	14,2	44,6	21,2	0,0	14,0	0,6	0,0	5,5
Boegoeberg	18,2	47,9	20,6	0,2	11,1	0,7	1,2	0,0
KLM	24,8	27,0	21,3	0,7	12,1	8,8	2,0	3,5
ZFM DM	10,3	63,9	8,3	0,4	5,1	5,6	5,5	1,0
NCP	8,0	60,1	5,9	0,6	9,1	10,7	4,0	1,6

Table 41: Refuse removal in the KLM: 1996, 2001 and 2011

	Removed by local authority/private company			Communal/own refuse dump			No rubbish disposal		
Date	1996	2001	2011	1996	2001	2011	1996	2001	2011
KLM	47,7	43,3	54,5	49,1	54,3	26,9	1,6	2,4	15,8
ZFM DM	62,4	65,0	72,9	32,6	32,9	19,9	3,0	2,1	5,8
NCP	61,3	62,6	66,3	31,8	32,6	26,3	5,4	4,8	5,4

Table 42: Refuse removal per settlement in the KLM (2011)

	Removed by local authority/private company at least once a week	Removed by local authority/private company less often	Communal refuse dump	Own refuse dump	No rubbish disposal	Other
Grootdrink	447	0	17	0	107	0
!Kheis NU	19	29	27	986	133	62
Topline	261	7	0	6	29	0
Wegdraai	295	8	0	34	125	7
Grobiershoop	882	6	3	16	177	47
Boegoeberg	303	0	0	26	84	1

	Removed by local authority/private company at least once a week	Removed by local authority/private company less often	Communal refuse dump	Own refuse dump	No rubbish disposal	Other
KLM	2208	50	47	1069	655	117
ZFM DM	42951	1576	1252	10880	3533	905
NCP	193020	6694	4970	74401	16357	5964

Table 43: Refuse removal per settlement in KLM (%) (2011)

	Removed by local authority/private company at least once a week	Removed by local authority/private company less often	Communal refuse dump	Own refuse dump	No rubbish disposal	Other
Grootdrink	78,1	0,0	3,0	0,0	18,7	0,0
!Kheis NU	1,5	2,3	2,2	78,6	10,6	4,9
Topline	86,1	2,3	0,0	2,0	9,6	0,0
Wegdraai	63,0	1,7	0,0	7,3	26,7	1,5
Groblershoop	78,1	0,5	0,3	1,4	15,7	4,2
Boegoeberg	73,4	0,0	0,0	6,3	20,3	0,2
KLM	53,3	1,2	1,1	25,8	15,8	2,8
ZFM DM	70,3	2,6	2,0	17,8	5,8	1,5
NCP	64,0	2,2	1,6	24,7	5,4	2,0

3.5.5 Main Settlement Location and Statistics

The following section provides an overview of the location, layout and vital statistics of each main settlement in the KLM. In order to give an indication of the direction of settlement growth, Google Earth Time-series Maps were used

(with 2004 or 2006 as base year, depending on availability), and the location of new developments were mapped.

Figure 11: Grootdrink Settlement Summary

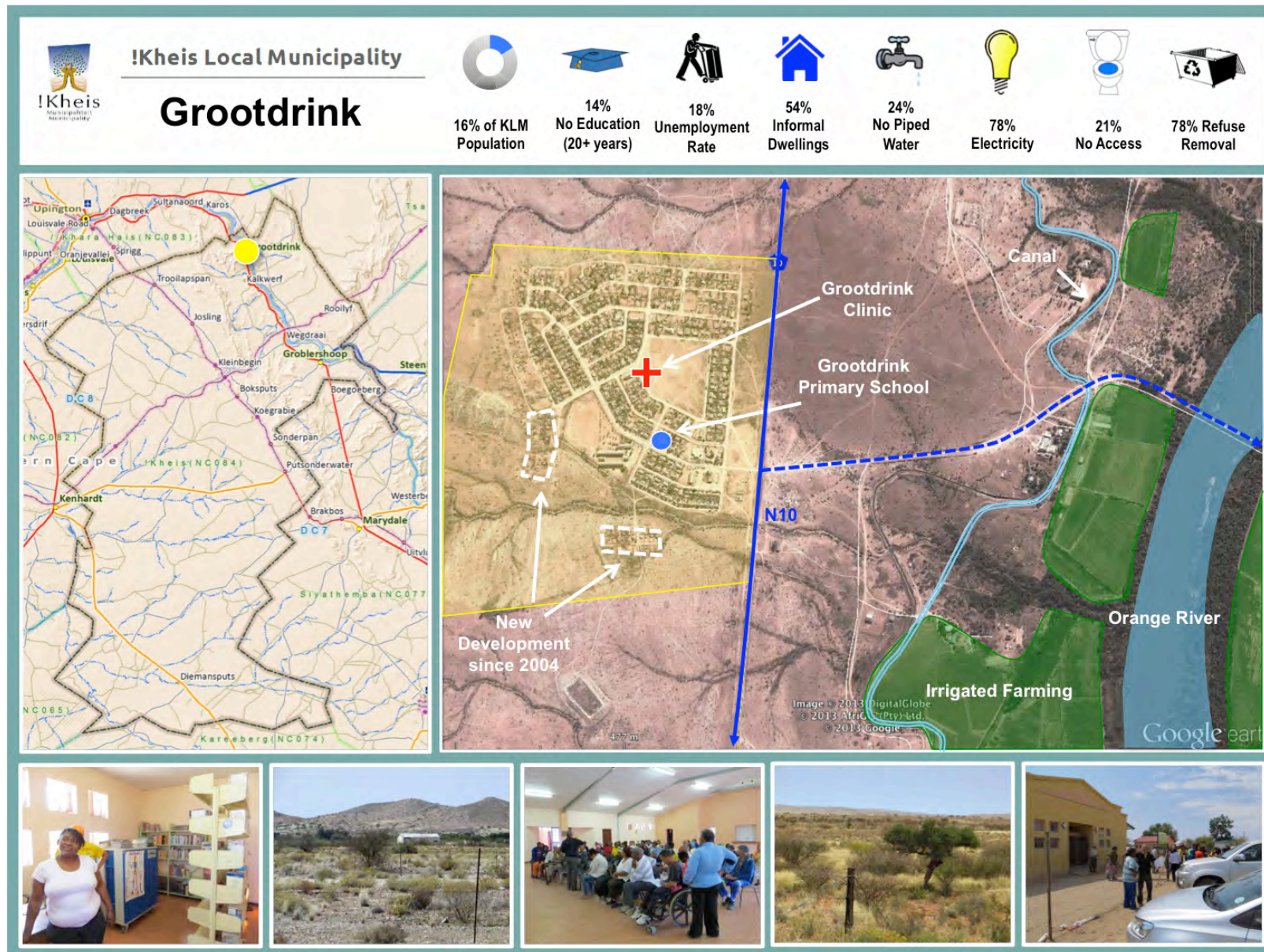


Figure 12: Topline Settlement Summary

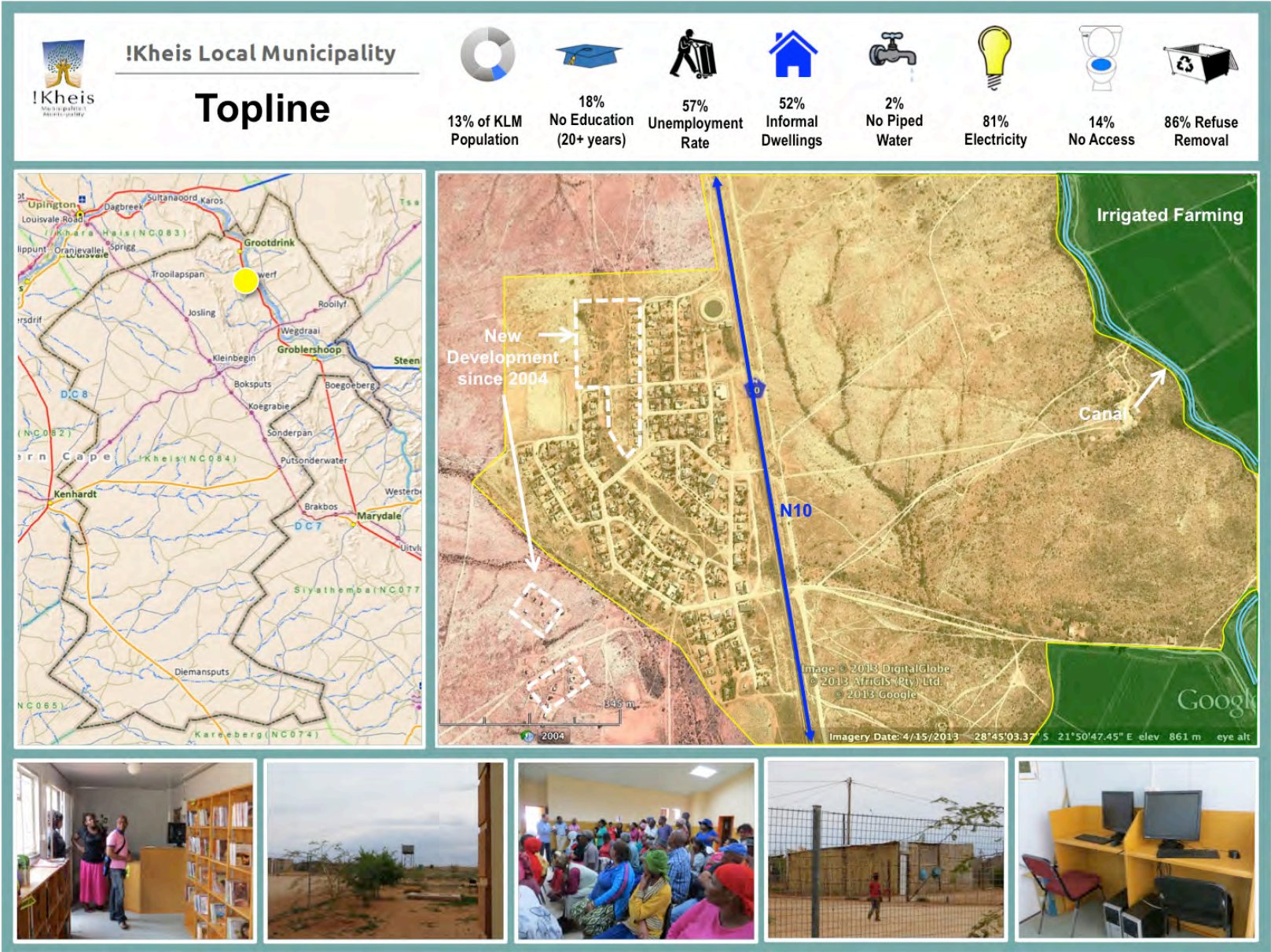


Figure 13: Wegdraai Settlement Summary

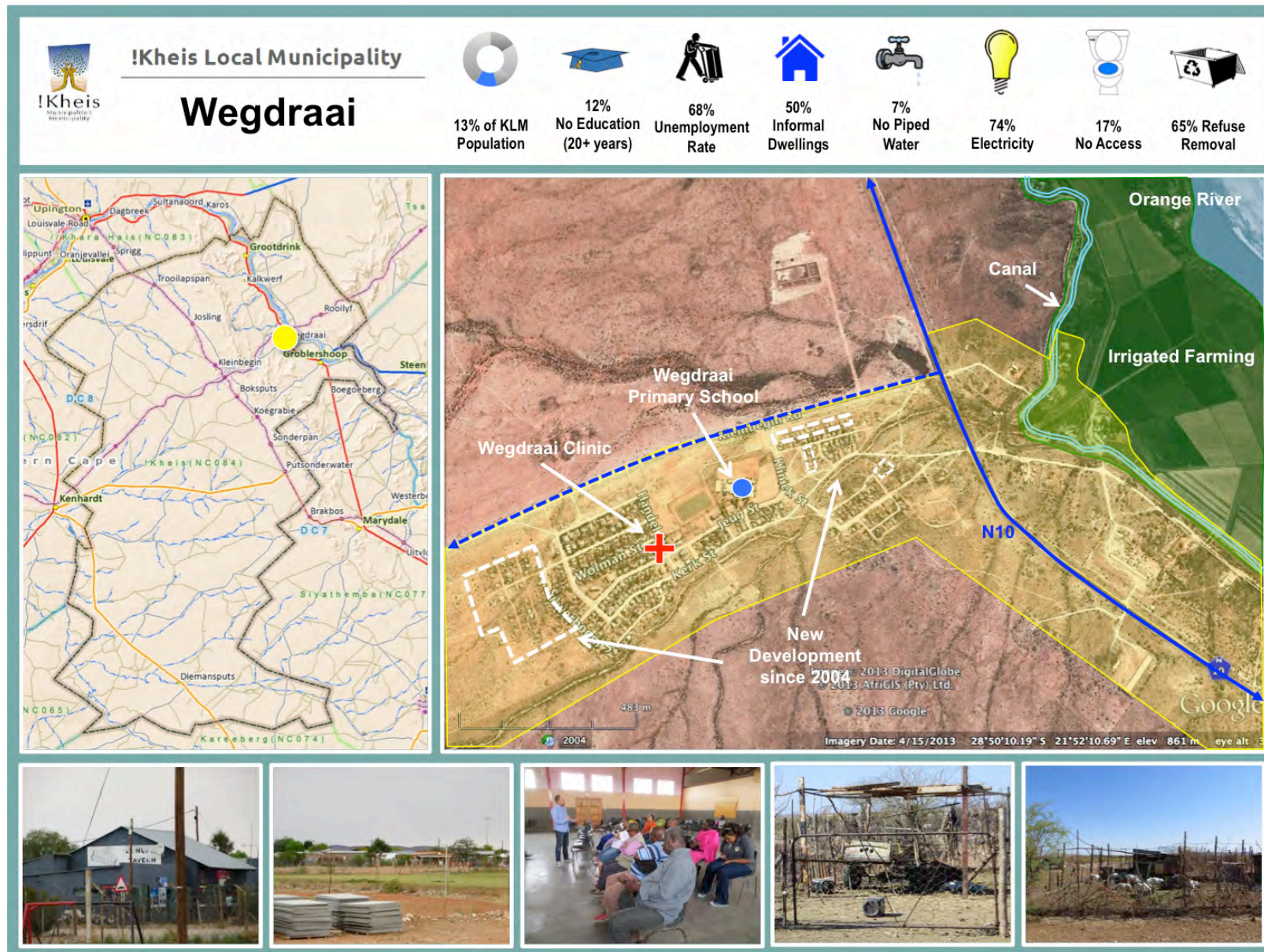


Figure 14: Groblershoop Settlement Summary

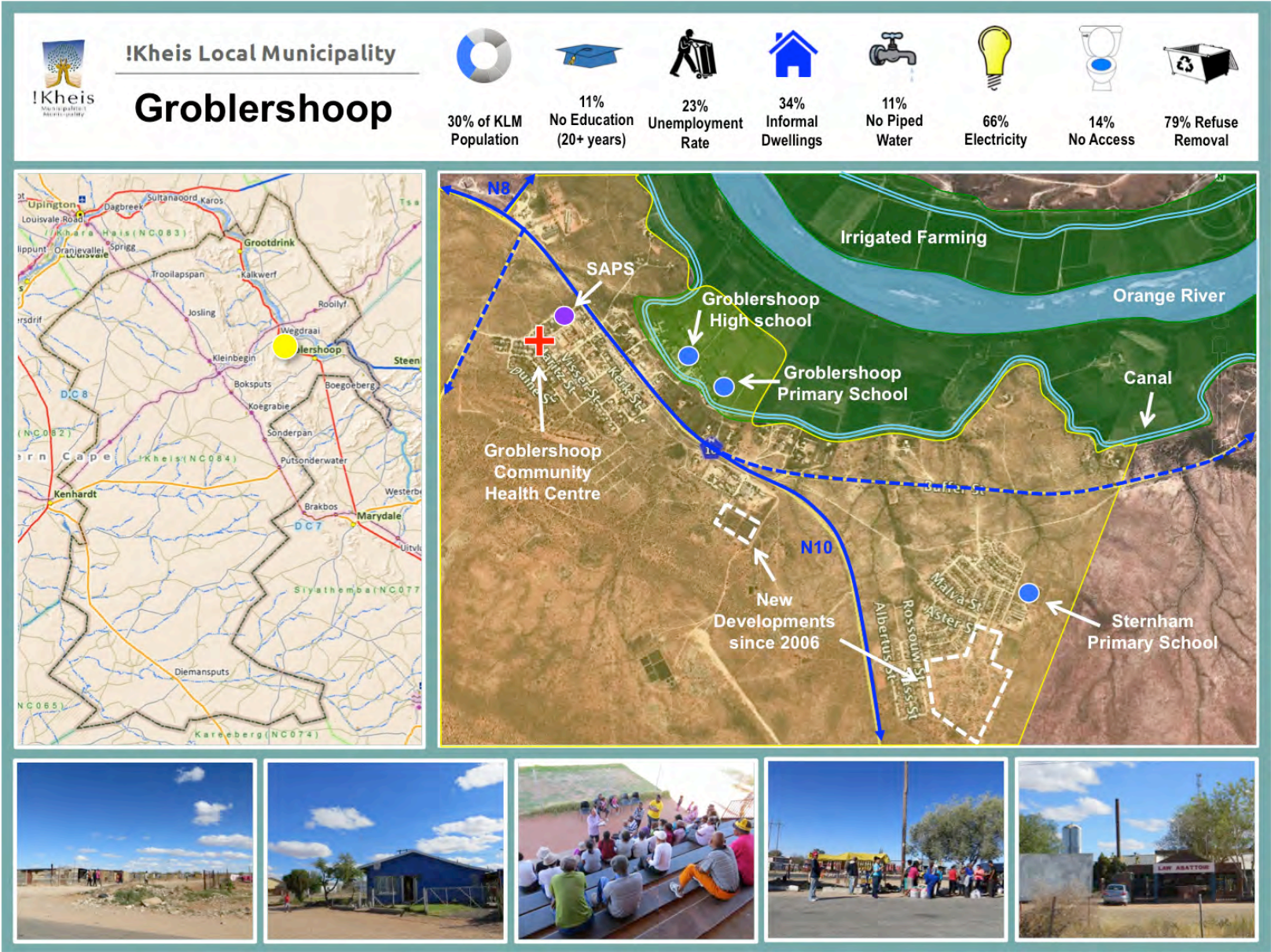
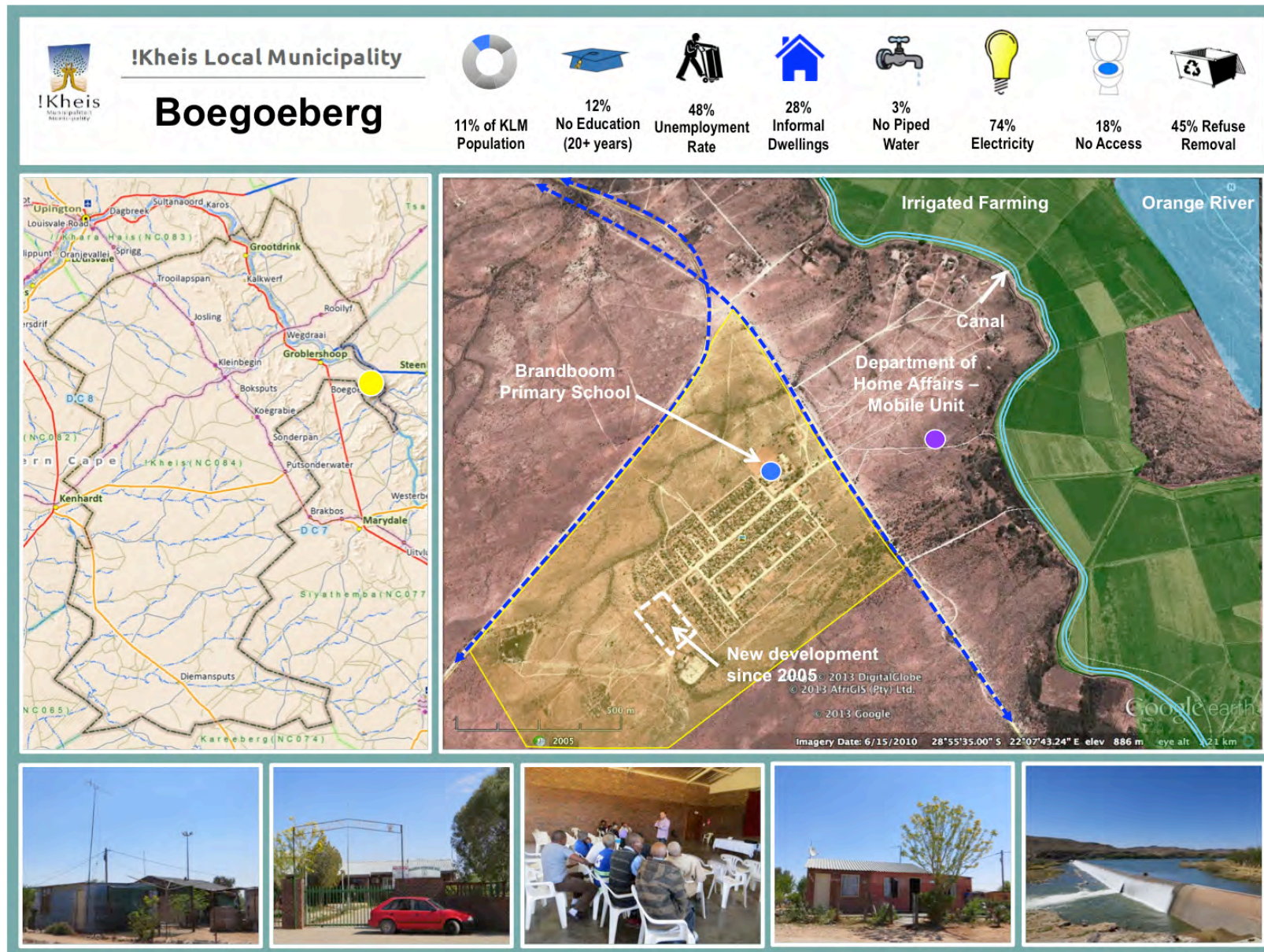


Figure 15: Boegoeberg Settlement Summary



3.6. PHYSICAL INFRASTRUCTURE

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3.6.2	Major Movement Systems	p. 126
3.6.3	Solid Waste Management	p. 128
3.6.4	Water Infrastructure	p. 128
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3.6.6	Energy	p. 129
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3.6.1 Overview of Physical Infrastructure

The road network in the KLM is very sparse. Two main highways (the N10 and N8) run through the KLM, and are in relatively good condition, but the secondary road network is much less developed. The more rurally-based members of the population are dependent on dirt roads of varying quality.

Two railway lines run through KLM, one connecting Upington with De Aar, and the other the Sishen/Salhanha line. Small settlements developed around stations, but these settlements have very low population levels and little economic activity.

With regard to solid waste management, there is no clear indication of systems that are in place to ensure waste prevention. According to the KLM IDP 2012-2017, the number of sewerage plants and industrial water purification plants maintained is unknown, as is the level of compliance with waste management regulations. The ZFM DM is currently in the process of developing an Integrated Waste Management Plan, which will hopefully address these issues.

The majority of the surface water is used by the agricultural sector for irrigation purposes and as drinking water for livestock. The towns and settlements along the Orange River also utilise this source extensively. Groundwater is also used extensively for the provision of water, and it is crucial that extraction does not exceed the recharge rate.

The sparseness of the population distribution in the KLM makes electricity provision problematic. Solar energy is as yet barely exploited for local communities.

Social facilities are very limited in the KLM, due to its low population levels, with only one High School in the area and no hospital.

Opportunities:

- Good primary road system;
- Opportunity to generate and utilise solar energy more widely; and
- Square Kilometre Array Radio Telescope in the south of KLM.

Challenges:

- Limited secondary road network is an impediment to tourism development;
- Lack of comprehensive and monitored solid waste management and waste water treatment;
- Uncontrolled, illegal dumping;
- Low quality and unreliability of drinking water; and
- Limited education and health facilities.



Bridge over the Orange River



Telephone Lines



Primary School



Library



Canal System



N10 Signage

3.6.2 Major Movement Systems

Major Road Systems

The N10 highway runs through the KLM along the Orange River connecting Upington to the north of the KLM, Britstown to its south, and passing along all the main settlements in the KLM. In Groblershoop, the N8 connects the KLM with Kimberley to the east. The R383 links Kenhardt to the west of the KLM to the N10 in east. The main roads are in good condition and have recently been upgraded. However, the secondary road network is much less developed and the more rural populations are dependent on dirt roads of varying quality. The bad state of these secondary roads can be seen as an impediment to tourism development in the area (see **Map 56**).

Major Rail Systems

The Shishen/Saldanha railway line (built solely to transport iron ore from Shishen to Saldanha) runs in a southwesternly direction through the KLM, crossing the N10 highway and the Orange/Gariep River at Wegdraai to the north of Groblershoop. Stations and siding along the line include Rooilyf, Oorskruis and Rugseer.

A second railway line, linking Upington with De Aar, crosses the Shishen/Saldanha railway line at Oorkruis. Other stations and sidings along the line include Sprigg, Trooilapspan, Josling, Kleinbegin, Bokspuits, Koegrabie, Sonderpan and Putsonderwater.

Airports

The KLM has no airport. However, the Upington International Airport is located just outside of the northern border of the municipality.

Non-motorised and Public Transport

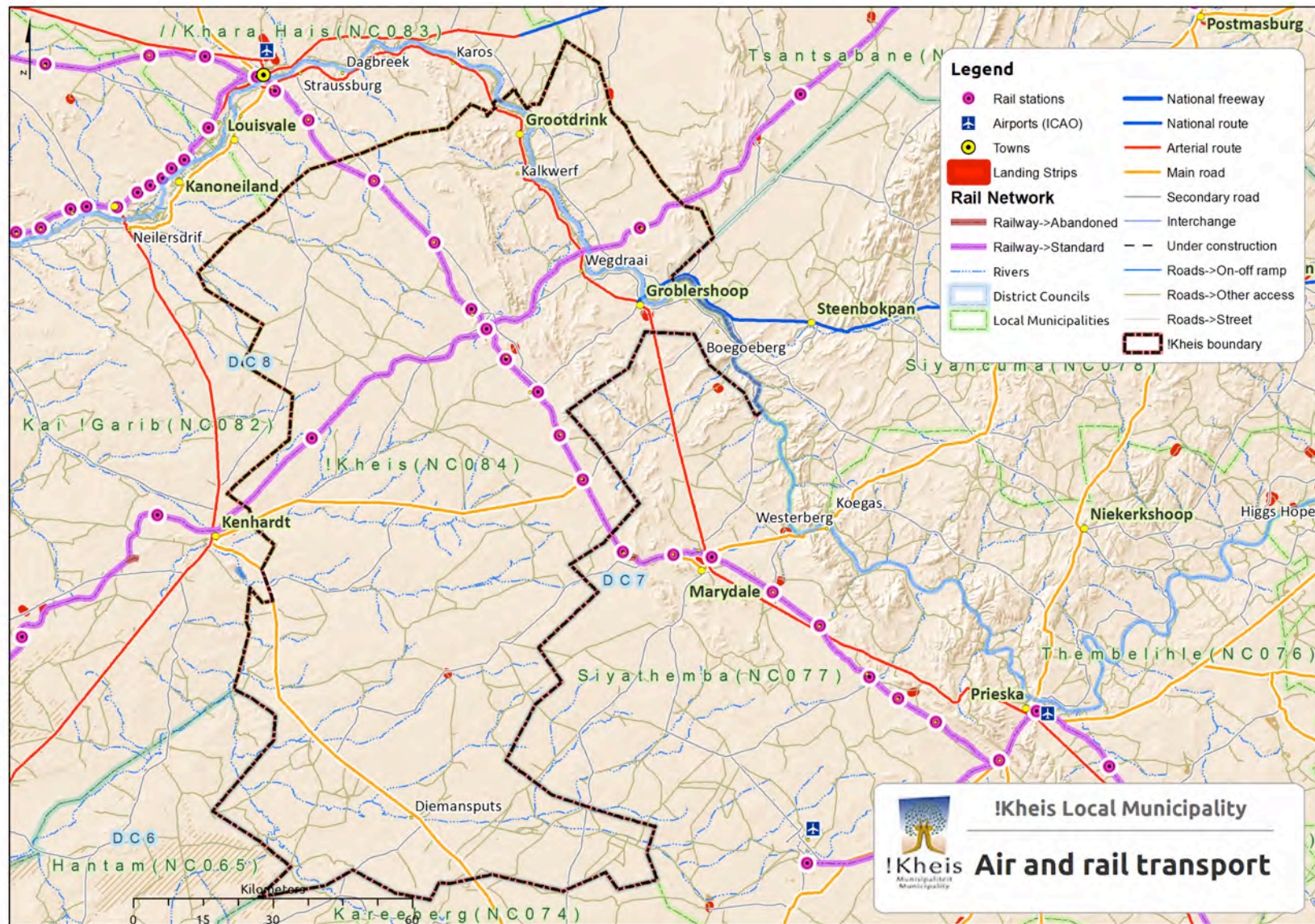
The 2011-statistics for transport are not yet available. According to the 2001-census date, 32,9% of the populations' main mode of transport was by foot, with only 3% being by car and 2,4% being by bus.

From **Table 44** below, it is clear that access to a private motorcar is very low, with only 28,3% of KLM households owning a private motor vehicle.

Table 44: Households that own a motorcar (2011)

	Household that owns a motorcar (%)
Grootdrink	12,3
!Kheis NU	28,0
Topline	16,4
Wegdraai	14,7
Groblershoop	28,4
Boegoeberg	11,1
KLM	21,9
ZFM DM	29,1
NCP	28,3

Map 56: Air and Rail Transport



3.6.3 Solid Waste Management

There is no clear indication of the systems that are in place or of efforts that are being made to ensure waste prevention and/or avoidance. Refuse removal in KLM is provided by the municipality and by private contractors. The following objectives have been set by KLM in order to improve waste management in the municipality: (1) Upgrading of existing landfill sites; (2) Provision of new landfill sites; (3) Upgrading and improvement of current waste management services rendered by the municipality; (4) Initiate recycling projects; and (5) Extending services in un-serviced areas (KLM IDP 2012-2017). A major constraint to these objectives is the lack of financial and human resources. However, the ZFM DM is in the process of developing an Integrated Waste Management Plan and it is hoped that this plan will assist the KLM with waste management.

There are also instances of uncontrolled illegal dumping in KLM, which could be a potential health hazard and may have a negative impact on tourism in the area.

3.6.4 Water Infrastructure

The majority of the surface water is used by the agricultural sector for irrigation purposes and as drinking water for livestock (see **Map 57**). The towns and settlements along the Orange/Gariep River also utilise this source extensively. Water is used to a limited extent for sanitation, with only 48,3% of the households having access to a flush toilet. Groundwater is also used extensively for the provision of water, and it is crucial that extraction does not exceed the recharge rate. The quality of the water in the area is generally not good being very brackish and the supply is somewhat unreliable.

The IDP (2012-2017:44-47) identifies the following projects linked to water provision and infrastructure:

- Upgrading of Wegdraai and Grootdrink Bulk Water Supplies;

- Upgrading of the high-lift storage tank in Gariep;
- Upgrading of the canal from Boegoebergdam to Matjies river;
- Replacement of the Boegoeberg raw water pipeline;
- Water connections to cemeteries for the entire KLM;
- Development of an Operations and Management Master plan;
- Bulk water provision for Opwag;
- Purchase and installation of domestic conventional and pre-paid water metres KLM; and
- Servicing of 1500 new plots with water connections in Gariep, Grootdrink, Topline, Wegdraai, Sternham and Boegoeberg.

From the above list it is obvious that the KLM is addressing the limited access to piped water in the area. It is, however, crucial to manage water resources carefully.

3.6.5 Waste Water Treatment

According to the KLM IDP (2012-2017:65), the number of sewerage plants and industrial water purification plants maintained annually is unknown, as is the level of compliance with waste management regulations. This clearly identifies the urgent need to gather baseline information for planning purposes.

The KLM IDP (2012-2017:50) identifies the following projects linked to sanitation/sewerage:

- Upgrading of Pit toilets in Wedgraai and Grootdrink and converting these into a sewage network with a pump station;
- Upgrading of oxidation ponds in Brandboom;
- Sewerage network system with pump station for Sternham and Duineveldt;
- Sewerage network system for Wegdraai;
- !Kheis UDS toilets;

- Development of a new refuse landfill site in Groblershoop (the IWMP proposes the development of One Regional Landfill Site);
- Development of new refuse transfer stations in Wegdraai, Topline, Boegoeberg and Grootdrink (the IWMP proposes that existing illegal sites be either rehabilitated or changed into waste transfer stations); and
- Purchase of two additional sewage removal trucks.

3.6.6 Energy

Energy in the KLM is provided by ESKOM Bulk Electricity Services (see **Map 58**). However, the small and sparsely populated areas of KLM make effective distribution of electricity very difficult. With 34,8% of the KLM households making use of wood for cooking, especially in the more rural areas, there is a danger of overexploitation of wood resources, especially the Camel Thorn trees in the area.

Due to the dry climate and the high levels of solar radiation in the KLM, there is the potential to utilise solar energy more widely, especially in the more remote areas of KLM. Two solar energy projects are currently being established in Bokpoort and Kleinbegin (see **Map 59**).

3.6.7 Telecommunications

Personal Communication

Access to telecommunications in KLM is relatively limited, with only 68,1% households owning a cellphone. Access to internet facilities is even more limited, with 77,8% of households not having no access to the internet. From **Table 45** it is clear that access to a cellphone increases a household's chance of accessing the internet.

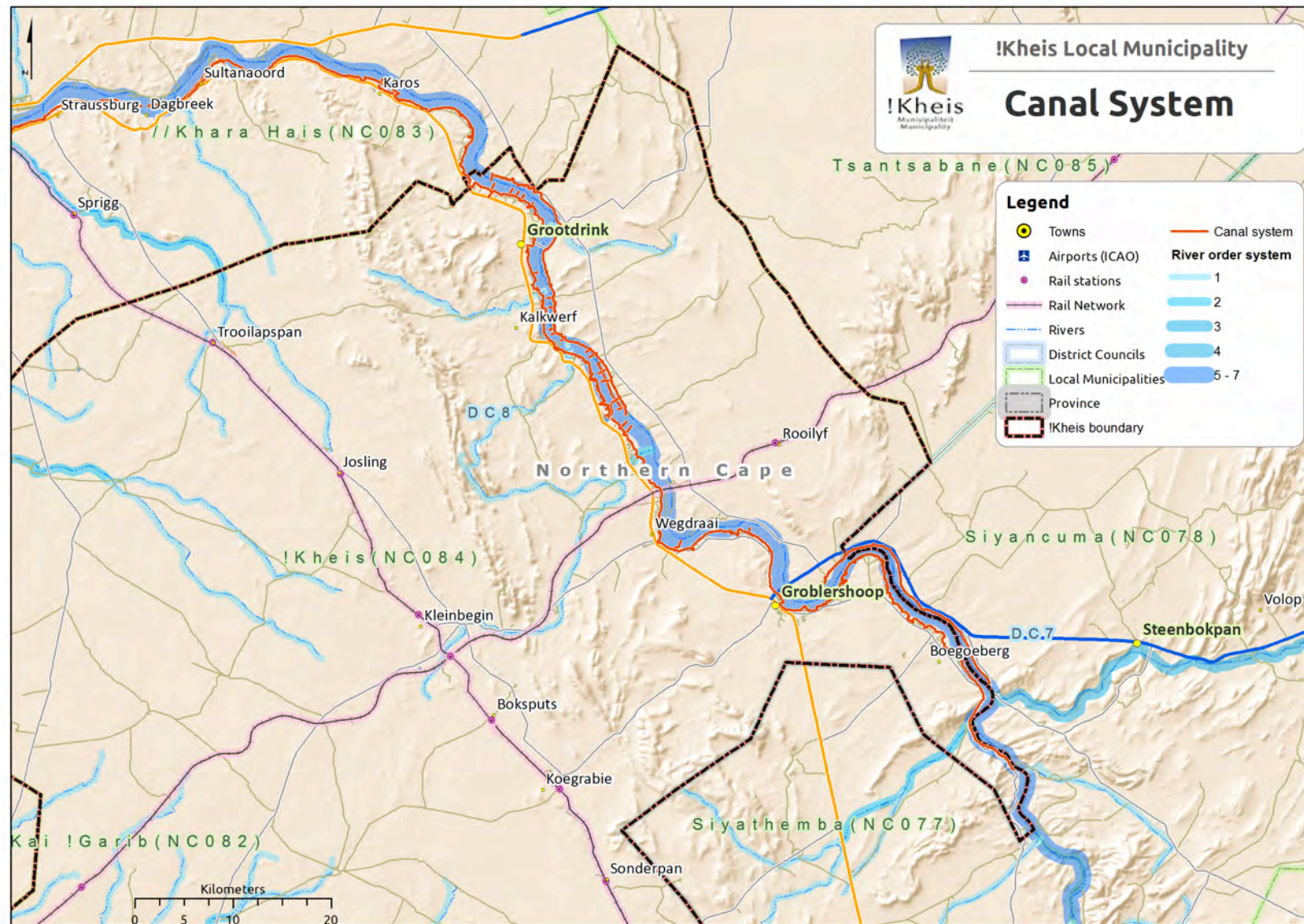
Table 45: Household Access to a Cell Phone (%) (2011)

Settlement	Household Access to a Cell phone (%)
Grootdrink	61,6
!Kheis NU	70,2
Gannaput	67,8
Wegdraai	62,3
Groblershoop	76,0
Boegoeberg	55,1
KLM	68,1
ZFM DM	80,8
NCP	81,1

Table 46: Household Access to the Internet (%) (2011)

Settlement	From home	From cell phone	From work	From elsewhere	No access to internet
Grootdrink	1,1	14,4	0,4	1,2	83,2
!Kheis NU	7,1	14,4	1,3	0,9	76,4
Gannaput	1,3	10,5	2,0	1,0	85,5
Wegdraai	1,3	12,1	0,2	0,0	86,4
Groblershoop	4,5	15,0	5,1	3,3	72,1
Boegoeberg	0,2	24,2	0,7	0,5	74,4
KLM	3,8	15,0	2,1	1,4	77,8
ZFM DM	6,0	13,3	3,5	2,2	75,0
Northern Cape	5,5	14,6	3,5	2,3	74,1

Map 57: Canal System



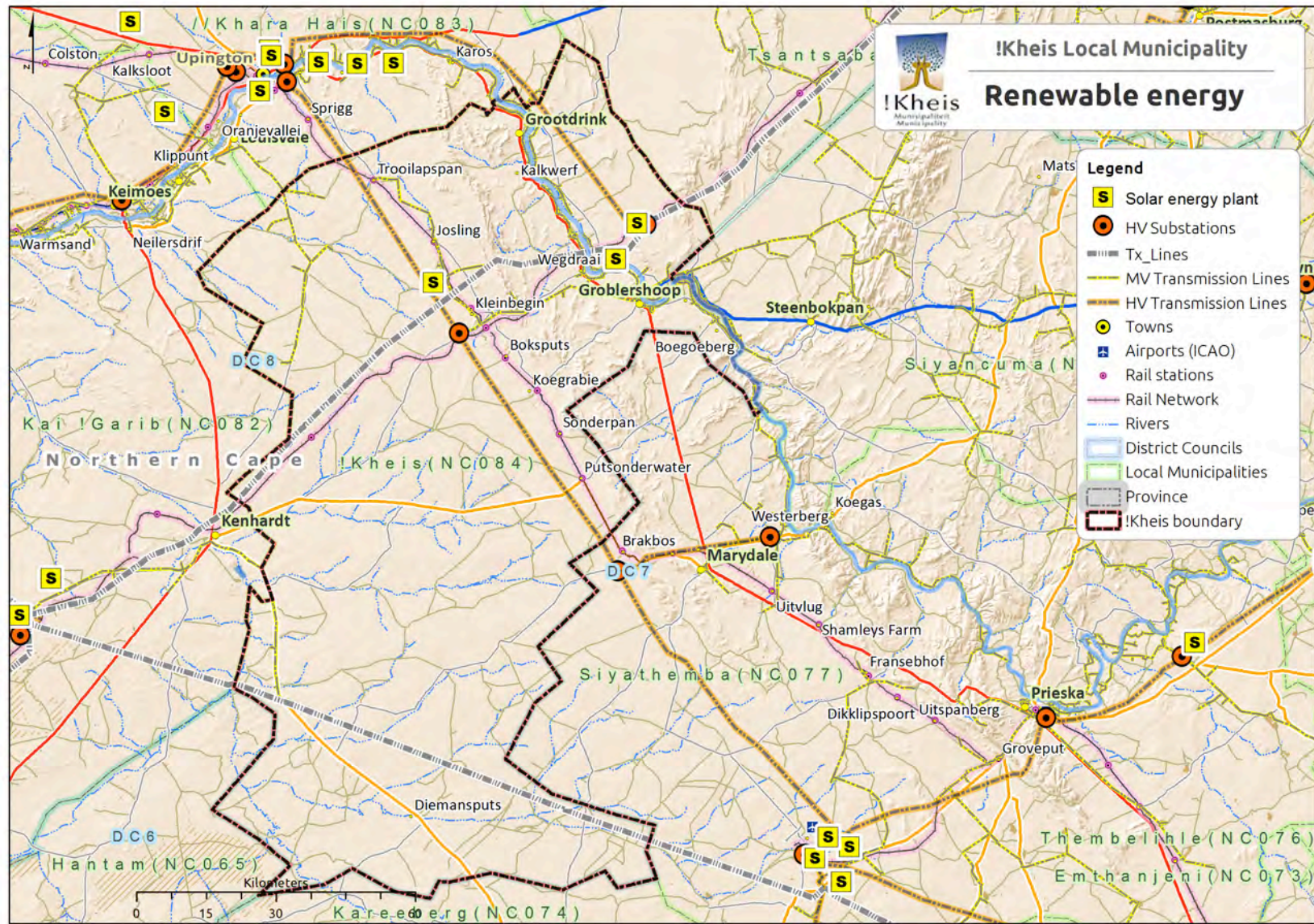
!Kheis Local Municipality
Electricity network

Legend

- HV Substations
- Tx_Lines
- MV Transmission Lines
- HV Transmission Lines
- Towns
- Airports (ICAO)
- Rail stations
- Rail Network
- Rivers
- District Councils
- Local Municipalities
- Province
- !Kheis boundary

Scale: 0, 15, 30 Kilometers

Map 59: Renewable Energy



Square Kilometer Array Radio Telescope (SKA)

South Africa has been awarded the majority share for the construction of a Square Kilometer Array Radio Telescope (SKA), which will be the biggest telescope in the world. The project will be located about 80km northwest of the town of Carnarvon in South Africa and the remainder of the project will be constructed in Western Australia. Radio astronomers will use SKA to better understand the universe (stars, galaxies, magnetic fields, etc.). Construction of the facility is to commence in 2016 (Phase 1) and 2019 – 2024 (Phase 2).

The Northern Cape Province was selected as an ideal location (see **Map 60**) for this project due to low pollution density and relatively low presence of industrial activity. Approximately 50% of the antennae will be located within the Karoo Core Astronomy Advantage Area (AAA), and a further 30% will be located in the Karoo Central AAA's along spiral arms. The remaining 20% of the antennae will be located across South Africa and 8 African SKA partner countries. The Core AAA area will accommodate the MeerKAT satellite and the most sensitive part of the SKA.

In order to protect the SKA-operations, the Astronomy Geographic Advantage (AGA) Act was promulgated on 17 June 2008 and came into operation on 24 April 2009.

In terms of this Act the minister has declared a Core AAA area. This means the following:

- **Core AAA:** The regulations pertaining to the declared Core AAA area prohibit the use of devices using certain radio frequency spectrums and the establishment of any urban development and related infrastructure (transport, mining, airfields/airports, etc.); and
- **Central AAA's:** The proposed regulations and Central AAA's pertain only to transmissions or activities which produce interference in the frequency band related to each area. In this instance there are three Central AAA's with different restrictions in frequency the further away they are located from the Core AAA.

In addition to this, the Astronomy Geographic Advantage Act stipulates that the declared core and central astronomy advantage areas includes the airspace above the area to a level of 18 500m above the highest point in the area. Future flight paths of airplanes will need to take this restriction into consideration (ZFM DM SDF 2012: 183).

Although the development of the SKA will limit certain types of activities in the southern regions of KLM, it can also positively benefit KLM through an increase in business and other tourists in the wider area (local tourists interested in SKA as well as national and international scientists visiting the site). This, in combination with the upgrading of Upington International Airport and the development of the Industrial Development Zone in Upington, will decidedly increase the amount of economic activity in the area.

3.6.8 Land Ownership

According to the ZFM DM SDF (2012) there is only a small amount of State and local authority land in the south of the KLM (see **Map 60**).

3.6.9 Social Facilities

Education Facilities

As a result of the low population densities in the KLM, there are very few education facilities in the area. There is only one High School in the KLM, and it is located in Groblershoop (see **Table 47 and Map 61**).

Table 47: Education Facilities in KLM

Settlement	Education Facility
Grootdrink	Primary School Intermediate School
Gariep	Primary School
Wegdraai	Intermediate School
Groblershoop	Primary School Intermediate School Secondary School
Boegoeberg	Intermediate School

Health Facilities

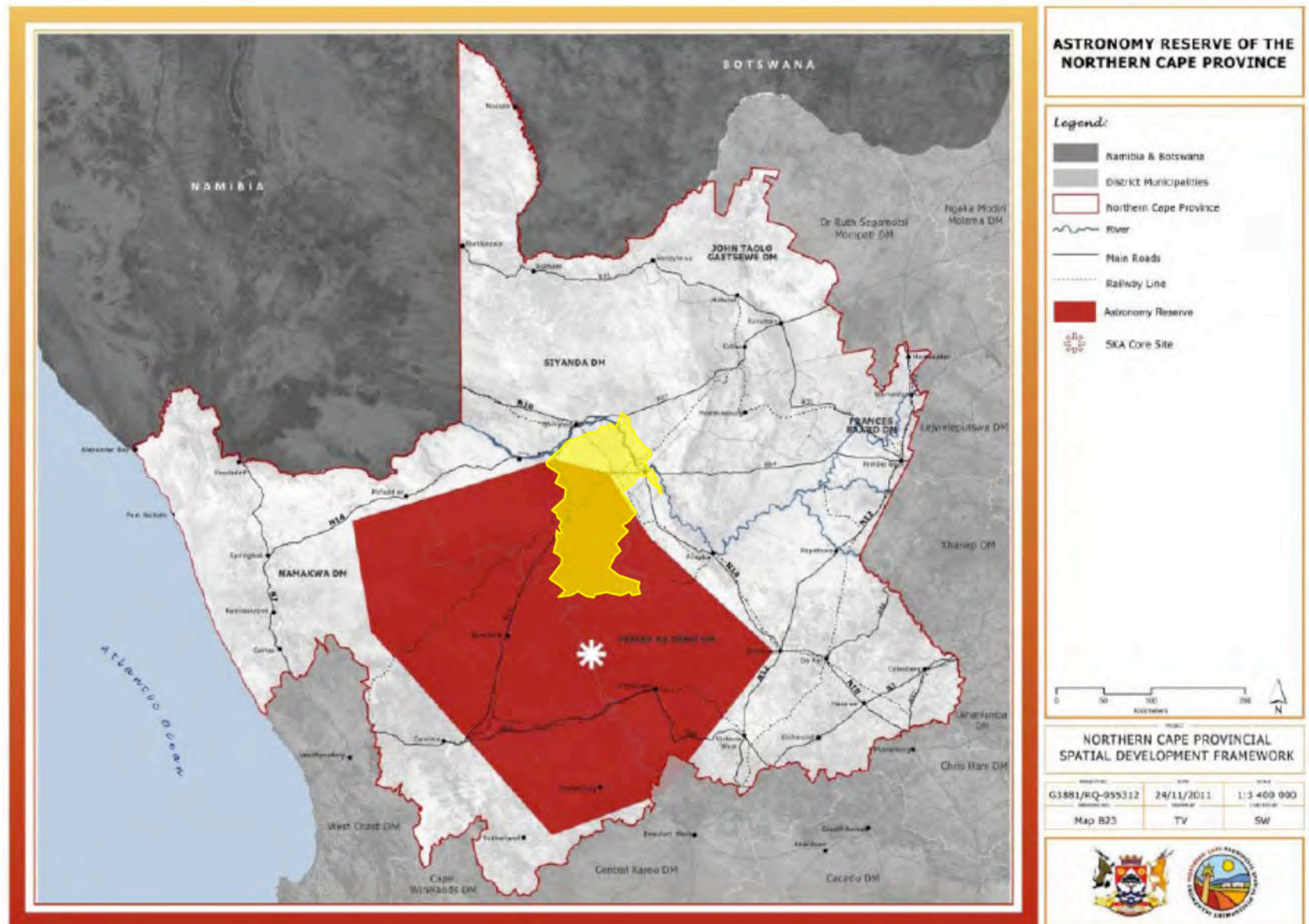
Health facilities in the KLM are limited to clinics in Grootdrink, Wegdraai, Groblershoop, Boegoeberg and Topline, with only one Community Health Centre in Groblershoop (see **Map 63**).

Other Social Facilities

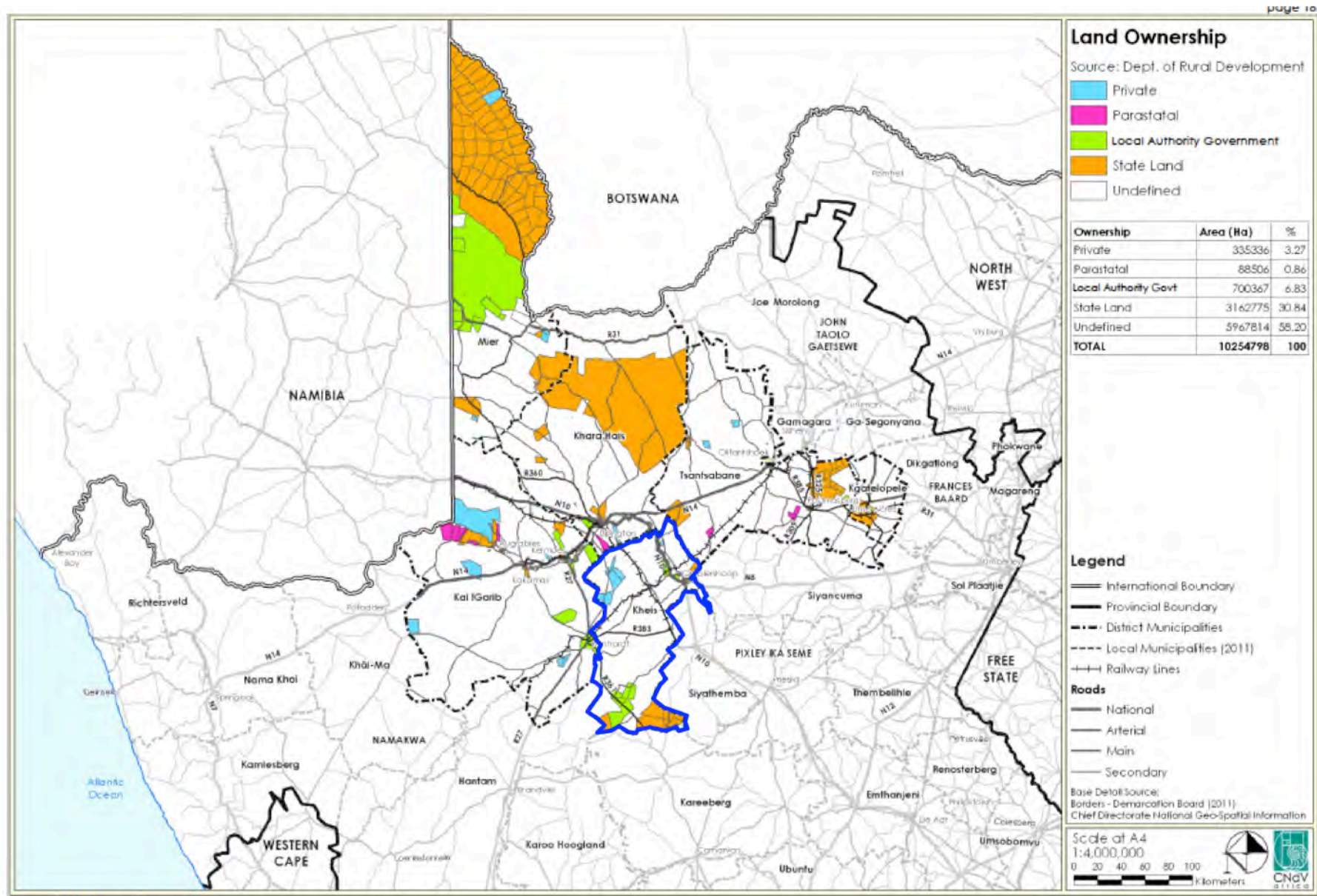
As the main town in the KLM, Groblershoop has the following facilities: (1) Post Office (also one in Grootdrink); (2) Magistrate Office; and (3) Department of Labour Office (see **Maps 64 – 67**).

According to the KLM IDP 2012-2017, there is a lack of sufficient cemeteries in KLM, and the aim of the municipality is to provide proper cemetery facilities in all wards by June 2014. **Map 68** provides the location of current cemeteries, but many of these cemeteries are full. Many of these cemeteries have historic/touristic value.

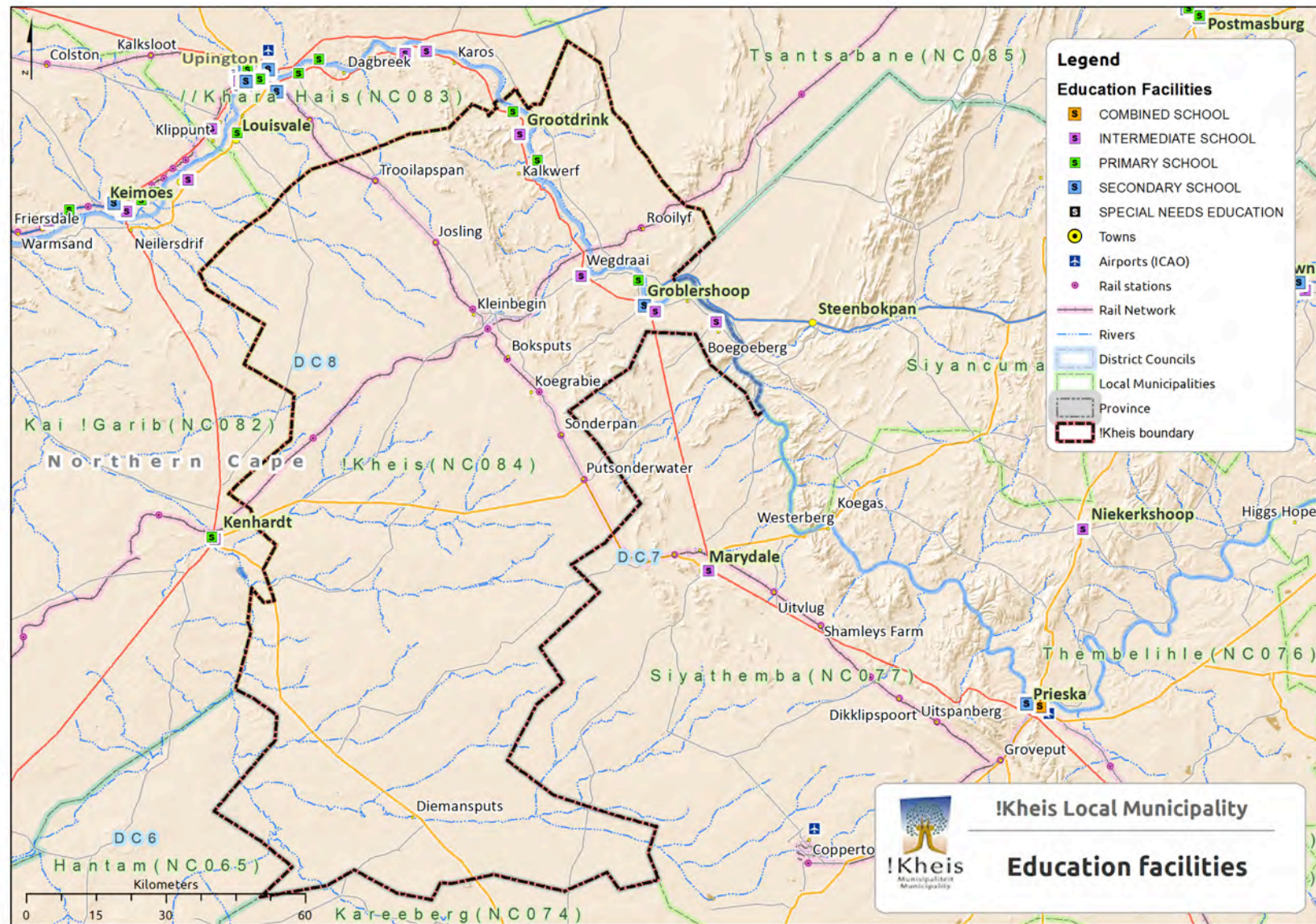
Map 60: Square Kilometer Array Radio Telescope (NC PSDF 2011: Annexure 2)



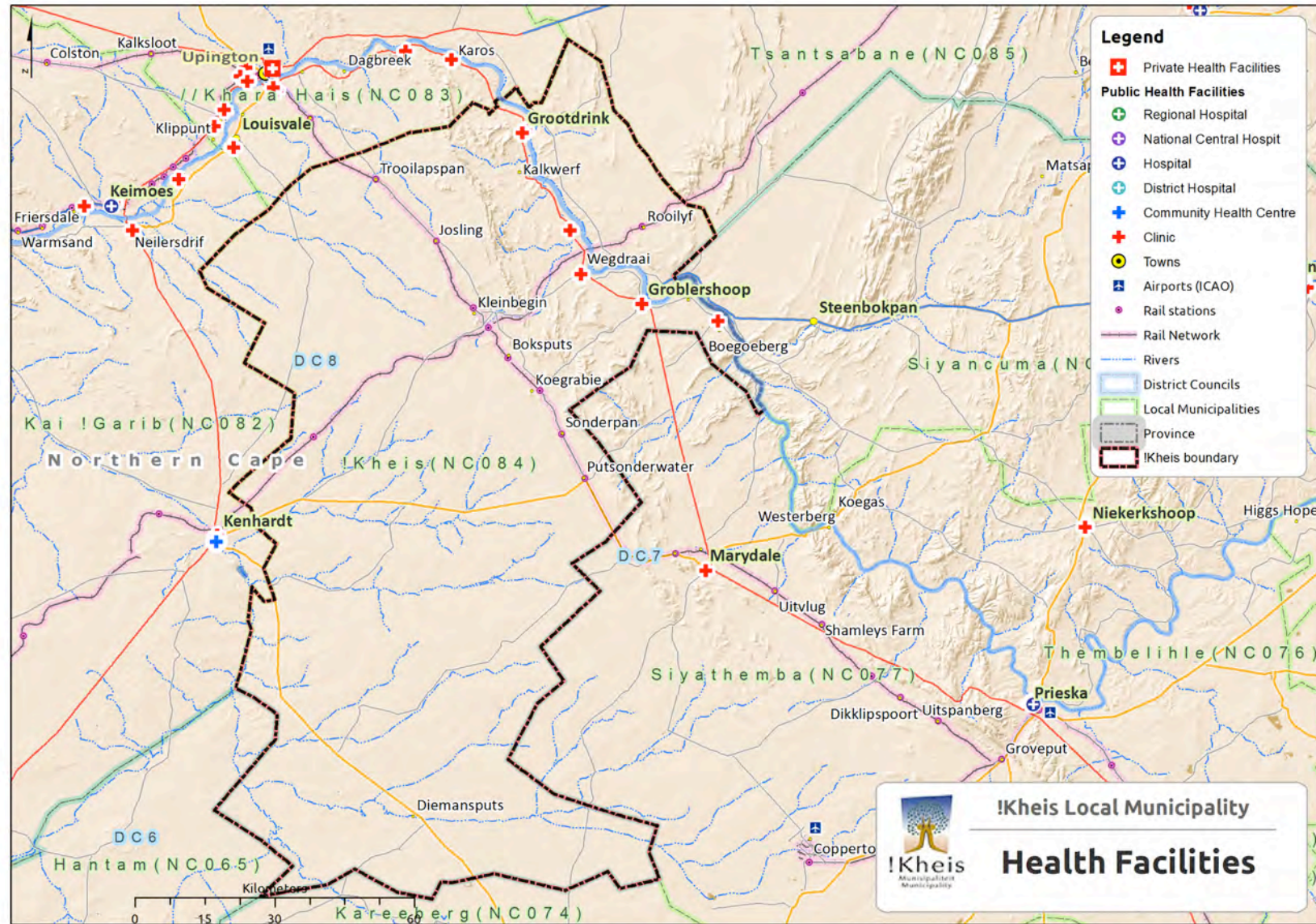
Map 61: Land Ownership in KLM



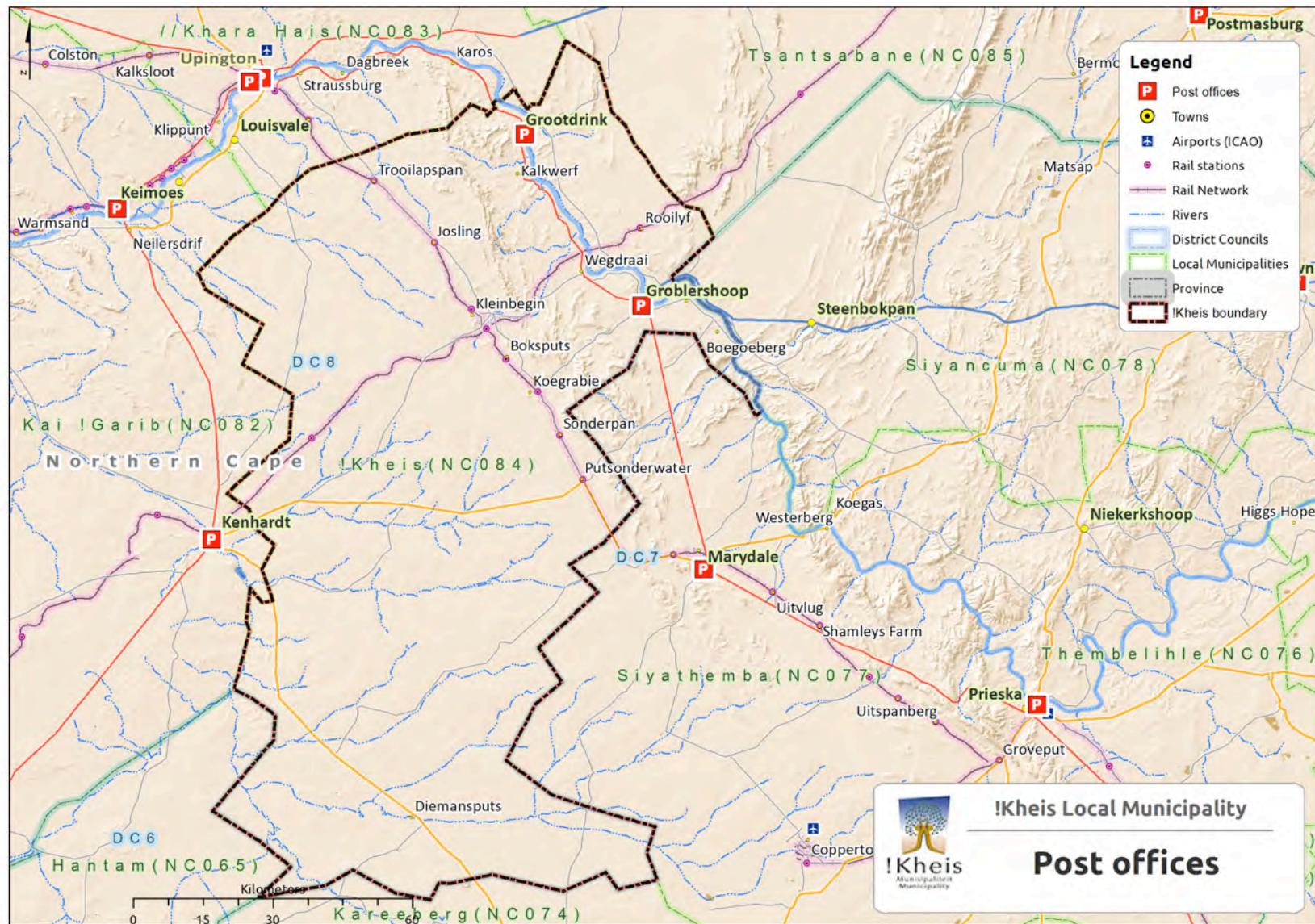
Map 62: Education Facilities in KLM



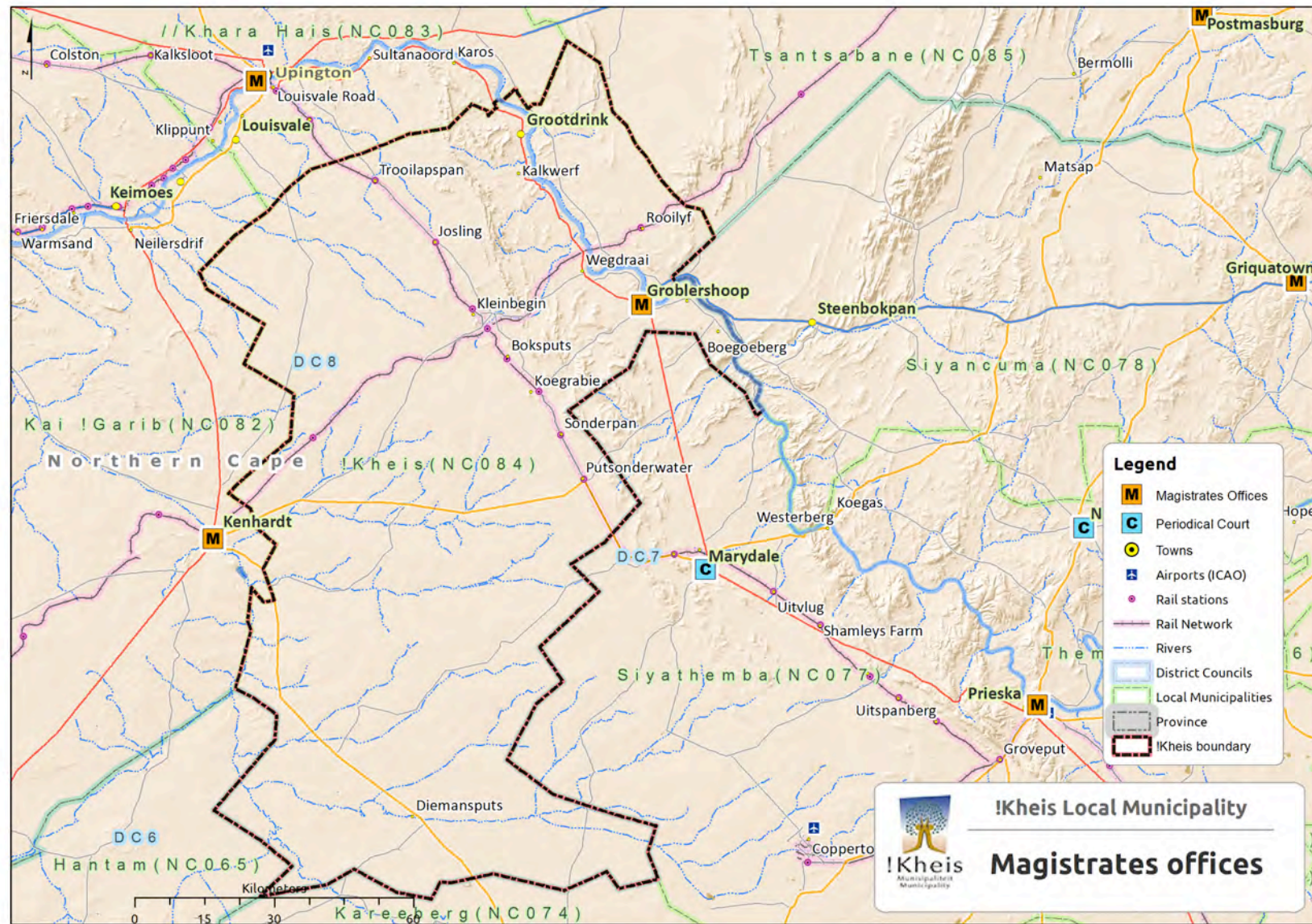
Map 63: Health Facilities



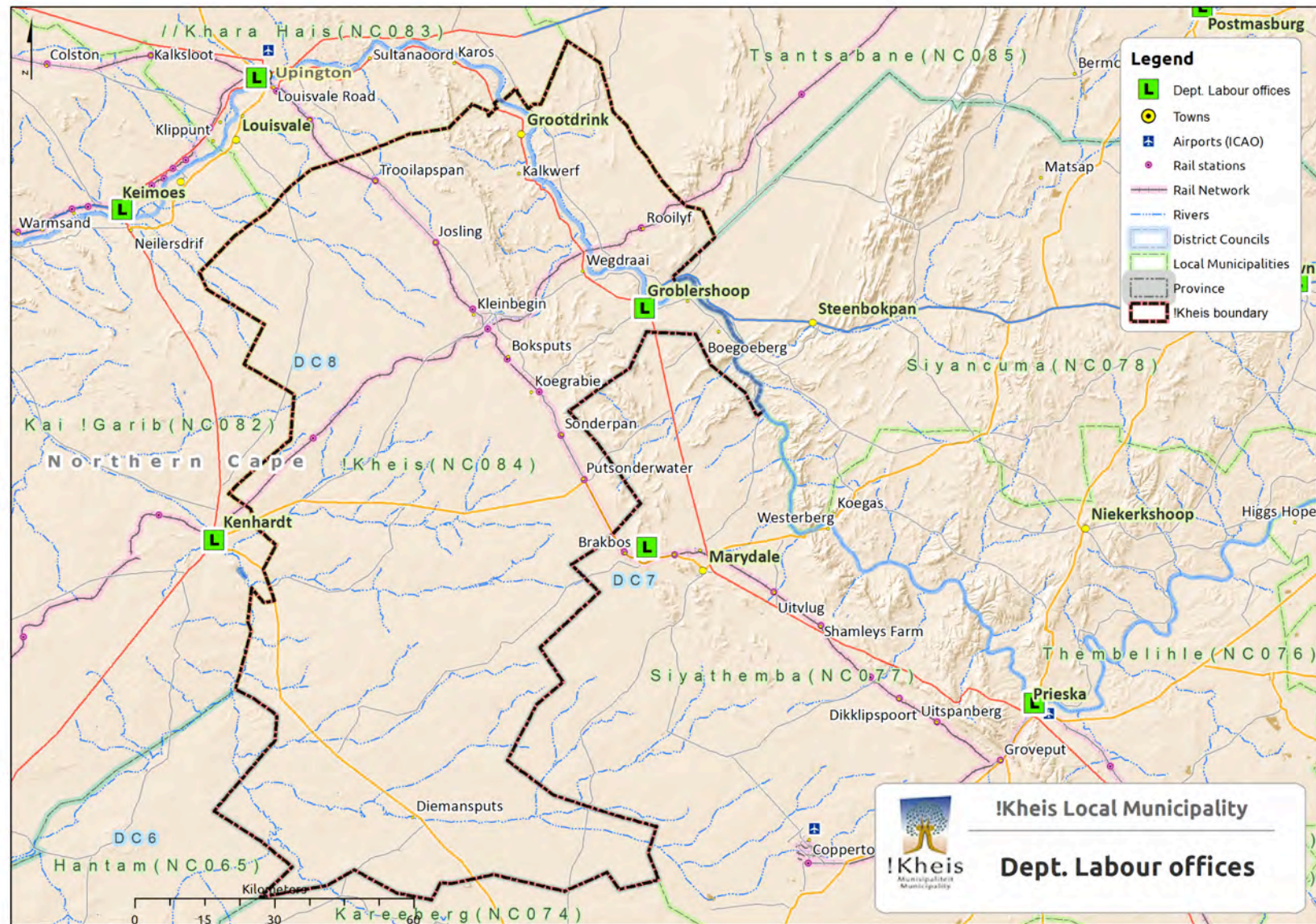
Map 64: Post Offices in KLM



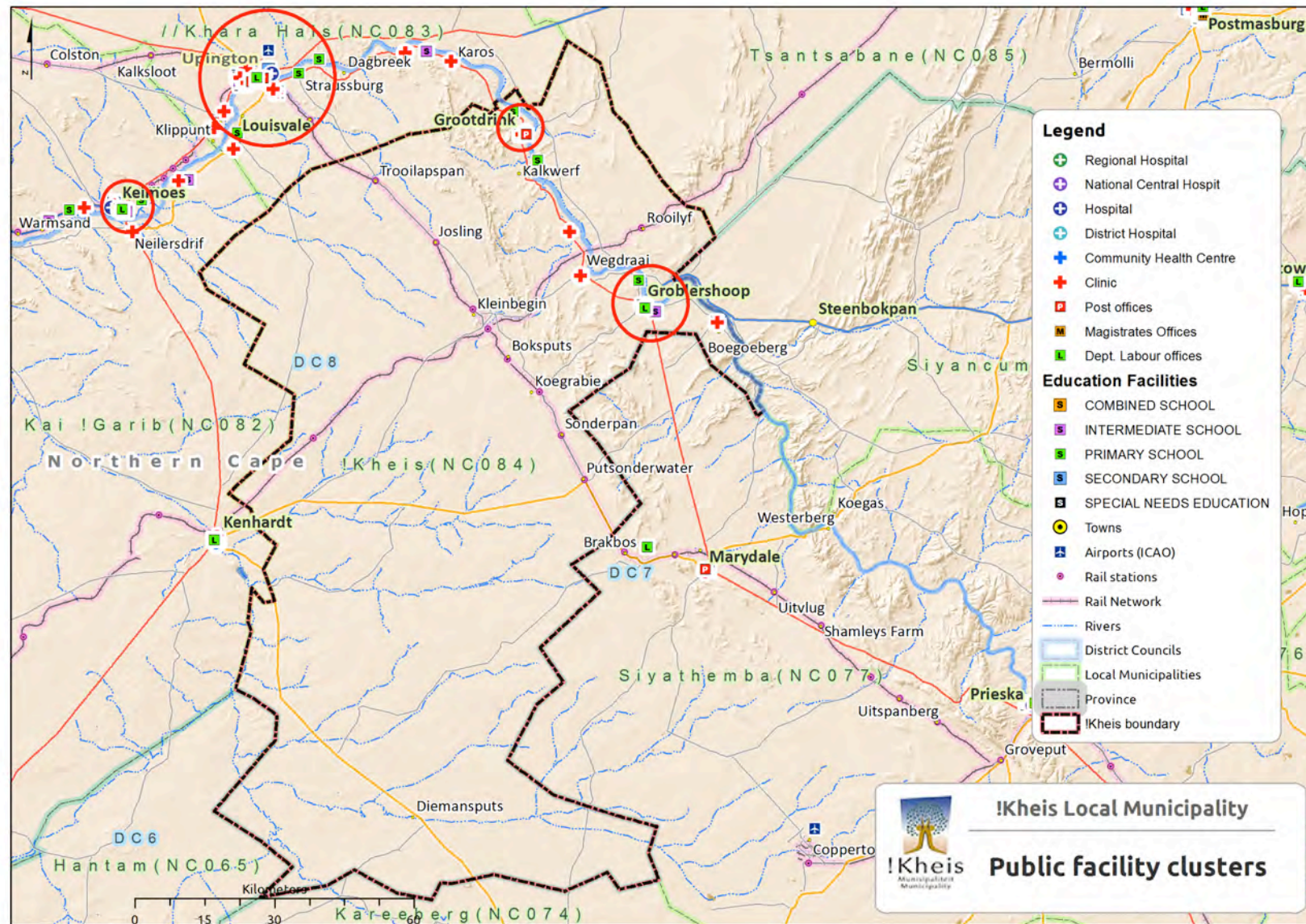
Map 65: Magistrate Offices in KLM



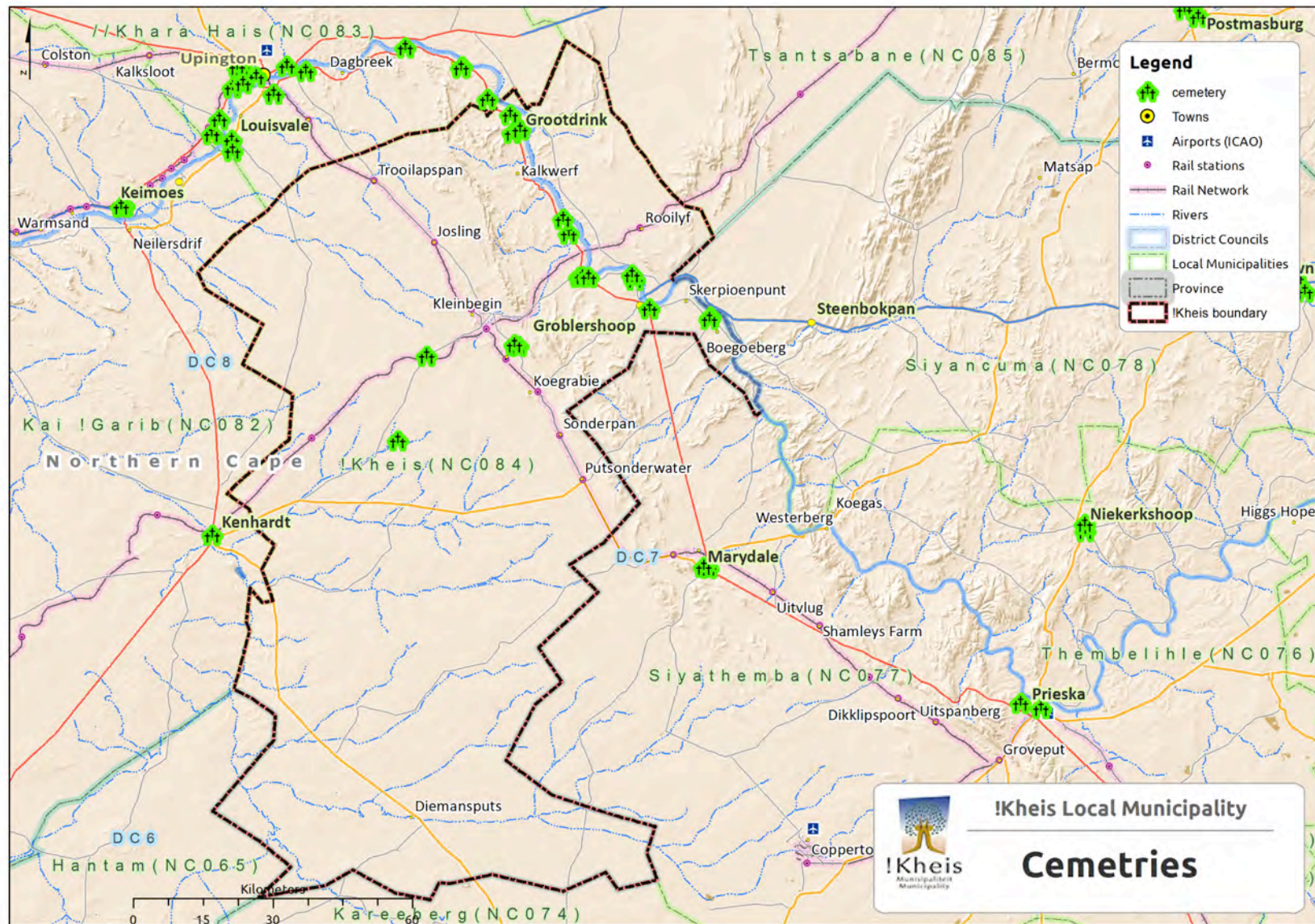
Map 66: Department of Labour Offices in KLM



Map 67: Public Facility Clusters



Map 68: Cemeteries in KLM



3.7 COMMUNITY CONSULTATION PROCESS

3.7.1	Introduction	p. 144
3.7.2	The Proceedings	p. 145
3.7.3	Community Meetings	p. 146
3.7.4	Stakeholder Groups	p. 155
3.7.5	Summary	p. 158

3.7.1 Introduction

The consultation process entailed three sets of activities: (1) a capacity-building and data-sharing session with the Mayor, ward councilors, municipal officials and community leaders, (2) community engagement and participation in all the settlements in the municipality, (3) meetings with stakeholder groups, notably persons involved in and interested in boosting tourism in the municipality, and the Boegoeberg Water User Association.

The *capacity-building and information sharing* session entailed the following activities:

- A presentation-led capacity-building session of at the municipal offices at the start of the community participation sessions;
- The identification and discussion of the desired spatial development outcomes from the side of the office bearers, officials and community leaders in attendance; and
- Uniting the local political and technical leaders behind the SDF preparation process.

The *community participation sessions* entailed the following actions:

- Allowing communities to participate meaningfully in the deliberations around the SDF and the subject matter it addresses;
- Gathering 'local knowledge' of the municipality from the community;
- Hearing and making sense of the needs and priorities of the community; and
- Uniting the community behind the SDF preparation process.

The *engagements with the tourism protagonists* entailed having an outdoor meeting at the Balanseer Dam and that with the *Boegoeberg Water User Association* entailed (1) a meeting with the Acting CEO of the Association and (2) listening and recording points of interest at the annual general meeting of the Association at its offices.

3.7.2 The Proceedings

The Capacity-Building and Information Sharing Session

This event was held in mayoral chamber of the !Kheis municipal offices in Groblershoop on the 23rd of September 2013, during which:

- A presentation was made by the service provider in which (1) the legal and policy framework within which the Spatial Development Framework (SDF) is prepared, (2) the process of spatial development planning, and (3) an overview of technical data gathered to date, and the issues and emerging trends as extracted from the data, were presented; and
- The !Kheis Local Municipality (KLM) office bearers, officials and community leaders' views on the presentation, local needs and expectations and desired spatial development outcomes for the municipality were shared and discussed.

In the next two sessions that which emerged at the work-session is presented:

Challenges, concerns and threats

- The leadership and officials in the KLM are both new, and are still finding their feet and establishing themselves.
- The KLM has very limited resources and planning capacity. It was asked why rural areas cannot be supported on a more permanent base by service providers.
- It was asked whether the university could remain involved after the preparation of the SDF in an advisory and monitoring capacity. The service provider mentioned and emphasised the role of the community as monitor of progress on the implementation of the SDF.
- The lack of plan-implementation was raised as a key concern. It was argued that too much money is spent on plan preparation and too little on implementation.

- The need for new economic activities and the creation of a solid property tax in the KLM was voiced.
- It was stated that once youth have matriculated they have to leave the area and seek employment elsewhere, due to the limited number of employment opportunities in the KLM.
- Corruption was mentioned as a key concern in the area.
- The community is getting impatient – it wants to see development on the ground. They want to 'feel and taste development'.
- It was suggested that the NC Province has to be kept on its toes. The community sees too little of (1) the provincial officials and (2) actual development from the side of the provincial government.
- A question was asked about the difference between the IDP and the SDF, and why the two processes are being run separately.
- The lack of community involvement in planning was raised. It was argued that there is too much top-down planning in the NC Province.
- It was mentioned that everyone must take responsibility for planning and delivery in the municipality.
- The seasonal nature of work in the municipality (orchards) was raised as an area of concern.
- It was stated that there are still people living in houses made of reed in the KLM.
- It was argued that there are many white elephant government initiated development projects in the area and this must be stopped.
- The jealousy of people in the various settlements towards each other was raised as a pity and as a major area of concern.
- It was suggested that the wrong leaders get elected by the people and that these leaders do not have the community's needs and future at heart. It was also argued that 'the councilors get paid, but do nothing'.
- The lack of transfer of information by leaders (especially the ward councilors and Community Development Workers (CDWs) to the people) was raised as a concern.

- Politics was seen as frustrating development in the area.

Opportunities and prospects:

- It was stated that the rural Northern Cape is a place of huge potential and that the people that live in it must not be underestimated – they must just be given a chance to prove themselves.
- The meeting and those to come in the various settlements in the KLM were described as ‘opportunities to bring together those with needs and those with the means to do something about these needs’.
- The SDF preparation process was welcomed. It was indicated that those present would inform the other community members and encourage them to attend the meetings and actively participate.
- It was stated that the community needs to take charge of its own destiny and the people have to take responsibility for making a better future.
- The manufacture of fertiliser was proposed as an upstream opportunity for the agriculture sector in the area.
- It was proposed that the community should be given the opportunity to design art on the wine bottles.
- The export of feed to Namibia by small farmers was proposed.
- The building of solar power stations was seen as a huge opportunity for the KLM.
- The need for collaboration across political boundaries for the common benefit of the people and the place was emphasised.
- The creation of a ‘new municipality’ after a local by-election in the municipality in April 2013 was seen as holding the potential to start afresh and with renewed development intent.
- The possibility of the KLM becoming a model rural municipality and an example for others like it was raised as something to aspire to and to work towards.

3.7.3 Community Meetings

Community meetings were held in the various settlements in the KLM from the 24th to the 30th of September 2013. The meetings were attended by the KLM officials involved in the KLM SDF preparation process and in some cases, councilors. (Attendance registers are attached to this report as Annexures ‘B’ to ‘G’). During the meetings, the (1) objectives of the SDF preparation-project, (2) the steps that are being followed in the execution of the project, and (3) the opportunities for involvement by the community, were discussed. The largest segment of the meetings was devoted to listening to and capturing the issues, needs, wishes and proposals of the community, and then reading out what was recorded at the end of the meeting to the community to make sure that (1) everything was captured, and (2) was captured correctly. In the following sections, the issues, concerns and opportunities, as raised in the meetings in the various settlements, are listed.

Grootdrink and Gariep

In the case of Grootdrink, a meeting was held with the Councillor and a number of Ward Committee Members in the settlement on the 24th of September 2013, in addition to the formally scheduled community meeting on the 25th of September 2013.

The key issues that were raised at the two meetings are:

- The high levels of unemployment and poverty in the area – 70% of the population was regarded as living in poverty.
- The shortage of land for churches, businesses and cemeteries (the latter especially posing a challenge as land requirements are very specific).
- The lack of job opportunities in the settlement and the KLM as a whole. Young people leave the area for work elsewhere and in some cases send back remittances. Often this does not take place due to the

high cost of living in the areas where the youth are located. Those that stay behind in the KLM 'often cause trouble' in the area.

- The lack of retail facilities in the settlement and the KLM in general, which results in people shopping in Upington. The only reason for buying in Groblershoop was the low price of meat.
- A perception that traders from other countries were taking over the Grootdrink and KLM retail sector, and were not paying taxes.
- The slow speed of processing of town planning/land development applications by the KLM.
- The tendency for local residents not to start their own businesses, due to poverty and fear of failure, but to rent out their properties to foreign traders – often resulting in residential stands being used for businesses without business rights or a business permit.
- The lack of expansion opportunities in a westerly direction due to the mountain on that side, and the N10 on the eastern side.
- The lack of grazing land in the area resulting in animals living and walking amongst the people in the settlement. This results in germs spreading and a fly plague. It also leads to the little land that is available for grazing, being destroyed and eroded.
- The lack of camps for animals leading to theft of livestock.
- The arrangement that residents need to buy land for a grave.
- The lack of recreation facilities and parks and 'things to do' for the people in the settlement, especially the youth.
- The lack of drinking water for animals.
- The lack of recognition for the ward committee. A problem was also discussed regarding the payment of stipends.
- The high cost of electricity.
- The long period of time community members have to wait to get a house.
- Service delivery by the KLM was regarded as inadequate. It did not meet the expectations of the people.

- A perceived undercount of inhabitants in the KLM.
- The lack of State support for businesses started by local residents.
- The clinics in the KLM are small and the service they offered weak.
- The rubbish dump ('asgat') in the area is not fenced off. This causes a health risk.
- The long distances people need to cover to get to places like Groblershoop and Upington and the high costs involved in doing so (R50-60/return trip).
- The long waiting times for ambulances and the policy of ambulances to drop people (day patients) off on the N10, leaving them to walk from there to wherever they need to get. The lack of oxygen in ambulances in the area.
- The bad condition of the road connecting the N10 to Gariep, especially so for people that have been released from hospital.
- The tendency of farmers in the area to bring in workers from other areas (notably Kuruman), and not to make use of local labour.
- The limited supply of potable water in the area and the health risks that go with this.
- The quality of the water in the area and the frequency of testing of the water by the KLM.
- Sanitation is a problem. While toilets for a water-borne sewer system were put in place, the problems with bulk water provision and the lack of water meant that it has in many cases not been used. The pit latrine system was still being used in such cases.
- The lack of fire fighting services in the area.
- The difficult times for farmers in the area (including frost), which has resulted in farmers having to lay-off and/or use fewer workers.
- The KLM's approach to indigents, which was not seen as ensuring a decent quality of life for indigents. It was argued that at least one third of all residents in the settlement cannot afford to pay for water.

- The lack of suitable properties for crèches, resulting in these facilities being provided and operated on properties that were too small and that did not have the required municipal services (especially water and sewerage).
- The limited number of teachers for Grade R's in the settlement, leading to an inadequate education and leaving children underprepared for primary school.
- The lack of a court in the area, meaning that people had to travel great distances to get to their hearings.
- The necessity to have to hike to get to Groblershoop and Uppington due to limited funds for transport. This is very dangerous.
- Inadequate cleaning of water sewerage pipes and the lack of proper refuse removal services, which not only creates a health risk, but also provides a fertile breeding ground for snakes.
- Slow response rates by the Police.
- Loud music in the area till late at night.
- An increase in theft in the area.
- The post office building, which is old and in need of repairs.
- The high number of children not attending school.
- The small size of and limited services provided by the clinic. The clinic is also understaffed and the model is one of 'first come, first served', with people not being served on a particular day.
- A perception that the appointment of contractors was based less on competence than on who their friends or relatives were.
- Ward committee members often fighting each other and not focusing on the needs of the community.

The community raised the following as opportunities:

- The vast stretches of land for farming (notably for grazing) that was not being utilised.
- Indigenous plant and seed production.

- Aquaculture.
- Chicken farming.
- The recently established 'Development Forum' in the settlement.
- The expansion in the mining activities and related settlements in other parts of the province, which creates markets for agricultural and manufactured products.
- Raising of tolls on the iron ore trains passing through the area from Sishen to Saldanha.

The community was in favour of:

- The making available of land for business purposes in the settlement.
- The making available of land for emerging farmers.
- Greater involvement by the private sector in development in the settlement.
- The settlement of large private sector firms, chain shops and more ATMs in the settlement.
- The building of a Multi-Purpose Community Centre (MPCC)/Thusong Centre in the area.
- The building of a police station in the area.
- The building of a pavilion at the soccer field in the settlement, coupled with the upgrading of the field.
- The provision of services in synch with the provision of residential erven.
- Greater use of the solar power generation in the area.
- Making available bursaries for Matriculants from the area.
- The building of the youth development centre (with the support of a solar power station company) in the settlement.
- Using town planning instruments and/or bye-laws to support local businesses in the light of a perceived threat to local traders offered by foreign traders.

- 'Jumping' across the N10 and using land on the other side of the road for residential expansion and for grazing. The NC provincial government would need to be engaged on this issue.
- The provision of solar panels and water tanks as standard features of new State-funded housing projects.
- The KLM's new method of installation of water on erven (in front of the house) and sewerage (at the back of the house) being communicated to the residents.
- The use of unemployed youth to gather data in the area.
- An alcohol and drug rehabilitation centre being developed in the area.
- The building of a skills training centre in the settlement, especially so for those who do not have a Matric.
- The municipality regulating the number of animals kept by farmers in the settlement.
- The construction of a facility where senior citizens could meet and socialise.
- The building of a proper day hospital, and not just a clinic in the settlement.
- The building of a secondary school in the settlement.
- The allocation of more nurses to the clinic and the clinic providing a 24-hour service.
- The provision of a school bus service.
- Better layout planning of the settlement.



Topline

The key issues that were raised are:

- The lack of land available for development in the settlement.
- The lack of investment by the private sector in the settlement.
- The lack of land for grazing in the area, which is causing a health risk.
- The unregulated use of land by emerging farmers in the area.
- The high levels of unemployment and poverty in the settlement. Many children go to bed hungry at night.
- The lack of land for crèches in the area. The school building and grounds are used for this, and this is not a desirable situation.
- The lack of solidarity amongst emerging farmers – people do their own thing at the cost of others.
- Lack of support for emerging farmers resulting in farming activities collapsing and bad management and unregulated use of land.
- The unsafe trip for children walking to school.
- Children walking along the N10 and hiking to other parts of the municipality. This is becoming increasingly dangerous.
- The cemetery is full and in urgent need of expansion.
- There is a serious housing backlog in the settlement.
- The lack of sports grounds in the area. This means that youth development is frustrated.
- Lack of a centre for youth where they can meet, gather, play and ‘stay off the streets’.
- The lack of solidarity and collaboration in the work of youth development groups. Everyone in the sector was seen as just wanting to do their own thing and benefit themselves in the process.
- The lack of an effective LED office in the KLM.
- The lack of State support for emerging companies/businesses in the area.
- Government projects that only benefit a few people.

- Inadequate water services in the settlement.
- The absence of medical doctors in the KLM.
- The lack of sport development in the area.
- Weak Matric results resulting in learners from the area not being able to enter higher education institutions.
- The lack of internships and learnerships available to residents of the settlement.
- The lack of access to government information.
- The disqualifying impact of criminal records on the employability of some residents.
- A lack of concern in government with senior citizens.
- The lack of visibility of rural development programmes in the area.
- The lack of a functioning water-borne sewerage system in the settlement.

The meeting raised the following as opportunities:

- The use of a stone found in the area in the solar energy business and the creation of large numbers of decent jobs in the process.
- The use of the ‘Balanseer Dam’ for tourism development, aqua-farming and job creation.
- The products of established farms, which could be used for beneficiation and the building of a dynamic manufacturing sector.
- The possibility of establishing factories in the area.

The meeting was in favour of:

- All the role-players in the area taking hands and finding solutions to the challenges they all face.
- Government buying agricultural land and making it available to emerging farmers for grazing, including female farmers.
- The provision of a school in closer proximity to the people.

- More and more targeted and sustained government support to emerging businesses.
- The building of a gymnasium in the settlement.
- The provision of a mobile court in the settlements in the KLM.
- The provision of solar panels on all the houses in the settlement.
- The provision of a 24-hour clinic service in the area.
- The provision of a special meeting facility/place for senior citizens.
- The capacitation of emerging farmers and the provision of adequate support to these farmers for an extended period of time.
- The development of pig, chicken and fish farms in the area.



Wegdraai

The key issues that were raised are:

- The lack of job opportunities and job creation initiatives/projects in the area.
- The lack of a doctor and a pharmacy in the area.
- The long distances that people need to travel to get to decent shops in Uppington.
- The lack of land for grazing for all the residents that wanted to farm – not only a few should benefit.
- The general quality of life in the area – bad housing, no flush toilets, bad streets, termites in the houses, leaking and collapsing roofs, joblessness and poverty.
- Lack of plan implementation.
- Lack of land for farming.
- The limited visibility of politicians and municipal officials in the settlement.
- The opening hours of the clinic (too short), the small size of the clinic and the need for another nurse (as stand-in and support) to be appointed to serve the community.
- Lack of oxygen in the ambulances in use in the area.
- Very long response times for ambulance services.
- Problems with the payment of stipends to ward committee members.
- Lack of a library in the settlement – the community needs to travel to Groblershoop to use the library there.
- No internet services in the settlement for use by the youth in their school assignments.
- A lack of sport facilities in the settlement.
- While police are visible, they are not there when they are needed – late at night (when the taverns close and fights break out) and are slow to respond to calls for help by the community.

- The absence of a government service, such as a police station, where documents can be certified.
- Weak matric results, leading to learners from the area not being able to access the university system, and also not being able to secure bursaries.
- Drug and alcohol abuse by especially youth.
- Outstanding payments for settled land claims.
- Loss of animals due to lack of land and water for animals.
- People expressing a view that politicians and government officials make promises that they cannot keep.
- People pushing and keeping each other down. Jealousy makes people not willing to allow anyone getting on in life. At the same time people seek to only benefit themselves, even at the cost of others.
- It is perceived that 'it is always the same people benefitting from government projects and support'.
- There are problems in the community around the soup kitchen and the way it is being run and how its operations are audited.
- The lack of use of local labour by the new solar companies in the area. It was stated that this may be due to people in the settlement not having the right qualification and skill sets.

The meeting raised the following as opportunities:

- The ward committee and ward councillor lobbying for more investment to be channelled to the settlement.
- Farmers in the area who are willing to assist in job creation ventures.
- The erection of a petrol-filling station (garage) in the settlement.
- The opening up of the shorter route to the Western Cape that runs past the settlement.
- The new solar power stations being developed in the area.

The meeting was in favour of:

- The general upgrading of living conditions in the settlement, like government had done in Upington and Postmasburg.
- The building of a safe house/facility for vulnerable children and women.
- The provision of recreational facilities such as swimming pools and parks in the area to keep children off the streets.
- The building of a youth centre in the settlement.
- The development of a shopping centre with chain stores in the settlement.
- The appointment of a medical doctor in the KLM.
- The construction of factories in the area to provide jobs.
- The making available of land for community vegetable gardens.

Boegoeberg

The key issues that were raised are:

- A lack of jobs and job-creation opportunities in the area.
- The short opening hours and limited and often erratic (in terms of time) service provided by the clinic.
- The need for more nurses to be appointed at the clinic.
- The dependency on Groblershoop for shops. These shops were also not seen as adequate. The closest decent shops are located in Upington. A return trip to Upington costs R120/130.
- The lack of a secondary school in the settlement. Children have to travel to Groblershoop.
- The lack of a centre/facility where senior citizens can meet.
- The lack of recreation and sport facilities for young people to keep them occupied and off the streets.
- Lack of internet access for especially young people to complete their school assignments.

- No ATM services in the area meaning that people have to travel to Groblershoop by taxi (R25 for a return trip) to just draw cash.
- The loss of the shops that were once located in the settlement.
- Youth that leave the area do not return and often do not send back remittances. The ones that remain often end up without a job and cause trouble – i.e. drinking, drugs and fighting.
- It was stated that Boegoeberg gets less investment than the other settlements in the KLM.
- The police are visible, but not at the right times and are slow to respond to calls for them to come out to respond to disturbances.
- Absence of a satellite police station in the settlement.
- Housing in the settlement is inadequate.
- The settlement is shunned and treated like an orphan. It was likened to a 'ghost town'. It was perceived that the other settlements in the KLM get much more than they (in Boegoeberg) do from the State.
- Lack of communication with the people from the State.
- Lack of visibility, involvement and care of/by the Mayor and councilors in the area.
- A lack of land for housing and farming in the area. It was noted that the new informal settlements are not the result of in-movement from outside the area, but of new household formation in the area.
- The high cost of using the community hall in the settlement.
- Lack of street lighting in some parts of the settlement (notably the new extensions), making it unsafe at night.
- Power supply being weak in the area, which results in regular power outages.
- Water supply is a problem in the summer months and over the December holidays when there were more people in the area with children coming home for the holidays.
- Water quality is a problem – there are often bugs in it.

- Water channels are a danger for children. Animals can also fall in them. They are often also not well maintained.
- Land for grazing was not seen as a problem in the area.
- The lack of municipal office in the area, meaning that power had to be bought in Groblershoop.
- Problems with the establishment of a local bakery (an LED project) were not attended to.
- Lack of land for crèches in the area, resulting in crèches being operated in 'the wrong places'.



The meeting raised the following as opportunities:

- The Boegoeberg Dam for tourism.
- The re-establishment of the shops, bakery and butchery that once were found in the area.

The meeting was in favour of:

- The creation of more jobs in the area.
- The provision/development of recreational facilities for young people.

*Groblershoop/Sternheim/Dankie Debo Village***The key issues that were raised are:**

- Lack of jobs in the area leading to poverty and social decay.
- The lack of refuse removal leading to piles of rubbish growing in the area.
- The weak quality of roads and potholes in the settlement.
- Lack of land for crèches in the area.
- The short opening hours and limited and often erratic (in terms of operating hours) service provided by the clinic.
- The absence of a medical doctor in the area.
- The slow response times of the ambulance and the lack of oxygen in the ambulances in use in the area.
- The slow response time of the police. Police are also perceived not to investigate cases.
- A perception of certain government service providers only offering services to certain community members.
- A lack of high-mast lighting in certain parts of the settlement, which makes it unsafe, especially after the taverns have closed.
- The lack of a community hall in the settlement.

- Youth having too little to do and as a result getting addicted to drugs and alcohol and wasting their own lives and those of people around them.
- The kind of work that is available for low-skilled people is not what community members are interested in doing anymore – e.g. packing grapes.
- Lack of information-sharing with the community by the municipality.
- A need for a trauma centre for women and vulnerable youth was expressed.
- A lack of job creation projects in the area.
- The Non-Profit Companies active in the area often do not get money from the State or their sponsors.
- The Department of Social Development does not assist the community with projects.
- The few facilities in the area, like the stadium, not being for use by children.

The meeting raised the following as opportunities:

- The location of the settlement on the N10, which holds opportunities for the tourism and manufacturing sectors.
- The re-establishment of the shops and factories that were once located in the area.
- The use of the solar power generation projects in the area for job creation and general economic development of the area.

The meeting was in favour of:

- The creation of more jobs in the area through the building of a clothing, shoe and plastic factory in the settlement.
- The provision of a facility where needlework could be done and where people with limited formal qualifications can be accommodated.

- The appointment of local people as CDWs, instead of bringing people in from outside the area.
- The building of safe, fenced off, recreational facilities for young people.
- The provision of a bus and regular bus service for older people to enable them to get to Groblershoop.
- The building of a proper clinic in the area.
- The extension of the soup kitchen service to Dankie Debo Village.
- The development of the skills of youth in the area to enable them to be able to secure better and better paying jobs.
- The provision of mentoring and business support services to upstart companies in the area.
- The provision of facilities and services for people with disabilities in the area.



3.7.4 Stakeholder Groups

The Tourism Protagonists

The key issues that were raised are:

- The lack of utilisation of the tourism potential in the area.
- The fact that there were many guest houses, but very little marketing to attract people to the area.
- The lack of innovation (conservatism) amongst land owners in the area with regards to the vast tourism potential the area has.
- The slow speed with which ideas moved from the conceptual phase to implementation.
- The lack of focused marketing of the tourism potential of the area.
- Suspicion and jealousy that limits and disrupts collaboration between operators in the sector, the communities and the State.
- The lack of a concerted effort to protect and manage the natural ecosystem and the tourist potential of the area.
- The replacement of the natural vegetation with non-indigenous species.
- The growing problems with maintenance of the waterways/system in the area.
- The destruction of the natural breeding grounds for birds – the reeds in the Orange River.
- The problem with silt formation in the Balanseer Dam and its emptying on an annual basis to address this.
- Problems around tenure and the use of the State land for tourism-related activities.
- A lack of serious involvement by the State in developing the tourism sector in the KLM.
- A lack of funds and self-confidence amongst young people in the area to try something new, such as in the tourism sector.

The following were raised as opportunities:

- The Orange River as offering a wide variety of possibilities for significant tourism development.
- The wide variety of bird species in the area.
- The Boegoeberg and Balanseer Dams as potential tourism development sites (e.g. camping, chalets, restaurants and curio shops).
- The rich history of the rock formations and footprints of pre-historic mules in the area – these are said to date back millions, even billions of years.
- The quietness and remoteness of the area for urban people who need to rest and want tranquillity and silence.
- The tourist possibilities, which include game farming/rides, hunting, adventure tourism, water sport-related activities, horse rides, 4x4 routes, the Khoi and San caves in the mountains, the footprints and the unique rock formations in the area.
- The mining boom in the NC Province bringing with it large numbers of workers with enough disposable income and the need for relaxation.

Those engaged were in favour of:

- A concerted and collaborative effort by all role-players to grow the tourism sector and create hundreds, even thousands of jobs in the tourism sector.
- Supplementing farms which were no longer viable for farming purposes only with tourism activities.

The Boegoeberg Water User Association

As indicated above, the service provider had a meeting with the Acting CEO of the Boegoeberg Water User Association and attended the annual general meeting of the Association during which issues, needs, concerns and prospects and opportunities raised in the meetings were recorded. These are provided in the two paragraphs below.

The key issues and concerns that were raised are:

- Some of the water rights being allocated in the wrong places.
- The limited success with State-supported land reform projects in the area.
- The economic unfeasibility of many State-supported land reform projects in the area.
- The envisaged increase in the price of water in the Scheme.
- The inability to plant low-cost crops in the Scheme area, due to constantly rising input costs – i.e. wheat and maize were no longer propositions.
- The very difficult times for agriculture in the area, with very few farmers being able to farm at a reasonable profit – it was said that a very good farmer under very favourable conditions could generate a profit of 20% on his/her investment. It was suggested that only the top one third of farmers in the area make a profit.
- The growing tendency towards mechanisation to remain competitive, but which results in greater unemployment for farm workers.
- The seasonal nature of work and the high turnover levels of workers.
- The huge input costs required to make a profit from farming in the area (e.g. nets for grapes).
- Limited and inadequate State support for farmers.
- Banks no longer being interested in lending money to farmers.
- Insurance companies no longer being willing to insure farmers in the area.
- The tendency for farms becoming bigger and bigger to survive – smaller farmers are going under and only the large ones, who are able to compete internationally through huge capital outlays and mass-mechanisation, are managing to survive.
- Young people shunning agriculture – seeing it as a menial occupation and part of the apartheid past.

- Continuing pollution of water sources that threaten vegetable production.
- Government officials and politicians, and not local community members, potentially getting land as part of land reform programmes.
- The challenges faced in maintaining the 270kilometres of water canals in the Scheme. This required of every farmer to play his/her part and to recognise that 'it is his/her canal system'. The canals also need to be thoroughly maintained every ten years. Trees also need to be kept out of the canals and dead animals must be removed from the system.
- The growing pressures on the available water in the system by residential/town development, which may get even more intense with an expansion in manufacturing and tourism in the area.
- The future of the Association is uncertain. The imminent establishment of the Catchment Management Agencies was seen as posing a threat to the Associations.
- The new Water Act with its 'use it or lose it'-principle and possibilities or limits on water rights. Without water rights the farming land in the area was worthless.
- The roads in the Scheme are also the farmers' responsibility. The State does not have funds to maintain them.
- Frost damage that has cost the farmers in the area dearly over the last three years.
- There need for Scheme rules to be obeyed, which was not always the case.
- Those using more water than they were allocated were committing a crime. Water rights for domestic use did not include that used for a guest house – a business.
- A view that the name 'Scheme' created the perception of poor, struggling farmers, and hence needed to be changed.
- The appointment of a new operator and the expansion of the tourism facilities at the Boegoeberg Dam was seen as a prospect, but also a

very difficult venture, due to uncertainties regarding tenure arrangements, the length of the lease, the Water Act and the future of the Association.

The following were raised as opportunities:

- The existence of 4 000 hectares of un-allocated water rights in the area. There was a difference in opinion as to the extent of rights that were actually available, with a figure of 2 000 hectares also being mentioned.
- The possibility of lifting the Boegoeberg Dam wall by another 10 metres to increase water availability in the area. There was a difference in opinion as to whether this was feasible and desirable.
- The better utilisation of the available water in the system through more research, better technology/methods (drip and micro) and the better use of fertiliser.
- The use of the farms for nut cultivation and grapes for raisin and currant production.
- Aqua-farming, but only if the market is very clearly understood.
- Generation of hydro-electricity in the Scheme.

The meeting was in favour of:

- Greater collaboration between the Association, the State, the district and local municipality and local communities. It was proposed that technical involvement by municipal officials was as important as that of councilors.
- National government departments talking to each other and working together.
- The establishment of vegetable gardens in every settlement to assist with local food security and job creation. These gardens have to be fenced (to prevent the crops being eaten by goats), well maintained and used as community development projects.

- Mentoring of emerging farmers by established, successful farmers.
- The development of an innovative, long-term tourism plan for the area in which farming and water rights were also considered and provided for.
- The need to retain the existing additional water rights in the area, and not to lose it to other places.
- Strong and sustained State support for emerging and established farmers in the area.
- Supporting emerging farmers with livestock, fencing, equipment and technical support, and not necessarily with money.
- The identification of champions in the local community to lead the land reform programmes in the area.
- The road infrastructure leading to the Boegoeberg Dam being upgraded and maintained to assist in the expansion of the tourist economy in the area.

3.7.5 Summary

The many engagements and meetings throughout the KLM provided a wide and very valuable range of insights into the views, concerns, hopes and fears of the people living in the area, and also generated a very strong series of issues and opportunities. These are summarised in **Tables 48** and **49** below:



Table 48: Issues, as raised by the community, officials, councilors and stakeholder groups in the KLM

ISSUES
HARD INFRASTRUCTURE
The bad condition of roads in some of the settlements and in the Scheme
The lack of adequate high-mast lighting in especially new extensions
A lack of funds to maintain the Scheme infrastructure (canals and roads)
A lack of rubbish dumps and associated refuse removal services leading to unsightly heaps of rubbish, pollution and associated health problems
A lack of space in the existing cemeteries
SOFT INFRASTRUCTURE AND SOCIAL SERVICES
The absence of any medical doctors in the municipality
The lack of and limited opening hours of clinics
The lack of a pharmacy in the area
The lack of libraries in some settlements
The lack of secondary schools in some settlements with associated long and costly travelling distances
A lack of suitable land and buildings for crèches
A lack of training facilities both for higher education purposes and for people that did not finish Matric
A lack of parks, meeting rooms/venues/halls, sport and recreation facilities, especially for youth
The lack of dedicated meeting places/venues/halls for senior citizens
Slow response times by ambulance and police services in the area
A lack of access to the Internet, which is especially limiting for youth who have to use the service in doing their school projects
ECONOMIC
The lack of job opportunities, notably for youth
A lack of job opportunities for people with disabilities in the area
The loss of erstwhile factories, notably light industries and shops in the area

Persisting and deepening inequality and poverty in the area

A lack of chain shops and shopping complexes in many of the settlements

A lack of ATMs in some settlements

LAND AND HOUSING

A lack of land for businesses, grazing for animals, and housing

A large and growing housing backlog

A lack of provision of power, potable water and flush toilet facilities in new housing developments in the area

A lack of fencing of land made available to emerging farmers for grazing purposes

Animals (notably goats, but also pigs) walking around freely in settlements and eating everything they can find and posing a health risk

GOVERNANCE AND SERVICE DELIVERY

A lack of visibility of councilors and officials

A general sense and experience of 'lack of service delivery' by the State

A lack of engagement by the municipality with the people, leading to a feeling of alienation and 'being forgotten'

A lack of implementation of plans

A lack of feedback on progress with the implementation of development plans and job creation projects

A lack of transparency in the work/dealings/decisions of the municipality

Some people seemingly always winning contracts from and benefitting from the work of the municipality

Slow processing of land development applications by the municipality

Confusion regarding the difference between the various development plans, strategies and frameworks prepared by the municipality and other spheres of government

Weak LED and Youth development opportunities and services offered by the municipality

Jealousies between community members (1) in the same settlement and (2) between settlements regarding State investment and support

Table 49: Development Opportunities, as raised by the community, officials, councilors and stakeholder groups in the KLM

DEVELOPMENT OPPORTUNITIES
Tourism, including a wide range of unique natural, prehistoric, historic, leisure, adventure and water sport-based opportunities. The Orange River, the Boegoeberg Dam and the Balanseer Dam are seen as holding huge potential
Further expansion of the already highly successful irrigation Scheme and agricultural production in the area through the smart allocation of the available water rights in the area
The development of new farming activities in the area such as aquaculture
A strong availability of farming skills in the area, which could be used to develop a new generation of emerging farmers in the area
The availability of large tracts of un-spoilt land that could be used for grazing by upcoming farmers
Beneficiation, manufacturing and tourism development tied to (1) the agriculture sector in the area, and (2) the mining sector in adjoining districts in the NC Province
The solar energy potential and recent developments in this regard in the area
The use of a unique stone found in the area in the solar energy business and the creation of decent jobs in the process
The possibility of generating hydro-electricity on the Scheme
The creation of a 'new municipality' in April 2013, which holds the potential of a fresh start and of refocusing the efforts of everyone on the development of the people and place for the better
The location of nearly all the settlements in the area on the N10, which is an important regional connecting route in the NC Province. While the settlements are scattered, the movement of people and goods and services between settlements is possible and can be readily be undertaken by public transport

3.8.1 SYNTHESIS

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3.8.1 Synthesis of the Status Quo Analysis

The KLM is blessed with a vast, unique, rugged, and timeless natural beauty of a kind that strikes ‘the outsider’ as somewhat of a ‘majestic silence’. The Orange/Gariep River, which meanders through the topmost north-eastern part of the municipal area, is not only a very attractive sight, but also a source of life for those living in the area through the State-funded infrastructure investments made in the 1930s in the form of the Boegoeberg Dam, the Balanseer Dam and the 270 kilometres of canals in the form of a highly productive irrigation scheme. This Scheme like any form of infrastructure, however, requires regular and sustained maintenance. In addition to this, the fruits of the Scheme are not equally shared by those living in and working on it, with white farmers still by far in the majority on ‘the Scheme’. Post-1994, limited and only small-scale attempts have been made to address this state of affairs. This has meant that the establishment of a cohort of brown and black farmers that are more than just subsistence farmers is still a dream and, judging from current conditions and proposals, still some way off.

The one-sidedness of the local economy, both in terms of (1) sector – primarily agriculture and associated beneficiation activities (dried fruit, wine cellars) and (2) participants – white persons owning the farms, the factories and the shares in the beneficiation activities, means that there are very marked differences and highly visible divisions/cleavages in the KLM society. In terms of space, the lines are drawn by the Orange/Gariep River, the canal system and the N10: On the eastern side of the N10, between the road and the river, a generally, highly intensive white-owned farming operation is found. On the western side of the road, between the N10 and a series of rugged mountains, are a series of settlements (Grootdrink, Wegdraai and Topline) established for so-called Poor White communities, but which are now home to predominantly brown/Coloured communities. Life is very different on the two sides of the road. While not all the white farmers are living the high life, they are by and large still much better off than the brown/Coloured communities, of whom many are unemployed or employed on a seasonal and low wage-base on the

farms. The small and seasonal nature of wage income in these communities means that economic conditions are tough, life is hard and life chances for children are very limited. While the State social grant system provides much-needed assistance, keeps the community alive and sustains a few small local businesses, it does not provide enough of an injection to elevate these deeply impoverished communities out of poverty or to support endogenous economic activities and ensure a transition to a less State-dependent kind of economy.

In the absence of any real economic opportunities in the settlements on the western side of the N10, and without ownership of, or access to capital to start their own businesses, there is not much focus on, or consideration of the future. Life revolves on the here and now, and on looking sideways at what others have and are getting from the State as near-sole provider, and not on looking ahead. This not only means that jealousy abounds, but also that local politics revolve around petty issues and result in communities not seeing each other as partners or as part of a larger !Kheis family/community, but as adversaries trapped in a brutal zero-sum game in which the benefit/gain of one is the loss of another. The focus on petty issues and a fixation on highly localised, generally futile squabbles and politicking, disables the work of the local municipality. Everything is politicised and everything is read through a party-political lens. Nothing is viewed as well-intended and hence nothing is responded to with an open mind. Local development and the urgently required project of crafting and making a way forward out of poverty is far from the collective mind.

Housing, services and maintenance are by and large provided by the State, and which is, given limited budgets, struggling to keep up with local needs in these areas. This means that (1) poverty and inequality continues, (2) people do not allow each other a chance of trying to do something to improve their lives, and (3) local youth have little to look forward to. These conditions, coupled with the weak health and ambulance services, an unsatisfactory police service, a feeling of deep remoteness from any place of importance, long travelling distances to get to 'decent/chain' shops, alcohol and drug abuse, and

associated violence and a-social behaviour life, have led to a sense of futility and desperation. This hopelessness further erodes the social fabric and makes people, especially youth, highly exploitable and vulnerable to both insiders and outsiders. The longer these conditions prevail, the worse matters will become, and the harder it will become to change the lives of these communities for the better. In addition to this, without strong planning guidance (both regarding regional and local spatial development) there is a very good chance that such broader development and transformation ventures, should they materialise, could be undertaken in an unsynchronised, uncoordinated, non-aligned and wasteful form.

While the social and economic challenges are substantial, there are equally substantial opportunities and possibilities in the area. Key amongst these are the existing agricultural and associated beneficiation opportunities on the Scheme, which could be further expanded upon by making use of groundwater sources in the wider region. This will, however, require a long-term regional rural development plan for the area, high levels of sharing of the available land and water resources by all, adequate and sustained allocation of budgets, high levels of intergovernmental collaboration and the full support and participation of established farmers. Should this be done, the future could look very different for those currently struggling to survive on a day-to-day base in the settlements along the N10.

In addition to the more established agriculture and associated beneficiation sector, the area is embarking on a new era of solar power generation. While only in its infancy, the sector holds sizeable economic growth and job creation potential. Through the introduction of more stable lower to middle-income earners to the area, the chances of more retail and service activities locating in the area are also increased. It is crucial though, that participation in the solar era is open for all that live in the area, and not just made available to an elite group of local businesspeople and/or foreigners. In addition to this, the spatial development plans for the area have to be used to ensure that the resulting infrastructure and social investment in the KLM (1) takes place in a targeted

way in nodes along the N10, and (2) not in labour camps or private residential estates, and (3) that the whole community benefits from it.

The area also has huge tourism potential, which in contrast to many other parts of the province where mining activities abound, is not threatened by any of the existing and emerging economic activities. The tourism sector is in fact supported and can provide a further trigger for growth in the agriculture and beneficiation sectors by boosting demand for and local consumption of local produce. The managed and sustainable utilisation/exploitation of the tourism potential will, however, not happen by itself. The tendency in the region for people to do things for themselves only is also not conducive for this pursuit. Planning, collective endeavour and innovative proposals will be required, coupled with both a public and private sector working in unison and that are in it for the long run. Should this, however, be done, the long term benefits for a large number of inhabitants of the KLM can be significant. Of crucial importance is to maintain the niche location and level of exposure of the KLM in rural South Africa – i.e. not too distant (proximity to Upington and its international airport), not too inaccessible (easily within reach through the airport in Upington and the recently upgraded N10) and while rural, not too rugged nor too urban – in fact, just right!

While the KLM has many opportunities and real prospects, it also faces a series of threats and constraints that will need to be avoided and/or managed. These include the threat of global warming in an already very warm part of the country, coupled with a higher frequency and more severe extremities in temperatures, rainfall figures and the prevalence of frost. While this is a global phenomenon about which those living and working in the KLM do not have much control, there are ways of planning for and mediating the risks it poses. While these responses are varied and span many sectors and spheres of government, spatial planning can provide a framework in which these responses can be located and integrated. And, while only a small part of the larger puzzle, this SDF has a key part to play, and will do so, as will be elaborated upon in the later spatial development proposals-section.

Another serious, but at least more manageable concern is the maintenance of the Scheme-infrastructure and the protection and enhancement of its functionality. Key to doing so is a plan, a budget, wise leadership and a collective approach and sustained action. Where some of these are already in place, they need to be kept so. Where not, and where the levels of collaboration, also with the KLM and the NC Province are not yet what they could be, these need to be worked on, built out and strengthened. Associated with the ‘threat’ surrounding the functioning of the Scheme is the threat of the reduction and removal of the water rights in the area. This is not an issue around the established or emerging farmers in the area, but one of ensuring that the community of farmers on the Scheme and those extracting water from the Orange/Gariep River as a whole retain their rights for use in the KLM. In addition to that, to secure more rights if and when such rights should become available. Importantly though, this pursuit of ‘retaining and securing water rights’ should be done in a responsible way and not just be a case of selfishly wanting to ‘have and to hold’ on to the rights at the cost of farmers in other districts in the country.

3.8.2 Summary of the Strengths, Weaknesses, Opportunities and Threats

Figure 16: SWOT Summary

STRENGTHS:

- Natural beauty of !Kheis LM
- Orange River
- Boegoeberg Dam, Balanseer Dam and the 270km of canals
- Developed agricultural economic sector
- Irrigated farms lands
- International producer of table grapes and dried fruit
- The N10 and N8

WEAKNESSES:

- Unequal distribution of opportunities
- Dominance of seasonal work
- Low economic conditions of a large part of the population
- Dependence on grants
- Lack of economic opportunities in the majority of the settlements
- Petty politics
- Limited service provision
- Weak health and ambulance services
- Long travelling distances
- Unsatisfactory police service

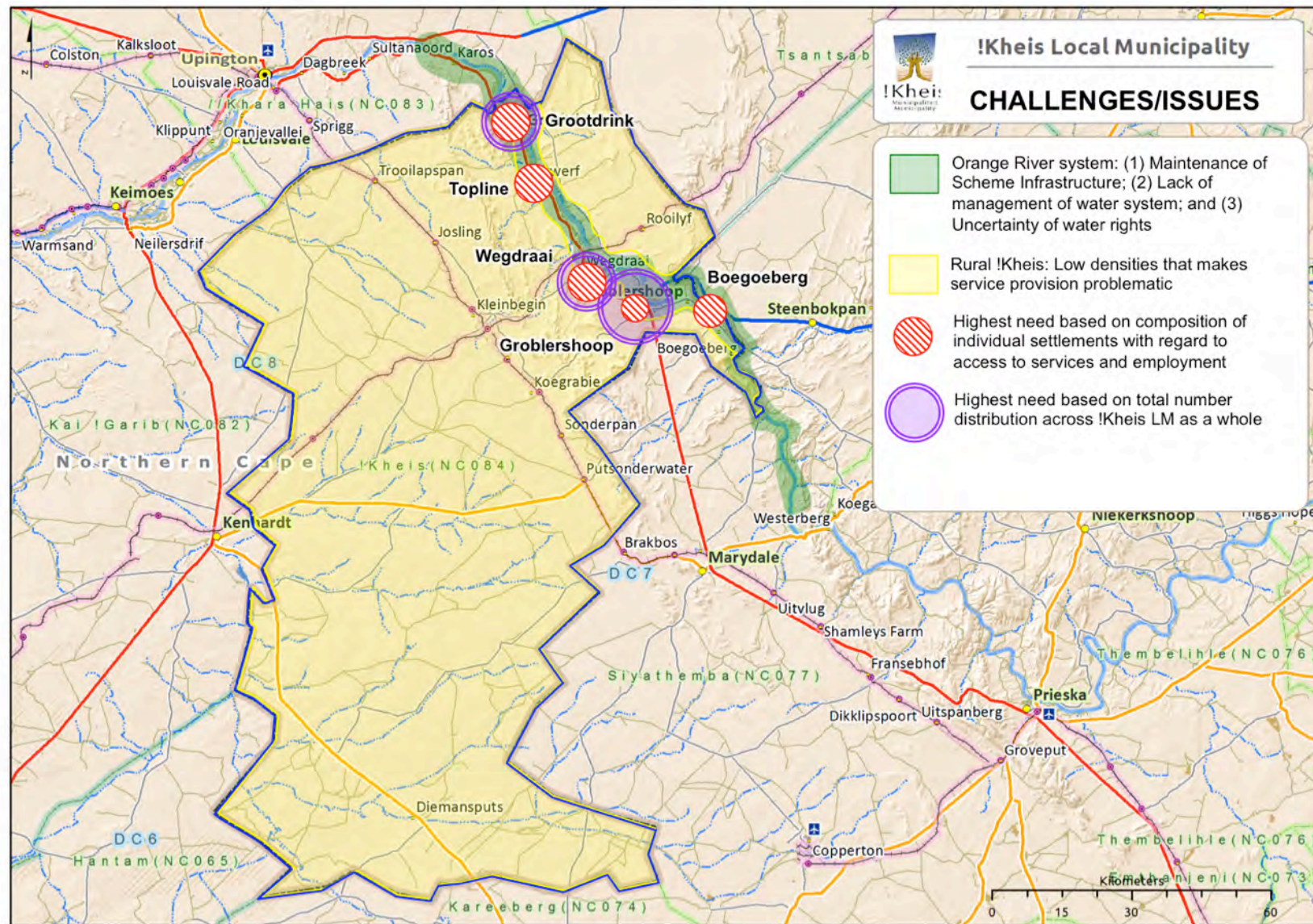
OPPORTUNITIES:

- Beneficiation related to the agricultural economy
- Possibility of supplying surrounding areas/developments (e.g. Gamagara Corridor) with food produced in the KLM
- Possibility of periodic markets to increase local community's access to local produce
- Solar power generation
- Tourism (based on scenic beauty and adventure sports)
- Maximise proximity to Upington for economic development (tourism and beneficiation), also making use of the International Airport and envisaged Industrial Development Zone
- Recently refurbished railway line running through KLM in a northwestern to southeastern direction on the northwestern side of the mountain range
- Development opportunities in Wegdraai if the Sishen Saldanha Bay railway line is opened for public use
- The SKA development in combination with the refurbishment of Upington International Airport and Industrial Development Zone will increase tourism and research/science-related traffic in the area

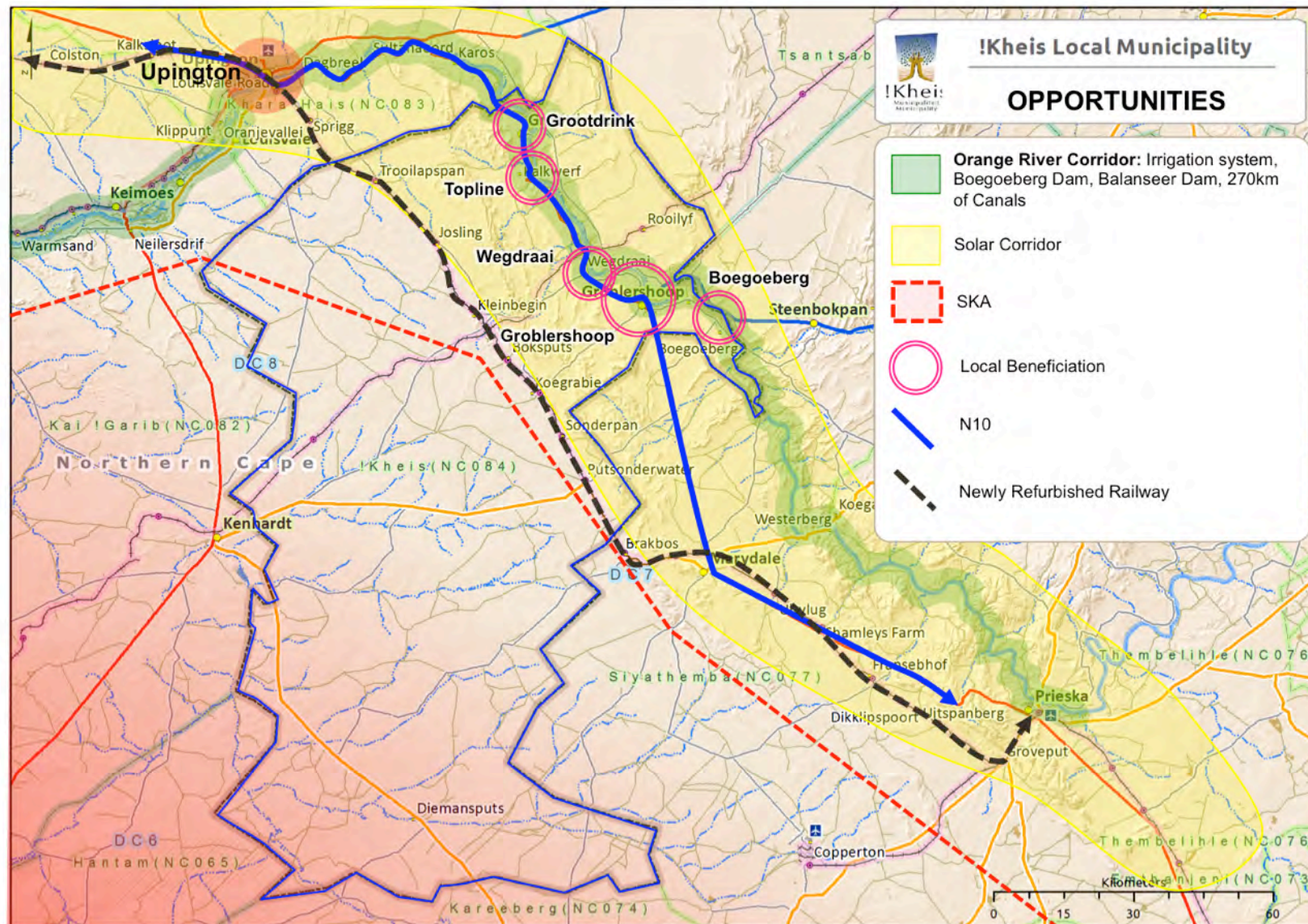
THREATS:

- Global warming
- Maintenance of the Scheme infrastructure
- Possible reduction and removal of water rights
- Lack of management of Orange River – upstream activities can negatively affect water quality and have a detrimental effect on agricultural production and tourism in the KLM. It is crucial that current practices and their impact on water quality be ascertained
- Invasive plant species, such as the *Prosopis* tree, threatens local biodiversity and ecosystem services

Map 69: Challenges/Issues facing the KLM



Map 70: Opportunities in the KLM



CHAPTER 4: THE FUTURE



4.1 SCENARIOS

Scenarios first appeared in the 1960s. Since then they have become a key feature in futures research. Scenarios have been defined as “*hypothetical sequences of events constructed for the purpose of focusing attention on causal processes and decision points*”³. As such, scenarios do not seek to present accurate future predictions, but rather to highlight key drivers/trends shaping the future. In doing so, they endeavour to:

- Steer individuals, groups and organisations away from actions that could lead to undesirable futures; and/or
- Prepare them for futures very different from the present and the past.

Essentially, they seek to propose alternative images/maps of the future and to direct and guide individuals, groups and organisations towards more desirable futures and away from less desirable ones. This they do by:

- Reminding individuals, groups and organisations of what is possible and ‘what can be’, if (1) they change their ways for the better, (2) local frame conditions improve, and (3) conditions and forces in the external arena take a favourable turn; and
- Warning individuals, groups and organisations of what could happen, if (1) they continue along set, detrimental, damaging, destructive ways,
- (2) local frame conditions remain the same, and (3) external conditions take a turn for the worse.

In this section, *three possible scenarios* are presented, based on past trends and patterns and local frame and external contextual conditions, internal and external drivers and the experience of other places and people finding themselves with similar initial conditions and profiles and being impacts upon

by similar drivers/trends. These scenarios are labelled based on their most prominent features.

³ Kahn and Weiner (1967: 6), as quoted in Meyer, Engela, (2005). *Possibilities, probabilities and prospects: Finding the future in planning*. Unpublished Masters-degree Dissertation in Town and Regional Planning, University of Pretoria.

4.2 SCENARIO 1: Me Myself and I with only the Unbearable Brightness of the Sun as Company

Selfishness and jealousy, coupled with an ever harsher climate have taken their toll. Instead of coming together and finding a way of ensuring that everyone is given a chance to share in the opportunities and benefits of the location (1) on the Orange/Gariep River and (2) in the Scheme, communities in the KLM have by and large tried to get as much and keep as much of this/these to themselves. In some cases the 'holding on' of some, and the 'wanting some' of others has resulted in anger-and-desperation-driven land and house-invasions. In others, violence has been used to drive people from the areas where they were living. As if to punish this selfish behaviour, nature turned against the people. Unbearably hot summer months were ever more frequently followed by sudden and often violent late summer storms and spells of destructive winter frost. This has seen the region's economy undergo a serious decline, with only the solar companies flourishing. Due to the difficult conditions, and the ever-growing threat of desperation-fuelled violence, the employees of the solar plants live in gated, high-security small workers' camps close to the solar facilities.

In addition to all of the social, economic and natural tragedies, the absence of a collective, communal focus, has led to a lack of care and repair of the canal scheme and the road network. The water in the canals, already far less than what is required for agricultural purposes, was reduced even further as increasing numbers of farmers stopped playing their part in the maintenance and repair of the Scheme infrastructure. A steady cutting back by the State of water rights in the area, due to pressures in the major urban areas and newly established growth points in larger towns in the Northern and Eastern Cape Provinces has aggravated matters further and resulted in a steep increase in the illegal extraction of water far in excess of the allocated rights. Due to the lack of State capacity to regulate and enforce laws and rules, life in the KLM is marked by ever more frequent periods of very low water levels and often even days with no water in the canal.

Under these conditions the communities living in the settlements of especially Grootdrink, Gariep, Wegdraai, Topline and Boegoeberg experience a rapid out-movement of their youthful members to the urban areas in Gauteng, the Western Cape and increasingly so, other parts of the SADC region. Due to the desperate situation on the Scheme, and the huge influx of low and semi-skilled youth from other rural areas in the wider SADC region, these youth take any job they can get, even very low paying work. This leaves them with very little to send back home in the form of remittances. With the State grant/welfare system having all but collapsed over the years due to a badly performing national economy, life in the KLM becomes highly unbearable. Those who are not employed in the solar industry or in the retail



and personal service sectors, and who do not have access to land, but have relatives and a support network elsewhere, leave the area.

These conditions result in the municipal level of governance in the area all but collapsing. In a short span of time the !Kheis Local Municipality exists only in name and, due to a very small staff contingent, endeavours to, but is hugely ineffective in undertaking and maintaining the most basic of municipal service provision. In addition to the low levels of municipal capacity the weak economic conditions have led to all services being provided on a strictly cash-only system, which is run by a money-lender who uses hard means to secure payment. Spatial development planning, environmental management and capital investment is all but non-existent.

Over time the harsh living conditions and out-migration result in there no longer being much of a reason to stay in the area for anyone, even the die-hard solar power operators. This results in the settlements in the area becoming ghost towns with small scatterings of nomadic farmers eking out a life herding drought-resistant goats. As the pressures on the land and lack of management of the natural vegetation take their toll, the goat herders also leave the area, the sun at their backs. The departure of human life from the area sees what once was the KLM become a part of 'nature' again, with only the ruins of the Scheme and the hard infrastructure invested in the area reminding the occasional truck-driver on the pothole-ridden N10 that there once was a vibrant and thriving community living in the area.

4.3 SCENARIO 2: The Power of Community: Seeing the (Sun) Light and so Much More

Part pragmatism, part the desire to do the right thing, the KLM community has come together and embarked on a journey of collectively finding a way by which everyone can benefit from the possibilities the Scheme offers. At the same time, focused research into the development of desert-resistant crops, water capture, purification and re-use, novel irrigation and agricultural production techniques, and beneficiation opportunities, coupled with an incisive and focused regional rural development programme, has seen the dawning of a new era in the KLM. Huge advances in animal husbandry and crop production have not only seen a far greater series of products being made available for local and regional consumption, but also provided a huge array of raw products for beneficiation in a large and growing number of factories in the settlements of Groblersdal, Grootdrink, Wegdraai and Topline located along the N10. In addition to the beneficiation of locally-produced agricultural products the N10 is used to import and export raw and semi-beneficiated products to and from a variety of destinations in the SADC region. The international airports at Upington



and Kimberley, the IDZ at Upington, and the resuscitated IDZ and international airport at Mahikeng provide import and export services to a wider, more global market.

In contrast to days gone by in which selfishness and jealousy dragged down the people of the KLM, there now is a focused drive to secure and sustain a better future for all. Driving this initiative along is a dedicated, capable and community-minded group of community leaders, farmers and representatives from the local, district and provincial government. One outcome of the work of this group has been a high-level, easily understandable five-page strategic action plan that has framed and guided all subsequent planning, budgeting and implementation in the area. Emanating from this has been a series of land reform, rural development, infrastructure investment and SMME-support and maintenance programmes. In all of these ventures the focus has been on ensuring transformation, redress and job growth. A spirit and series of practical steps mark the interaction between the established and emerging farmers, with the State providing the necessary and carefully targeted support services. It is especially the regular visits of officials from national regional offices and provincial sector departments, coupled with the roll-out of the massive jobs-for-degrees youth development programme that have played a very strong role in what has been described in textbooks on rural development as a small, but growing miracle.

The improvement in the local and regional economy and in the lives of communities in the municipality has also meant more income for the institution and assisted it in a much improved service offering. This in turn has seen civil strife, unrest, endemic unhappiness and service protests becoming a thing of the past and a steady stream of investors following in the footsteps of the factory owners setting up shops, offices and restaurants in the area. As a result of these improvements in the economy, and the huge improvements in education and health services in the area, youth now get both a much better start to their lives and a dream to work towards. This leads to far more youth finding employment in the area, and a growing number of them starting their own businesses. These opportunities have also expanded with the introduction of wider regional (SADC) development plans spanning national borders, and in which tourism, mining, energy generation, agriculture and beneficiation have been key drivers. With the growing amount of research undertaken in the pursuit of new economic sectors, the booming solar sector, and the preparation of strategic and innovative regional development action plans, the KLM area has become a hive of research activities. This has led to establishment of a number of research and development centres with researchers from around the world undertaking their work in a variety of areas in the area, and in doing so, boosting the local economy even further.

Spatially the KLM has become a tightly interconnected micro-region, with a range of smartly designed housing types and developments, the maximum retention of agricultural land, and an efficient bus system the most notable and core features of the system. Through a focus on developing the area in such a way that it is attractive for local residents and



tourists alike, a unique local character has been developed, which has proved to be very popular with a wide range of tourists, including those traveling from Gauteng to Cape Town on the newly opened tourism meander passing by Wegdraai stopping over at one of the many Bed and Breakfast facilities and restaurants at the Balanseer Dam. Many stay on for a longer period of time, exploring the many unique historical and natural resources of the area. A highpoint on the tourism calendar is the annual meeting of representatives from river and irrigation-based agricultural communities and water user associations at the Boegoeberg Dam Spa. A number of tourists have also returned to the area to set up businesses and undertake research in a number of sectors, including the use of many of the unique stones in the area in amongst others, the solar industry.

In demonstrating true leadership, tackling challenges head-on, and using human ingenuity and compassion in this pursuit, it has been possible for the people in the KLM to transform the economy, the place and the institutions so as to serve all its inhabitants. In doing what was back in the early 2000s seen as impossible and for many unimaginable, the area with its novel irrigation scheme, brought about through hard work and persistence in the 1930s, was given a new lease of life and continued along the established and deeply embedded course of vision-led, decisive, individual and collective action for the common good. Through embodying something of the visionary and pioneering spirit of its past, the future of the KLM looks brighter than ever before.

4.4 SCENARIO 3: More of the Same: Some Sunrises, but ever More Sunsets Abound

While many local and 'outside' development enthusiasts and practitioners expressed their concerns and put forward proposals for positive change and improvement, and there was ample time and opportunity to make a decisive and change for the better, this was never done. Caution, an ostrich-style pre-occupation with day-to-day matters, a concern with selfish interests and jealousy, party politics and inertia won over from calculated risk-taking and vision-inspired decisive action. Little was done to attract new investment to the area and plans that were on the table were mauled over year after year, with little coming from this. Piecemeal and small-scale maintenance of the Scheme was chosen above radical upgrading and decisive and large-scale maintenance. Calls from those excluded from the farming activities on the Scheme for land for grazing and for cultivation went largely unanswered. Land reform was not undertaken with the necessary attention, energy and care. While a limited transfer of land took place, this was done without the necessary support and real commitment on the side of the State and established farmers to make a success of it. Of the urgently required job creation programmes very little was seen. The few State-driven ventures consisted of low-impact, short-term, and by and large futile LED projects (e.g. brick-making, chicken broilers, and essential oils). Serious investment in, and concerted development of the secondary/manufacturing sector was not actively pursued.



Under these conditions the already dualistic economy with ‘those who have’ concentrated on the few profit-generating farms on the Scheme, or living in primarily Groblershoop, and ‘those who do not’, in Grootdrink, Gariep, Wegdraai, Topline, Boegoeberg, is growing more so. Of a reduction in poverty and inequality very little is to be seen. Housing conditions remain a bone of serious contention, with small-scale interventions washed away by a growing, youthful population and rapid household formation. Health, education and welfare services do not improve, and in many cases just get worse. Overburdened and over-staffed, and lacking civil-minded, strong and caring leadership, the municipality struggles to provide basic services, let alone take on the many tasks communities expect it to undertake. With intergovernmental development planning, collaboration, cooperation and integrated implementation remaining an ideal on paper, communities see and feel their lives not getting better, and even getting worse. This leads to ever more frequent service protests and civil instability, vandalism and crime. This situation is worsened by a growing inability of the State to maintain the social grant system and the transfers to the municipality. With youth unemployment growing, gangs becoming an ever more visible phenomenon and serious acts of violence, armed robbery and general disturbances continually on the rise, and the police unable to deal with it, the SA Defence Force is frequently called upon and deployed to contain the anger and ever-more frequent euphemistically-called service delivery protest. Often this results in serious injuries, which fuels the already strained situation and alienates the State ever-further from the people.

Given the troubled state of the local economy, the harsh living conditions and the serious crime in the area, out-migration by those who can ‘escape’, is constantly on the rise. Over time, this results in most of the members of the middle class having left the area. With (1) global warming leading to climatic conditions not favouring the agricultural activities in the area and (2) the growth of highly productive mega-farming activities elsewhere in Africa, the Americas and South-East Asia, more and more farmers leave the area. While there are enough willing and aspiring farmers to take over from those that have left, a lack of technical support, financing, new seeds and technologies and equipment sees these emerging farmers never producing the quality and volumes that are required to make a decent life, and to provide enough of an input for the already fragile downstream local manufacturing/beneficiation sector economy. Life for those who stay on is very much like riding a monocycle on a very slippery knife-edge with the constant threat of a sharp drop into very hard and troubled times. How long conditions will remain as such is an open question, but there are ever-more of those living in the area who believe that the fall into the feared hard times is less a case of ‘if’, and ever more so one of ‘when’.



CHAPTER 5: SPATIAL DEVELOPMENT VISION, MISSION AND OBJECTIVES



5.1 VISION AND MISSION

In line with the vision of the !Kheis Local Municipality, as set out in its IDP, the **spatial vision** that guides this SDF, and that is pursued in the spatial development objectives, is as follows:

A diverse, well connected, vibrant, economically integrated and socially cohesive municipality in which all residents enjoy a decent quality of life.

The accompanying **spatial mission** of the municipality is to ensure:

- The provision of a well-functioning, affordable and reliable public transport service to ensure connectivity between the various settlements;
- The provision of basic municipal services in all the settlements in the municipal area;
- The provision of access for all to housing;
- The spatial location of future land uses in a logical, efficient and sustainable manner;
- The provision of health, education and early childhood development services that meet the needs of all the people in accessible buildings;
- The provision of safe and maintained recreational facilities in all the settlements in the municipal area;
- The provision of land for grazing of animals and the growing of fruit and vegetables; and
- The provision of land, equipment, technical support and mentoring to assist in the establishment of beneficiation and manufacturing activities in all the settlements in the municipal area.

5.2 SPATIAL DEVELOPMENT OBJECTIVES

The following Spatial Development Objectives for KLM are based on the spatial vision and mission statement, issues raised by stakeholders and the findings of the spatial analysis:

- | | |
|---------------------|---|
| Objective 1: | To improve the accessibility to and quality of government services; |
| Objective 2: | To develop settlements that allow their inhabitants to live dignified lives; |
| Objective 3 | To increase participation of all the inhabitants of the municipality in the local and regional economy; and |
| Objective 4 | To provide an attractive settlement for residents, investors and tourists. |

5.3 SPATIAL DEVELOPMENT STRATEGIES

In order to address the challenges present in the KLM, four Overarching Spatial Development Strategies have been developed:

- Improve the quality and accessibility of Government Services, especially health services and education;
- Create Community Facility Clusters in every settlement that are not only focused on providing government services, but also on creating spaces for youth development;
- Create jobs through a focus on beneficiation, agriculture, tourism and exploitation of the construction and operational stages of the solar projects in the area; and
- Develop Groblershoop into an attractive Kalahari village that can attract residents, investors/businesses and tourists.

5.4 UNPACKING THE SPATIAL DEVELOPMENT STRATEGIES

5.4.1 Introduction

In this section, the four Overarching Spatial Development Strategies are unpacked into smaller components that need to be completed in order to achieve the Overarching Strategy. Once the Implementation Framework is completed each component will be linked to a specific project of an Implementation Programme.

5.4.2 Spatial Development Strategy One: Improve the quality of Government Services

Overview

In general, the settlements in the KLM have limited access to quality health services and there is significant space for improvement of the standard of education. With regards to health services, there is a need for better equipped clinics with more nurses and longer hours of operation, and with faster access to the hospital in Upington. With regard to education, Early Childhood Development Centres tend to be located on sites that are not large enough for the use/activity and without the necessary services (i.e. water and sewerage), which is not conducive for a healthy life. At primary and secondary school levels, the quality of education has to improve to enable youth to get access to and make a success of university education and/or to move to places with more employment opportunities and stand a chance of getting a job at such places.

What is required for the implementation of this strategy?

Table 50: Requirements for the implementation of Spatial Development Strategy One

SDS 1	PROJECT DESCRIPTION
SDS 1.1	Preparation of a KLM Health Service Revitalisation Plan based on a comprehensive study of the exact needs of each settlement.
SDS 1.2	Identification of appropriate sites for Early Childhood Development Centres in consultation with existing service providers and communities in each settlement.
SDS 1.3	Ensuring that all government investment, notably in the areas of education and health services, is provided in the proposed Community Facility Clusters in each of the settlements.

5.4.3 Spatial Development Strategy Two: The creation of Community Facility Clusters

Overview

Currently, facilities providing government services are scattered across the settlements in the KLM in no specific pattern, and with no specific spatial outcome in mind. As such, there are no real nodes of note in these settlements, other than in Groblershoop, and no spatial advantage is gained in terms of the potential attraction of business activities to government service-nodes in these settlements.

In terms of this strategy, it is proposed *that government services are clustered in each node*, and further enhanced with paved, greened and shaded squares linked to entertainment and sports facilities for the youth. These Community Facility Clusters will not only make small-scale economic activities in these areas more feasible, but also provide spaces where periodic markets or festivals can be held.

What is required for the implementation of this strategy?

Table 51: Requirements for the implementation of Spatial Development Strategy Two

SDS 2	PROJECT DESCRIPTION
See SDS 1.3	Commitment by KLM, the FZMDM and all relevant provincial government departments to the clustering of services from hence forward.
SDS 2.1	Establishment of a Community Facility Cluster Task Team to manage the development of these clusters and ensure that a functional rural-regional approach is used in the allocation of the various government facilities/services in the various settlements in the municipality.
SDS 2.2	Development of detailed design guidelines for the development of the Community Facility Clusters that take the extreme climatic conditions into consideration.
SDS 2.3	Detailed delineation of the Cluster areas.
SDS 2.4	Maintenance and upgrading of Cluster areas.
SDS 2.5	Only allowing applications for non-residential land-uses that could strengthen the Community Facility Clusters.

5.4.4 Spatial Development Strategy Three: Job Creation

Overview

Job creation through:

- Beneficiation, using the N10 as conduit for the import of raw and semi-completed products, and the export of completed products, and also using Upington International Airport in this venture. Part of this can be the beneficiation of local agricultural produce;
- Utilizing and further exploiting opportunities in the farming sector through research into better farming techniques, better use of water,

and more suitable livestock and crop farming;

- Expansion of the tourism sector by (1) using the river, the dams (Boegoeberg and Balanseer dams) and all the prehistoric and historic attributes in the area, and (2) developing Bed & Breakfast establishments tied to sleep-overs of people on tour to and from Namibia and the Namakwa flowers; and
- Making the most of the solar projects during the construction operational phases.

What is required for the implementation of this strategy?

Table 52: Requirements for the implementation of Spatial Development Strategy Three

SDS 3	PROJECT DESCRIPTION
SDS 3.1	Undertaking a detailed study of 'real economic opportunities' in the municipality.
SDS 3.2	Establishing a Local Economic Development Forum to focus on maximising on economic opportunities in the area, including negotiations with relevant sector departments in the NC provincial government and the local business and farming community.
SDS 3.3	Establishing a Youth Development Forum to ensure the involvement of youth in all economic activities in the area.
SDS 3.4	Identifying sites for the start-up/roll-out of economic activities.
SDS 3.5	Entering into negotiations around land swapping with the private sector, should State and Commonage Land not be located in areas suitable for utilisation by the communities in the municipality.

5.4.5 Spatial Development Strategy Four: Development of Groblershoop as an attractive Kalahari village

Overview

Development of Groblershoop into an attractive ‘Kalahari Village’ and regional node for beneficiation of local produce, storage and distribution point for products from the area and raw material to be beneficiated further, coming into the area. While provision is also made for such economic activities in the other settlements, Groblershoop will perform a nodal function for these activities.

What is required for the implementation of this strategy?

Table 53: Requirements for the implementation of Spatial Development Strategy Four

SDS 4	PROJECT DESCRIPTION
SDS 4.1	Commissioning the preparation of an urban design framework that will both enable (1) the development of Groblershoop into an attractive ‘Kalahari village’ and (2) the development of a vibrant agri-processing and manufacturing economy through: • Connecting up Groblershoop and Sternham through activities that can grow the local economy and create jobs using a ‘job creation corridor’, and by providing adequate shaded and shielded walkways for pedestrians from both settlements; and • Providing a proper open market space with adequate municipal services, shade and protection from the heat and the rain, for informal traders in Groblershoop.
SDS 4.2	Putting in place adequate pollution control measures in the areas where beneficiation will be undertaken to protect the crucially important water source in the area.

SDS 4.3

Taking great care when considering land-use development applications in the area to not allow the energy derived from concentration of complimentary land uses be dissipated.

CHAPTER 6: ! KHEIS LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK



6.1 INTRODUCTION

A Spatial Development Framework guides and informs all decisions relating to the use, development and planning of land, and thus indicates the desired patterns of land use, directions of growth, urban edges, special development areas and conservation areas in a municipality. However, not all components of the Overarching Spatial Development Strategies are spatial in nature. For ease of use, the spatial components of the KLM SDF are discussed in this chapter while non-spatial components are discussed under Chapter 4: Programmes and Projects

6.2 MAJOR STRUCTURING ELEMENTS

6.2.1 Introduction

The base of the spatial structure is made up of the existing structuring elements that largely dictate the location of development and the direction of growth. In order to align with the Bioregional planning approach of the NCPSPDF (2012), bioregions need to be identified on a district municipal level and local municipalities need to identify Neighbourhood Areas as 'fine-grained planning units' to ensure constructive community participation.

6.2.2 Bioregional Structuring Elements

The FZ Mgcawu District Municipality (FZMDM SDF 2012) demarcated two bioregions in the KLM, namely (1) the South Bushmanland region, and (2) the Orange River Corridor (see **Chapter 2.4.2** of this report for a more detailed discussion in this regard). The majority of KLM's population, as well as all the major settlements, are located in the Orange River Corridor, for which the development of an Orange River Corridor SDF is proposed in which all the relevant municipalities would have to be involved (see **Map 71** for the bioregions demarcations).

No Neighbourhood Areas within settlements will be identified, as the KLM settlements are small in nature, and do not possess the necessary complexity to warrant such demarcations.

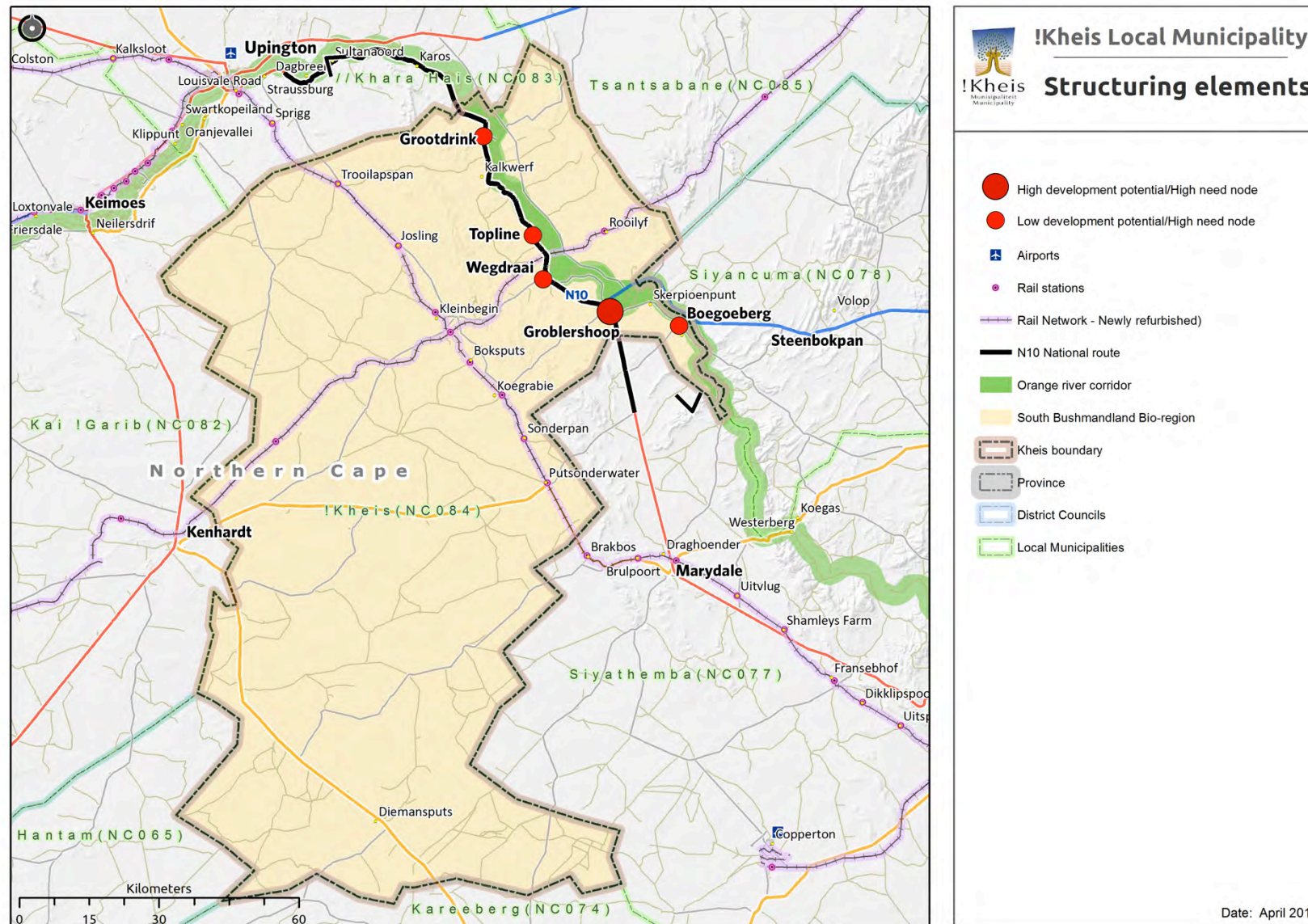
6.2.3 Major Physical Structuring Elements

The major physical structuring elements are:

- The Orange River;
- The N10 running along the Orange River;
- The N10 highway runs through the KLM along the Orange River connecting Upington to the north of the KLM, with Britstown to its south, and passing through all the main settlements in KLM;
- In Groblershoop the N8 connects the KLM with Kimberley to the east;
- The R383 links Kenhardt to the west of the KLM to the N10 in east;
- The Shishen/Saldanha railway line (built solely to transport iron ore from Shishen to Saldanha) runs in a southwesternly direction through the KLM, crossing the N10 highway and the Orange/Gariep River at Wegdaai to the north of Groblershoop. Stations and siding along the line include Rooilyf, Oorskruis and Rugseer;
- A second railway line linking Upington with De Aar crosses the Shishen/Saldanha railway line at Oorkruis. Other stations and sidings along the line include Sprigg, Trooilapspan, Josling, Kleinbegin, Bokspuits, Koegrabie, Sonderpan and Putsonderwater;
- The towns of Groblershoop, Grootdrink, Wegdraai, Topline and Boegoeberg;
- Boegoeberg dam and canal system; and
- Irrigation farming made possible by the Boegoeberg dam and canal system.

Map 71 depicts the bioregional and structuring elements as discussed.

Map 71: KLM Structuring Elements



6.3 MUNICIPAL NODES, CORRIDORS AND LINKAGES

6.3.1 Local Municipal Nodes

The towns in KLM are not identified as major nodes on a provincial level and on a municipal level only Groblershoop contributes considerably to the GVA. According to the NCPSTDF (2012), only Groblershoop has 'high development potential' in KLM and is classified as a Service Centre in terms of its economic base. Although identified as a settlement with 'low need' a close eye has to be kept on the settlement as it has seen a 42% population growth between 2001 and 2011 and currently houses 30% of KLM's population. If the current growth trends continue Groblershoop is in danger of falling behind in service provision and struggle to provide employment.

Table 54: NCPSTDF (2012) Integrated Settlement Profiles

Settlement	Population	Economic Base	Development Potential & Need	Investment Type
Groblershoop	Medium	Service Centre	High development potential /Low need	Infrastructural Capital and Basic Services
Grootdrink	Medium	Agriculture	Low development potential / High Need	Social capital
Wedraai	Small	Agriculture	Low development Potential /High Need	Social capital
Boegoeberg	Small	Agriculture	Low development potential/ High need	Social capital
Topline (Gannaput)	Small	Agriculture	Low development potential/ High need	Social capital

6.3.2 Development Corridors and Linkages

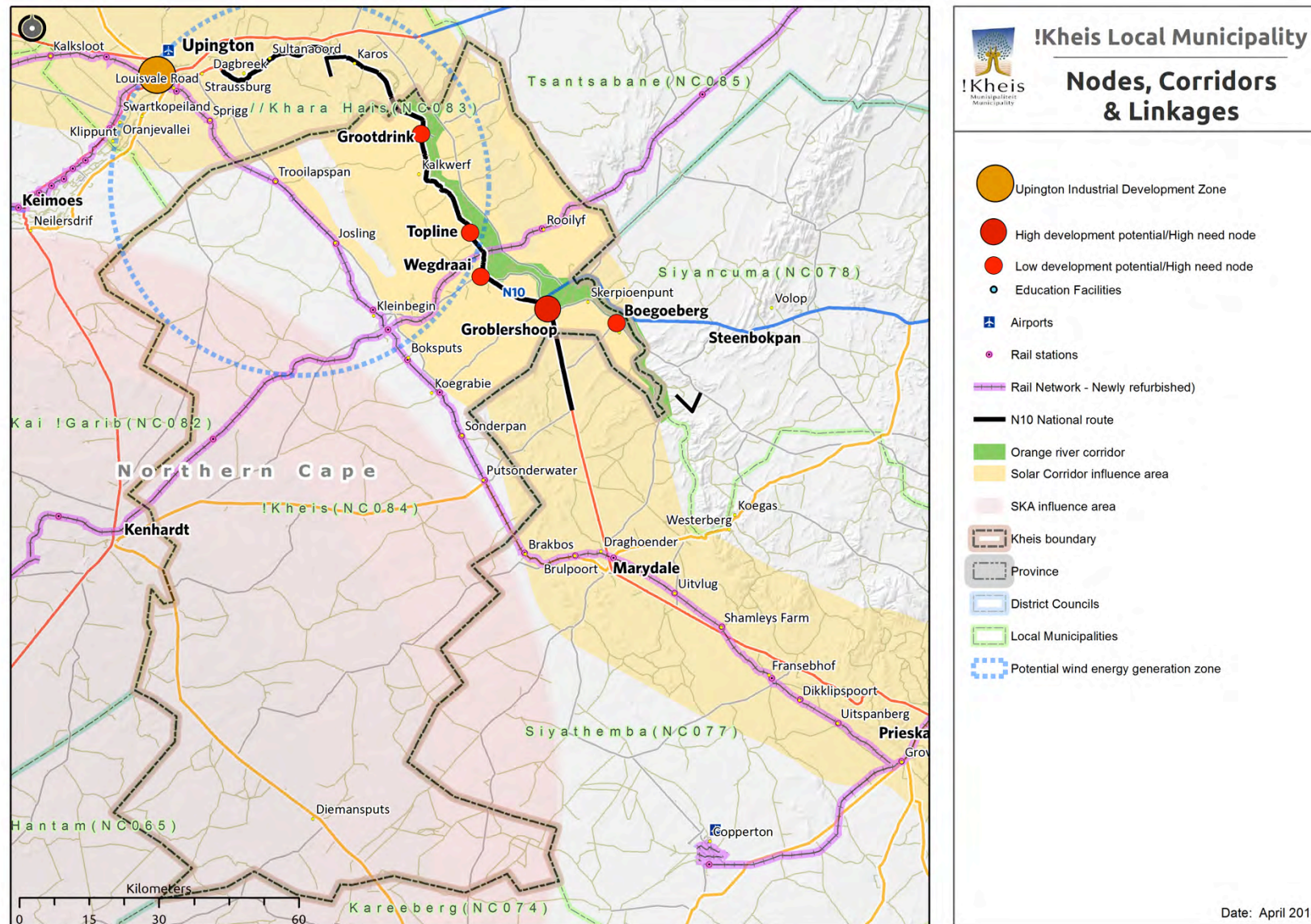
According to the NCPSTDF (2012) and FZMDM SDF (2012) the following major corridors, zones and linkages are present in KLM (**Map 72**):

- Potentially high wind energy generation zone;
- Potentially high solar energy generation zone;
- Solar corridor from Britstown along the N10 Freeway to Namibia;
- Square Kilometre Array (SKA) reserve; and
- The Orange River Corridor.

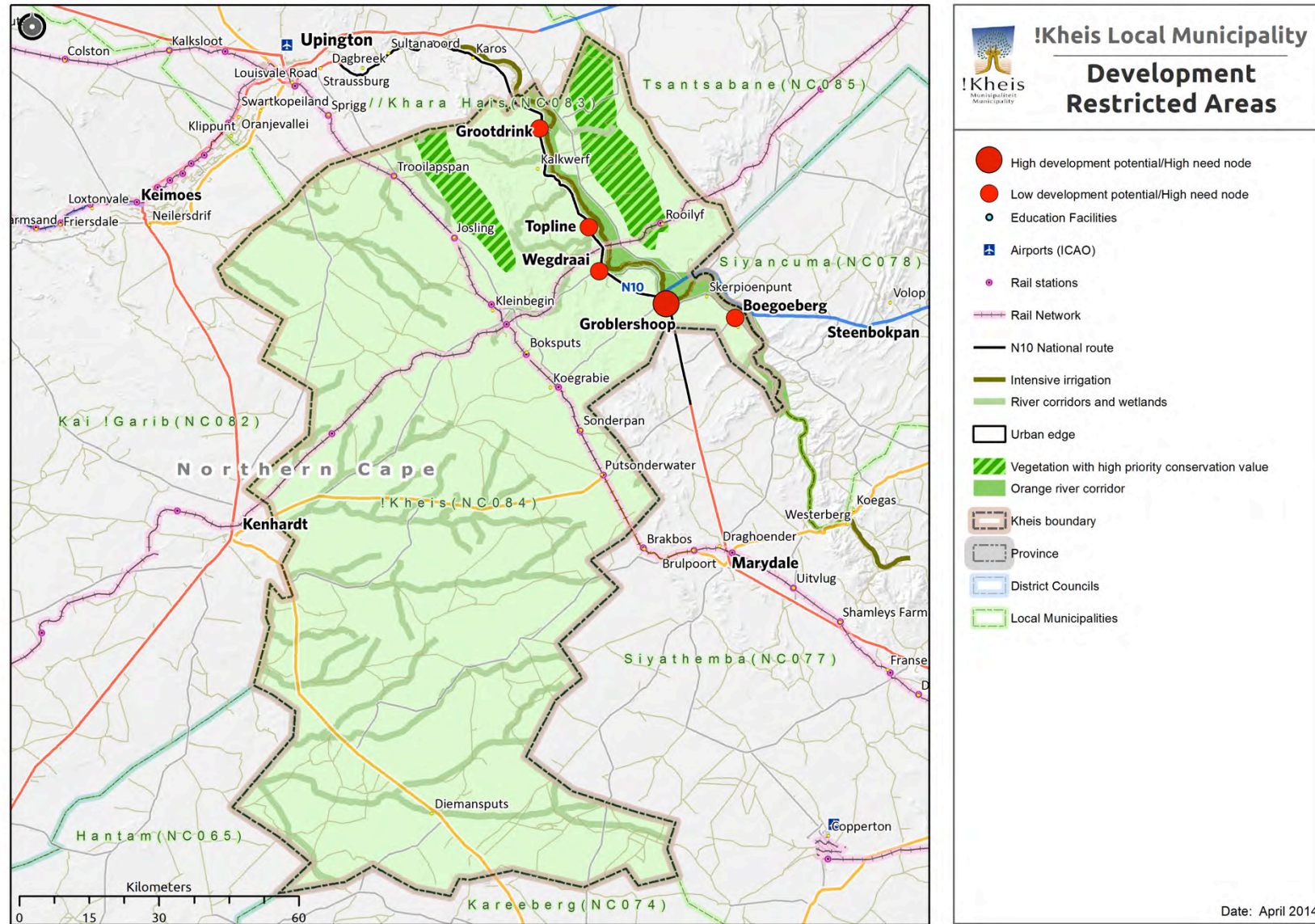
6.4 PROTECTED AND DEVELOPMENT RESTRICTED AREAS

The majority of KLM, specifically the southern sections, has a limited need for conservation due to the low human occupancy/use levels. There are, however, a few sections in the north of KLM with high conservation priority. In addition to this, the river corridors and wetlands, as the lifeblood of the KLM, need to be protected in order to sustain the local communities and plant and animal life. **Map 73** provides an overview of the protected and development restricted areas in KLM.

Map 72: KLM Nodes, Corridors and Linkages



Map 73: Conservation and Development Restricted Areas



6.5 SETTLEMENT DEVELOPMENT FRAMEWORKS

6.5.1 Introduction

This section provides (1) a short description of the key spatial challenges in each settlement, (2) a rationale for the proposed development framework, and (3) an illustrated development framework. For a more detailed description and discussion of the spatial structuring elements and development guidelines, please refer to **Chapter Seven**.

Chapter 6 focuses on the main five settlements in KLM namely Groblershoop, Grootdrink, Wegdraai, Topline and Boegeoberg. Although other smaller settlements exist (notably Gariep and Opwag), their small size makes detailed planning for them impractical. Using the NCP SDF (2012) 'Settlement Invest Typology Rationale', they could be classified as a 'Category 3 Investment Type-settlements', which means that they will receive limited capital and social investment.

6.5.2 Groblershoop

Key Spatial Challenges

The following key spatial challenges were identified in Groblershoop:

- Relatively high level of population growth rate (42% increase since 2001) in comparison to the other settlements in the KLM;
- Unhygienic environment created by the lack of refuse removal;
- Weak quality of roads;
- Lack of land for crèches and other public facilities;
- Lack of high-mast lighting making the area unsafe;
- No entertainment facilities for the youth;
- Lack of coherent structure to the location of public facilities;
- High levels of informal dwellings (34% of dwellings in the KLM are informal);

- Lack of linkage between Groblershoop and Sternham; and
- The town does not optimize its interface with the N10.

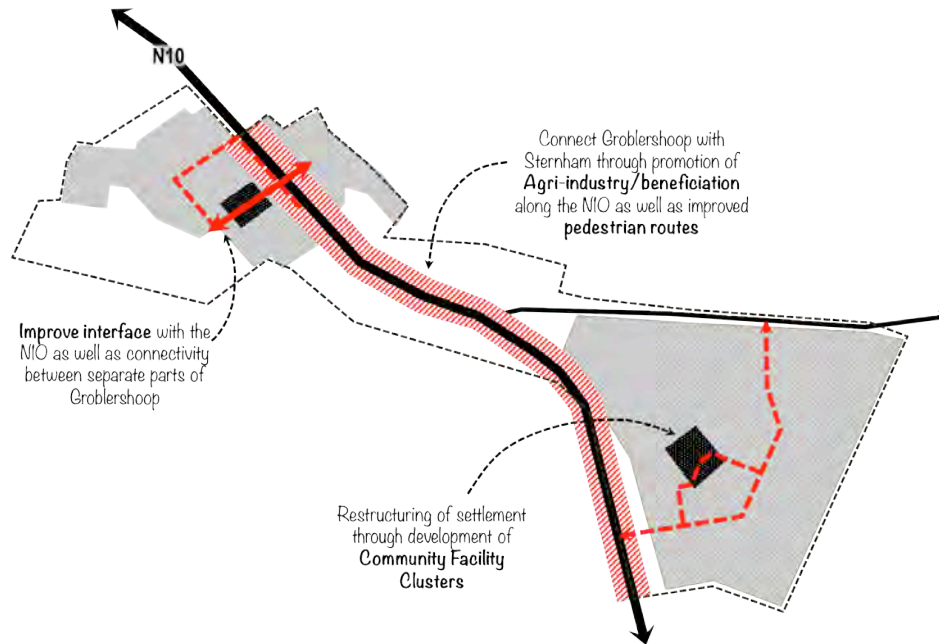
Rationale for Development Framework

Overarching Spatial Development Strategy Four aims to develop Groblershoop into an attractive Kalahari village and a centre of beneficiation in the municipality. In order to make the most of the Groblershoop and its interface with the N10, it is proposed that an Urban Design Framework is commissioned for the settlement. The Development Framework created for Groblershoop provides some preliminary guidelines that should be addressed in the Urban Design Framework, namely:

- The need to improve the interface of Groblershoop with the N10;
- The creation of a Government Service Cluster with mobility streets connecting the main economic strip which is also the interface with the N10;
- Linking Groblershoop and Sterrhham through the development of beneficiation-initiatives along the N10, as well as providing pedestrian routes to facilitate safe movement of individuals between the two settlements;
- Connecting the education facilities on the 'river-side' of the N10 to the main settlement through the development of mobility streets; and
- Including the new extension of Sternham into the Urban Design Framework.

Please refer to **Figure 17** and **Maps 74** and **75**.

Figure 17: Groblershoop Spatial Logic



6.5.3 Grootdrink

Key Spatial Challenges

The following key spatial challenges were identified in Groblershoop:

- A shortage of land for churches, business and cemeteries;
- A lack of retail facilities;
- A lack of expansion opportunities to the west of the settlement;
- An unhygienic environment created by animals living and walking freely in the settlement due to a lack of grazing land;
- Lack of recreational facilities;

- Inadequate service delivery;
- Small clinics which provide weak service;
- The unfenced rubbish dump; and
- A lack of suitable sites for crèches.

Rationale for Development Framework

The following is proposed for Grootdrink:

- The development of a Community Facility Cluster on/around the unused open space;
- An activity street on the main road entering Grootdrink where some government services and small businesses are located;
- Connecting the Community Facility Cluster to the Activity Street and the rest of the community through the Mobility Streets, which focuses on the creation of a safe pedestrian and bicycle movement system through the implementation of lighting, street furniture, paving and greening;
- A pedestrian route which links Grootdrink with the farms along the Orange River – this route is not so much focused on beautification, but rather safety, by providing pedestrian crossings and street lighting; and
- Investigate the current status of a township establishment on the other side of the N10 where no development has as yet taken place. The current expansion of Grootdrink is limited, as it is located between two non-perennial streams, and depending on the growth of the population over the next few years, this unused development might be helpful.

Please refer to **Maps 76** and **77**.

6.5.4 Wegdraai

Key Spatial Challenges

The following key spatial challenges were identified in Wegdraai:

- Low quality of health facilities;
- A lack of land for grazing;
- Low quality of the living environment;
- No library;
- No internet services;
- Lack of sports facilities; and
- 50% of the community live in informal housing.

Rationale for Development Framework

The following is proposed for Wegdraai:

- The development of a Community Facility Cluster on/around the unused open space;
- The development of an activity street on the main road entering Wegdraai, which will reinforce the activities already in place;
- Connecting the Community Facility Cluster to the Activity Street and the wider community, through the creation of safe pedestrian and bicycle movement systems; and
- Linking the community to the farms along the Orange River, as well as providing a safe route to travel through the unused open space in Wegdraai by developing a Pedestrian route linked to the Activity Street.

Please refer to **Maps 78** and **79**.

6.5.5 Boegoeberg

Key Spatial Challenges

The following key spatial challenges were identified:

- Low quality of health services;
- Lack of shopping facilities;
- Lack of a secondary school;
- Lack of a centre/facility where senior citizens can meet;
- Lack of recreational and sport facilities;
- Inadequate housing;
- Lack of land for housing and farming;
- Lack of street lighting;
- Water channels pose a danger for children; and
- Lack of land for crèches.

Rationale for Development Framework

The following is proposed for Boegoeberg:

- The lack of a centrally located open space makes the provision of a Community Facility Cluster problematic, and it is proposed that an investigation into the feasibility of developing a Community Facility Cluster along the main route at the entrance of Boegoeberg be undertaken;
- If development of an open space along the main routes is not feasible, it is proposed that government services be focused around the main entrance to Boegoeberg where it links with the Activity Spine, and an appropriate alternative site be identified for sport and leisure facilities;
- Mobility Streets linking the community to the Activity Spine and possible location of the Community Facility Cluster; and
- Linking the community to the farms along the Orange River through the provision of safe pedestrian routes.

Please refer to **Maps 80** and **81**.

6.5.6 Topline

Key Spatial Challenges

The following spatial challenges were identified:

- A lack of land for development;
- Unregulated use of land;
- 52% of the community living in informal housing;
- Lack of land for crèches;
- Unsafe trips for children walking to school;
- A need to expand the cemetery;
- Lack of entertainment and sport facilities;
- Lack of quality health services; and
- Low quality of services.

Rationale for Development Framework

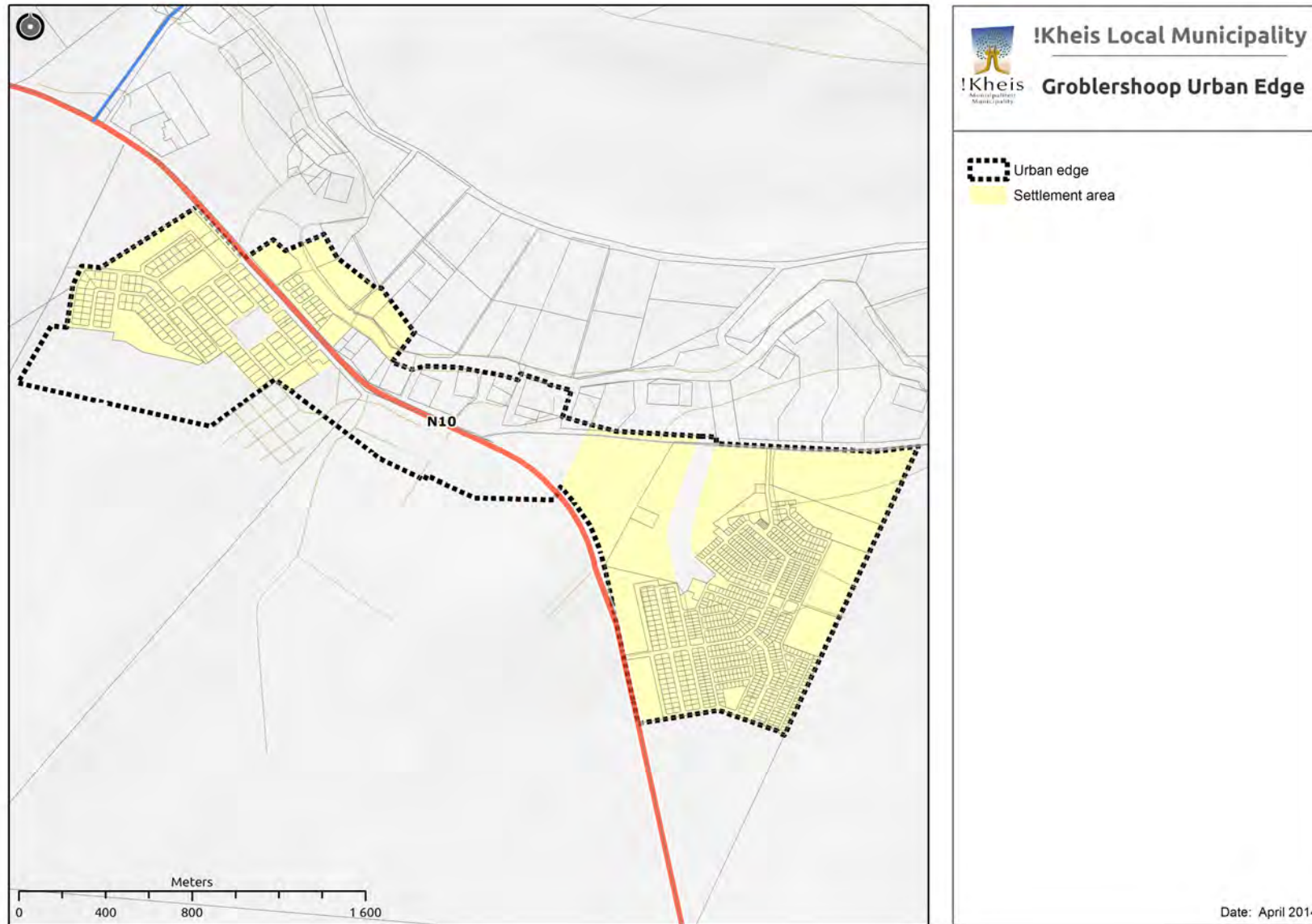
The following is proposed for Topline:

- The lack of centrally located open space makes the provision of a Community Facility Cluster problematic, and it is hence proposed that government services be focused around the main entrance to Topline;
- An Activity Street connecting the development focus area to the wider community;
- The large green strip (non-perennial stream) running through the settlement need to be upgraded through the provision of public seating and pedestrian routes, which will allow it to connect the two parts of the settlements rather than it being a barrier;

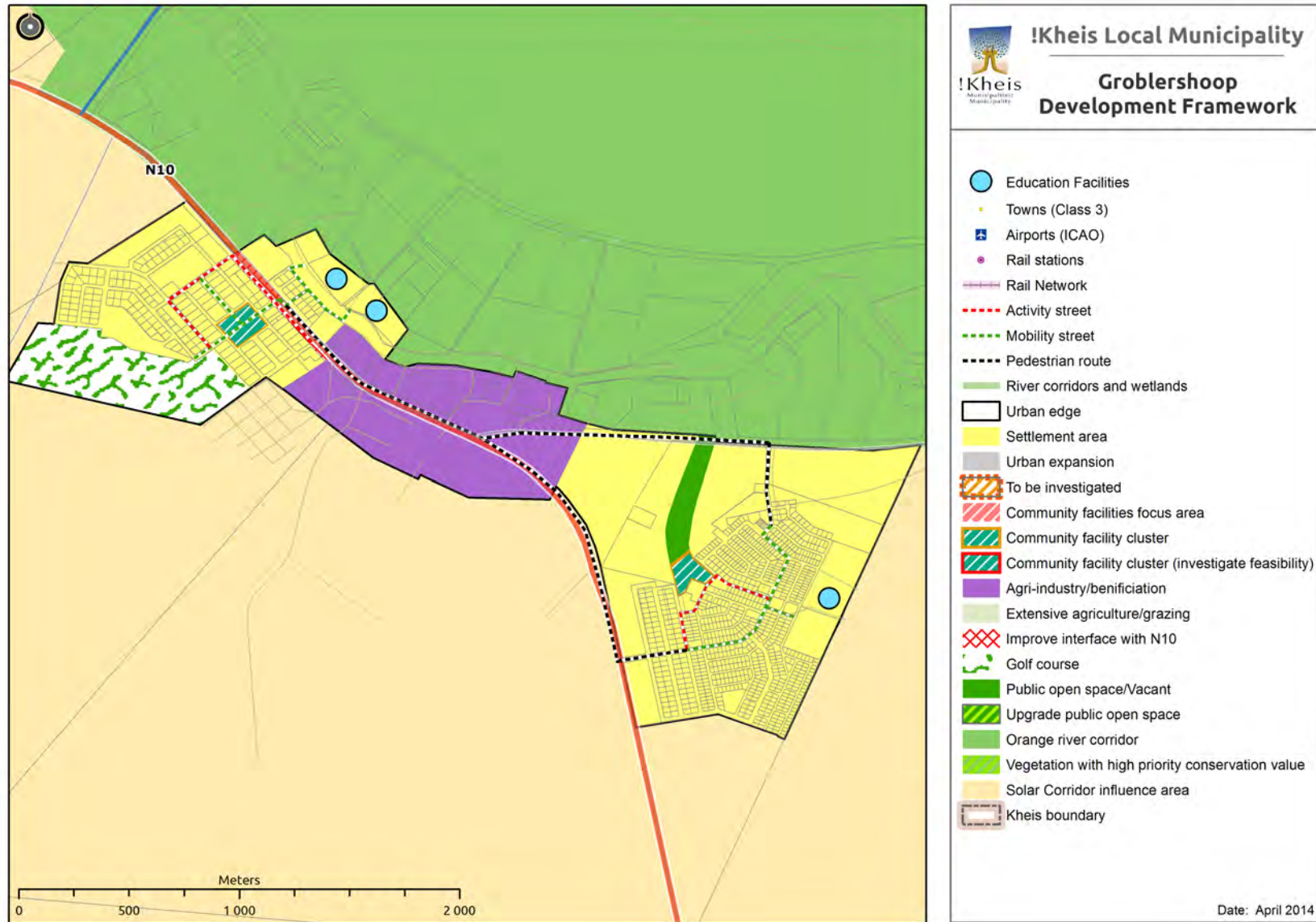
- The feasibility of developing the proposed green strip running through the settlement into an entertainment area and sport fields needs to be investigated; and
- The development of Pedestrian Routes to the farms along the Orange River, and more importantly to the school, ensuring that learners are safe when they walk to and from school.

Please refer to **Maps 82** and **83**.

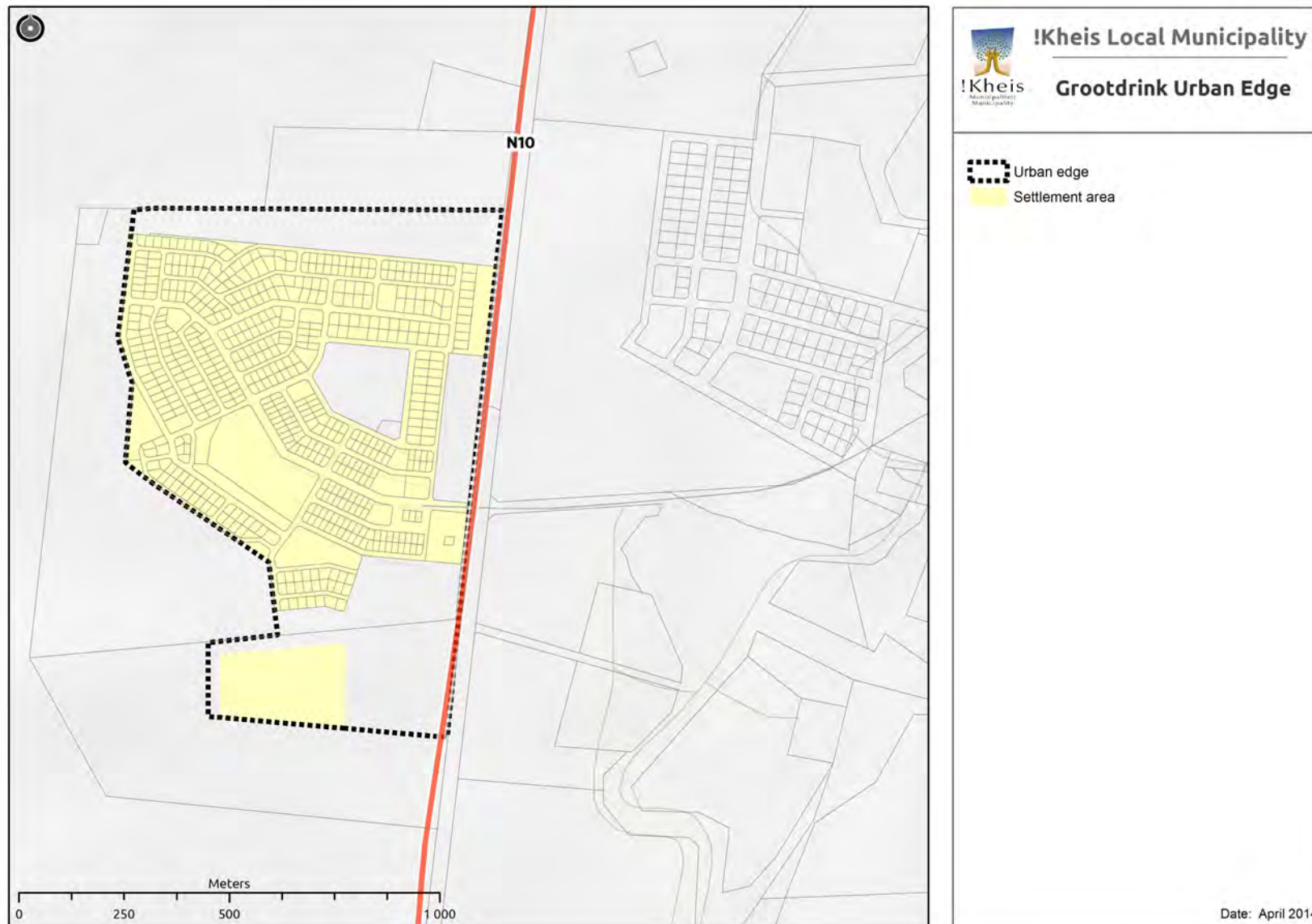
Map 74: Groblershoop Urban Edge



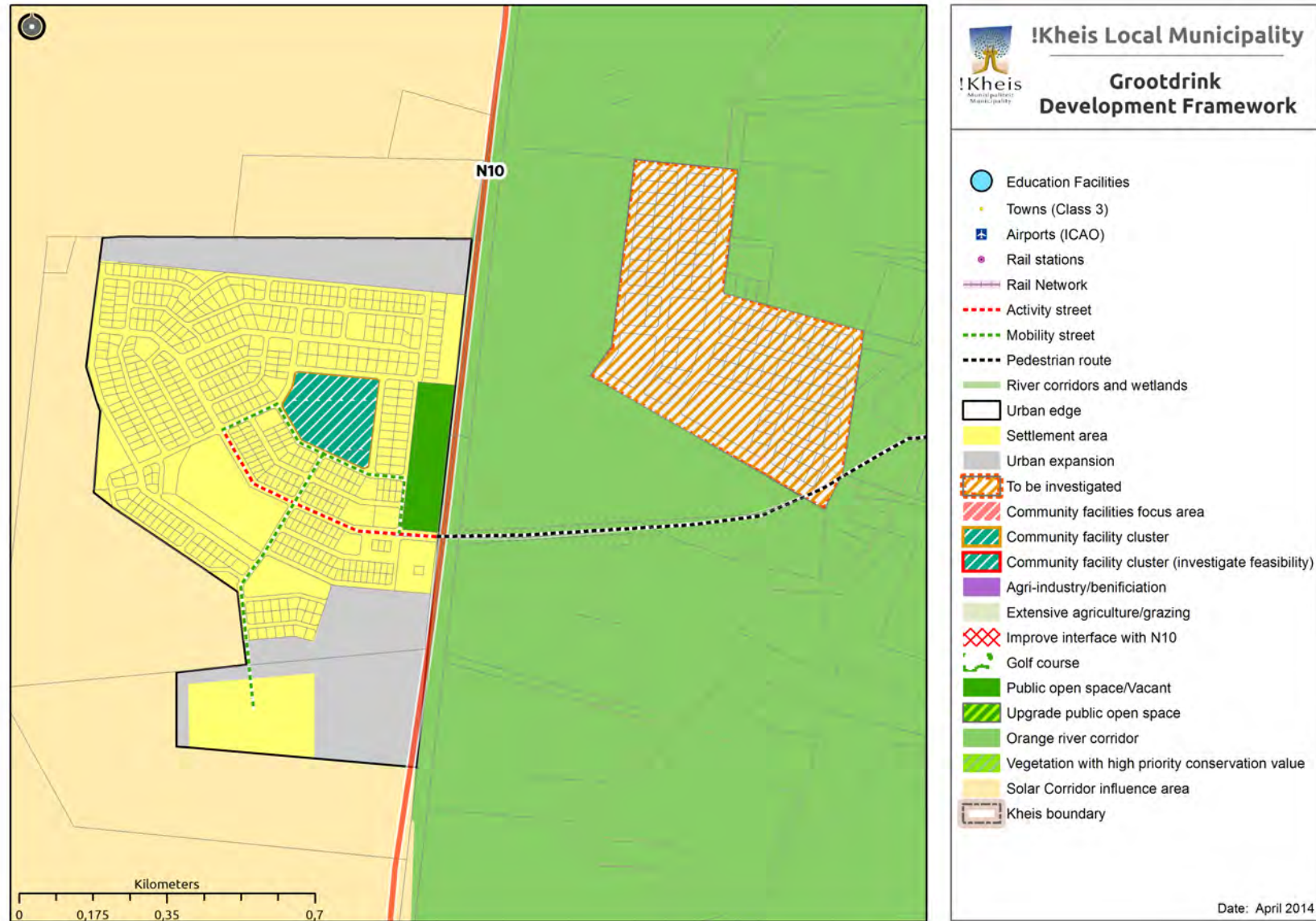
Map 75: Groblershoop Development Framework



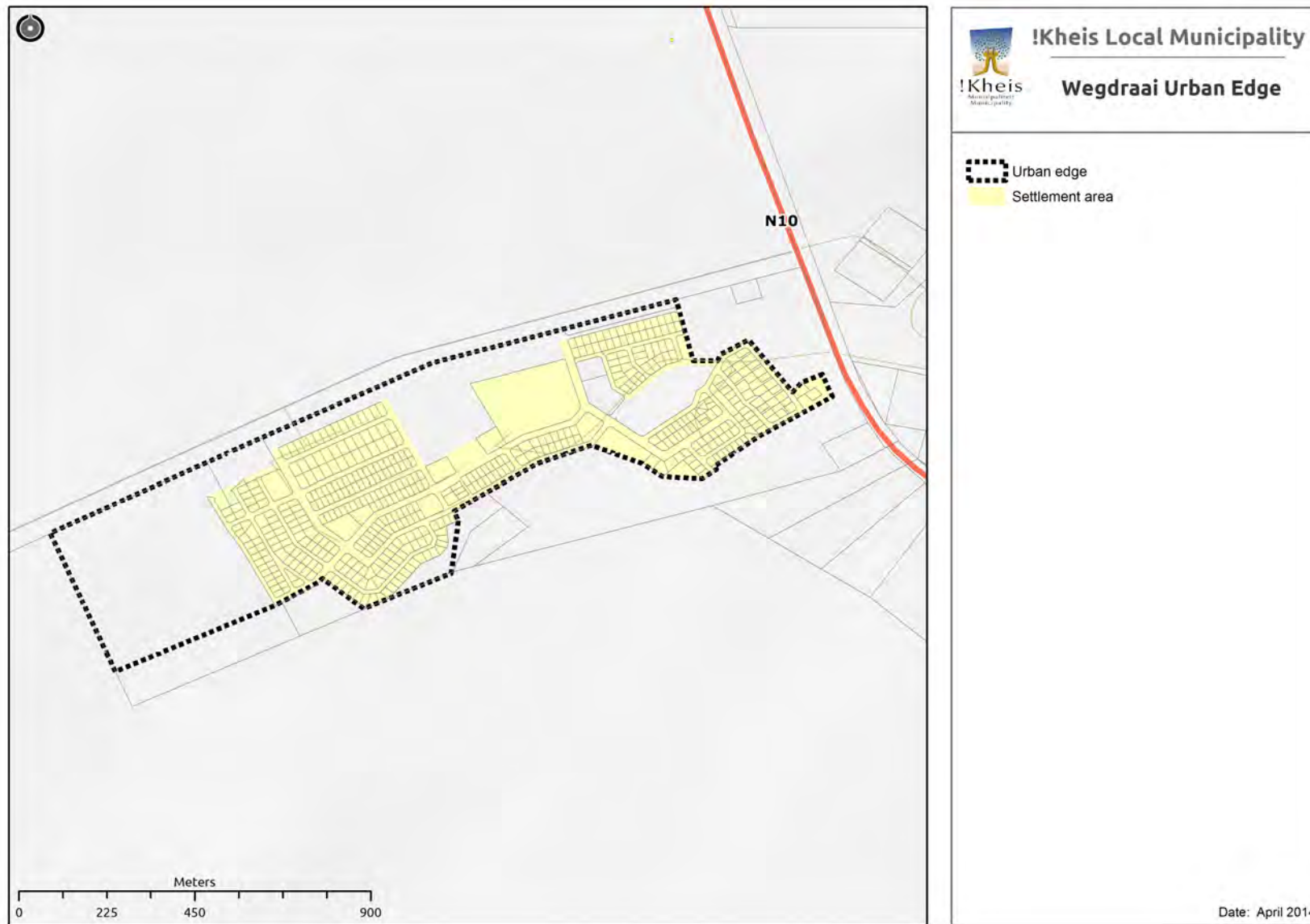
Map 76: Grootdrink Urban Edge



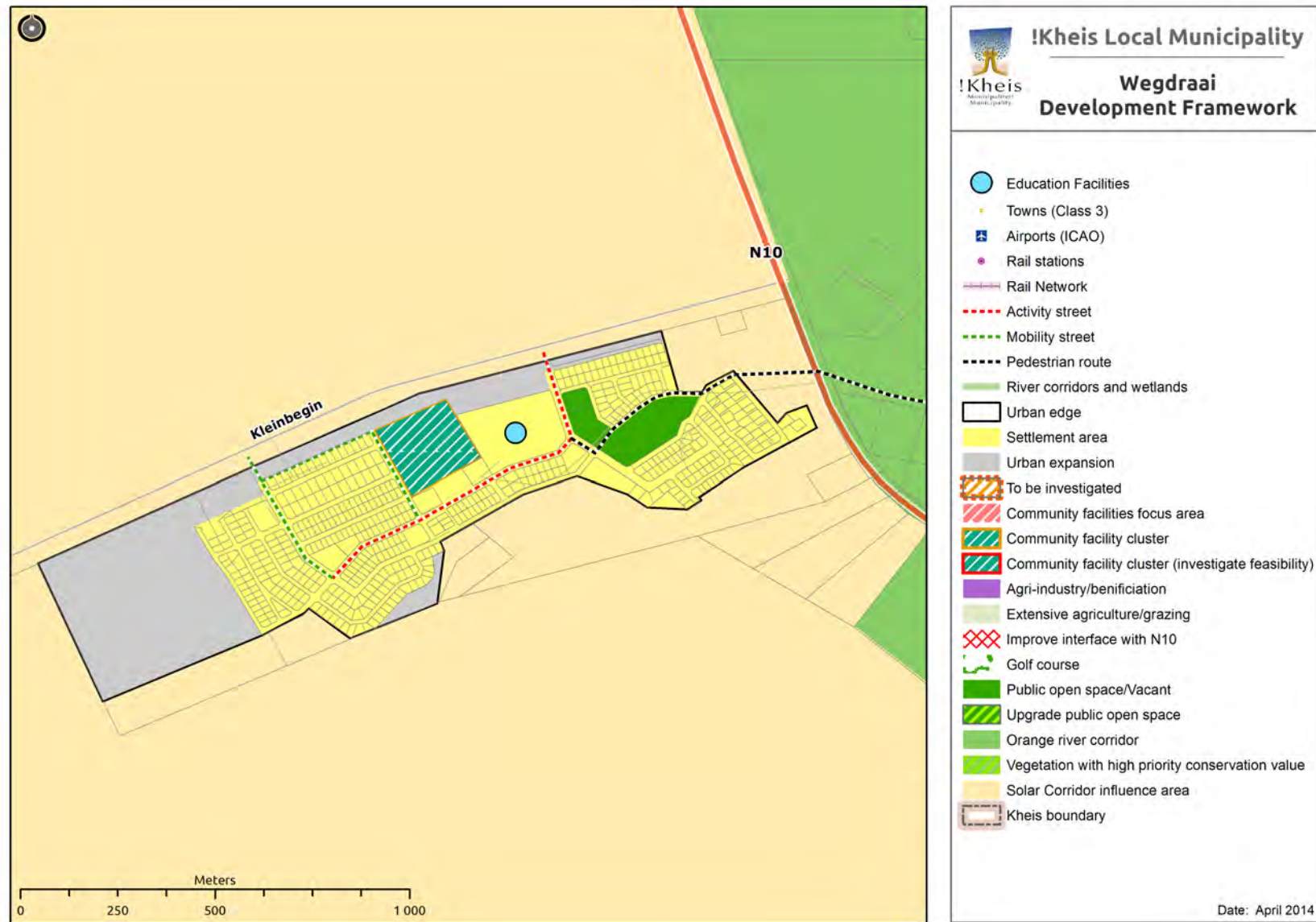
Map 77: Grootdrink Development Framework



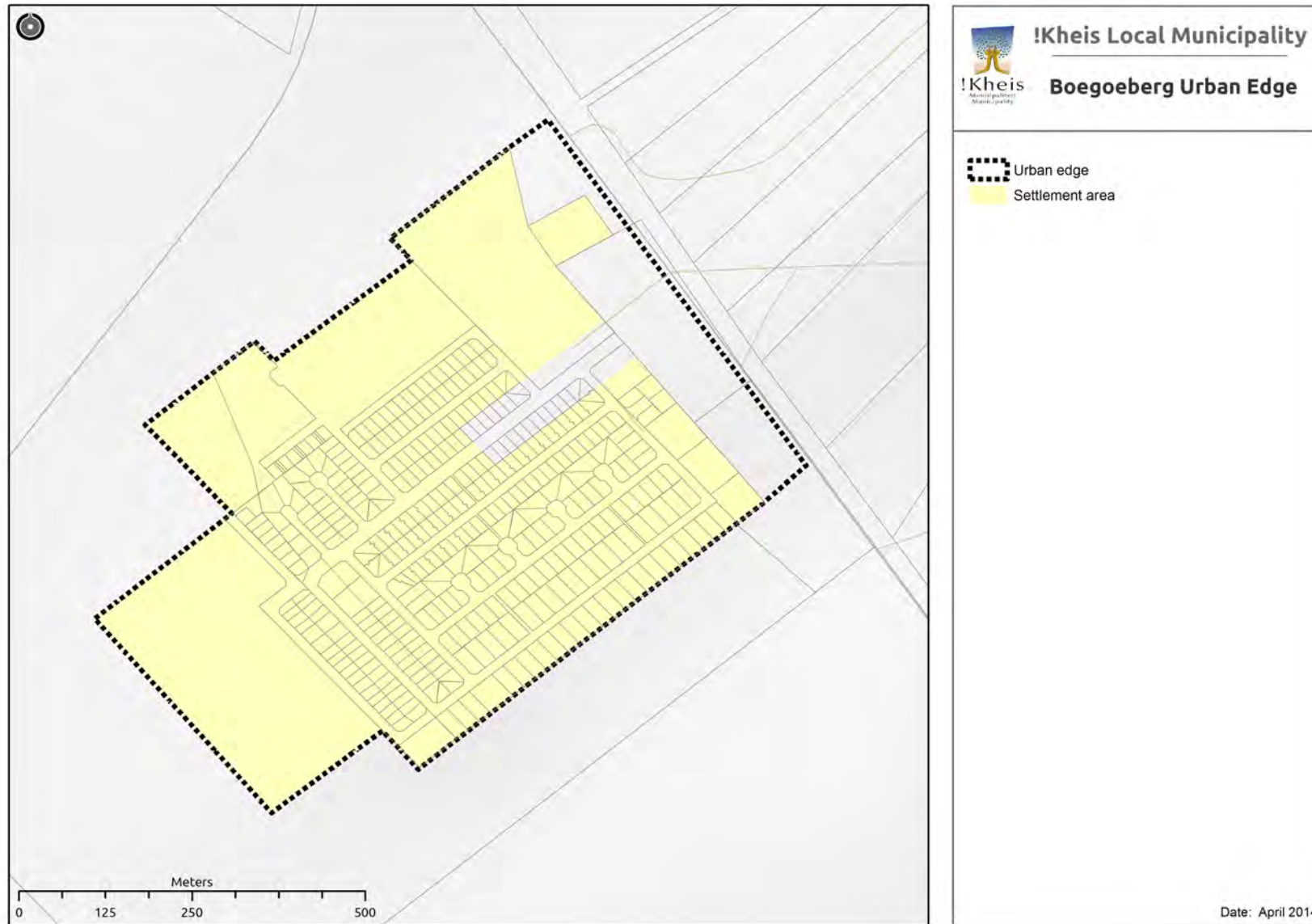
Map 78: Wegdraai Urban Edge



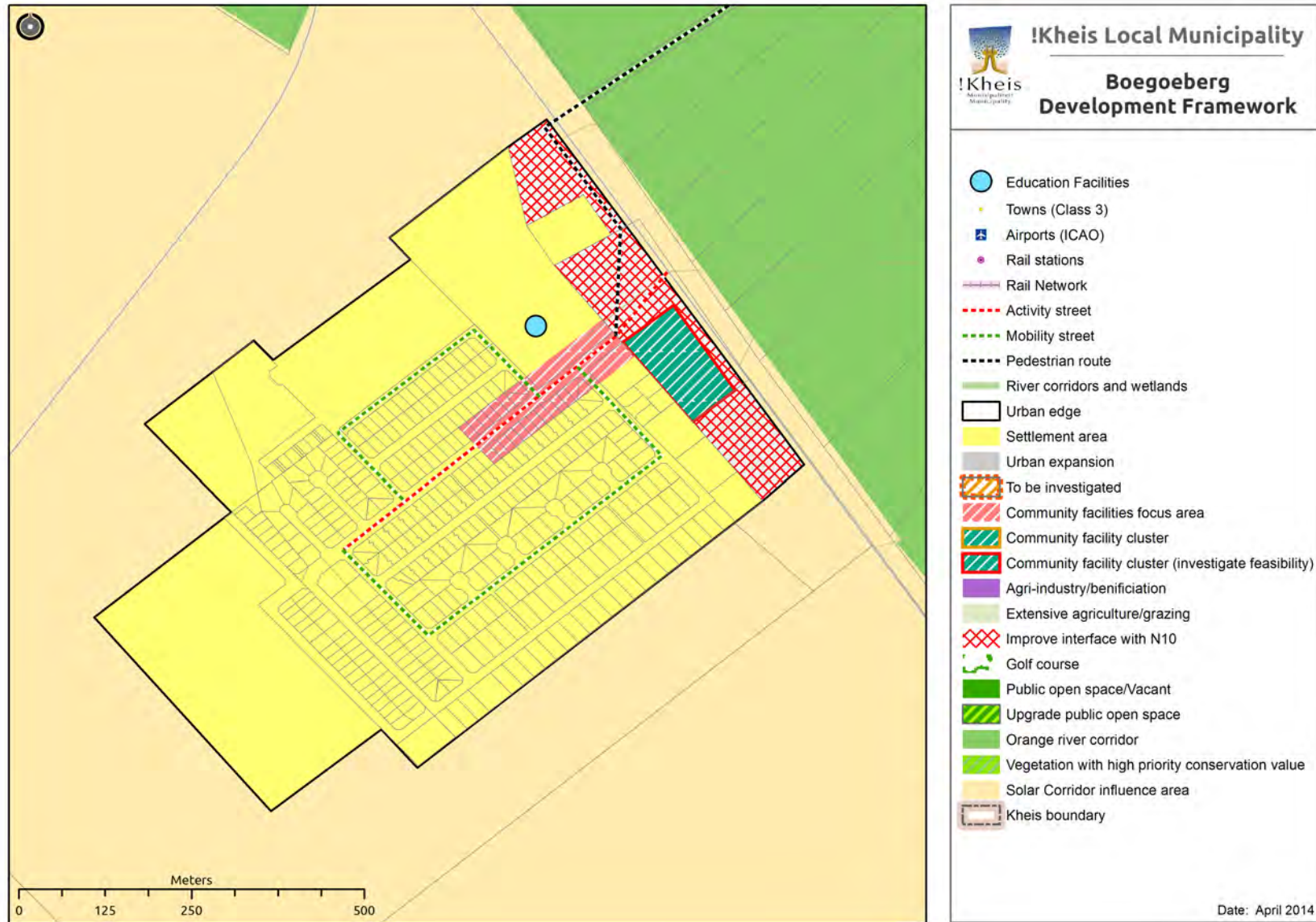
Map 79: Wegdraai Development Framework



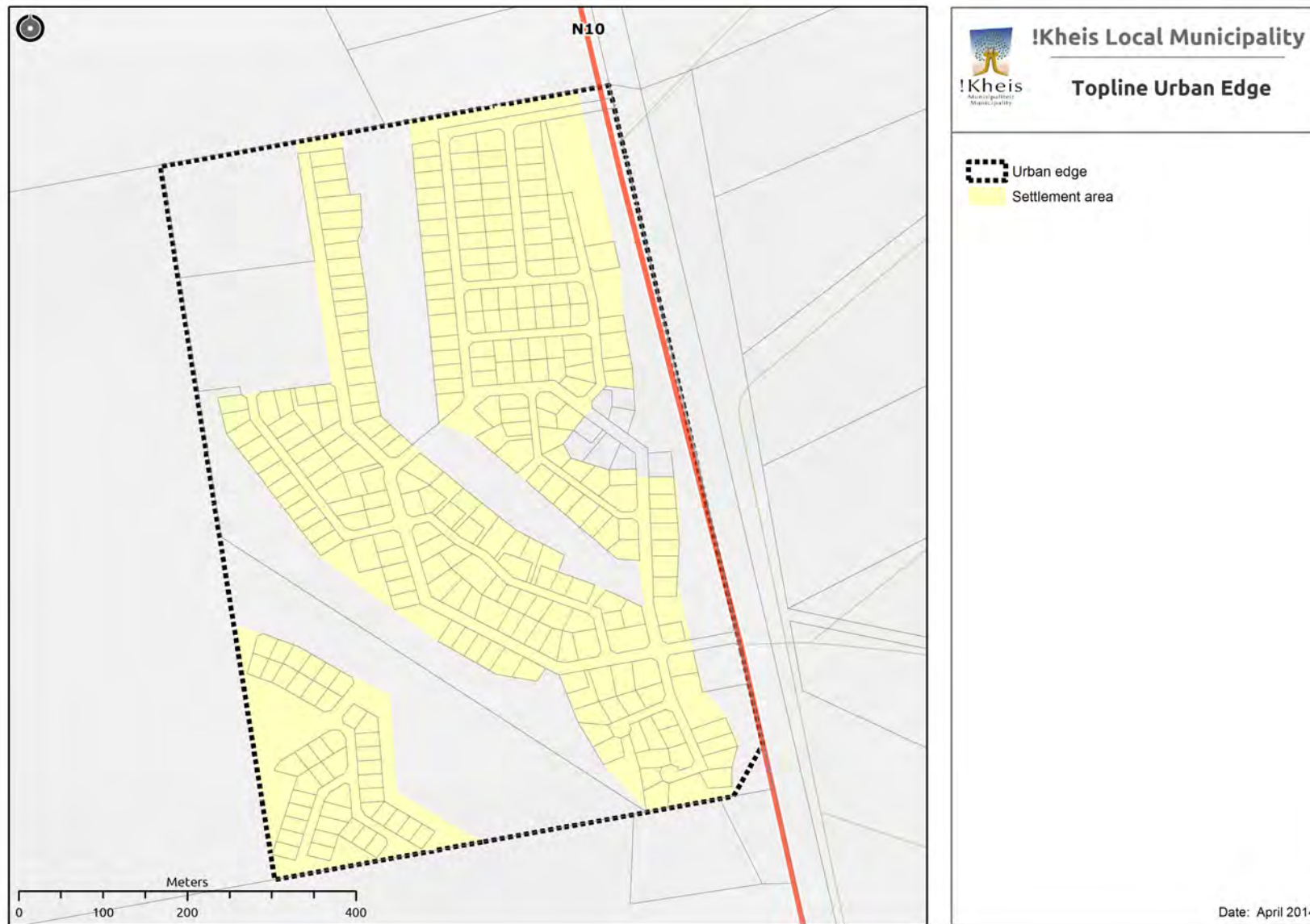
Map 80: Boegoeberg Urban Edge



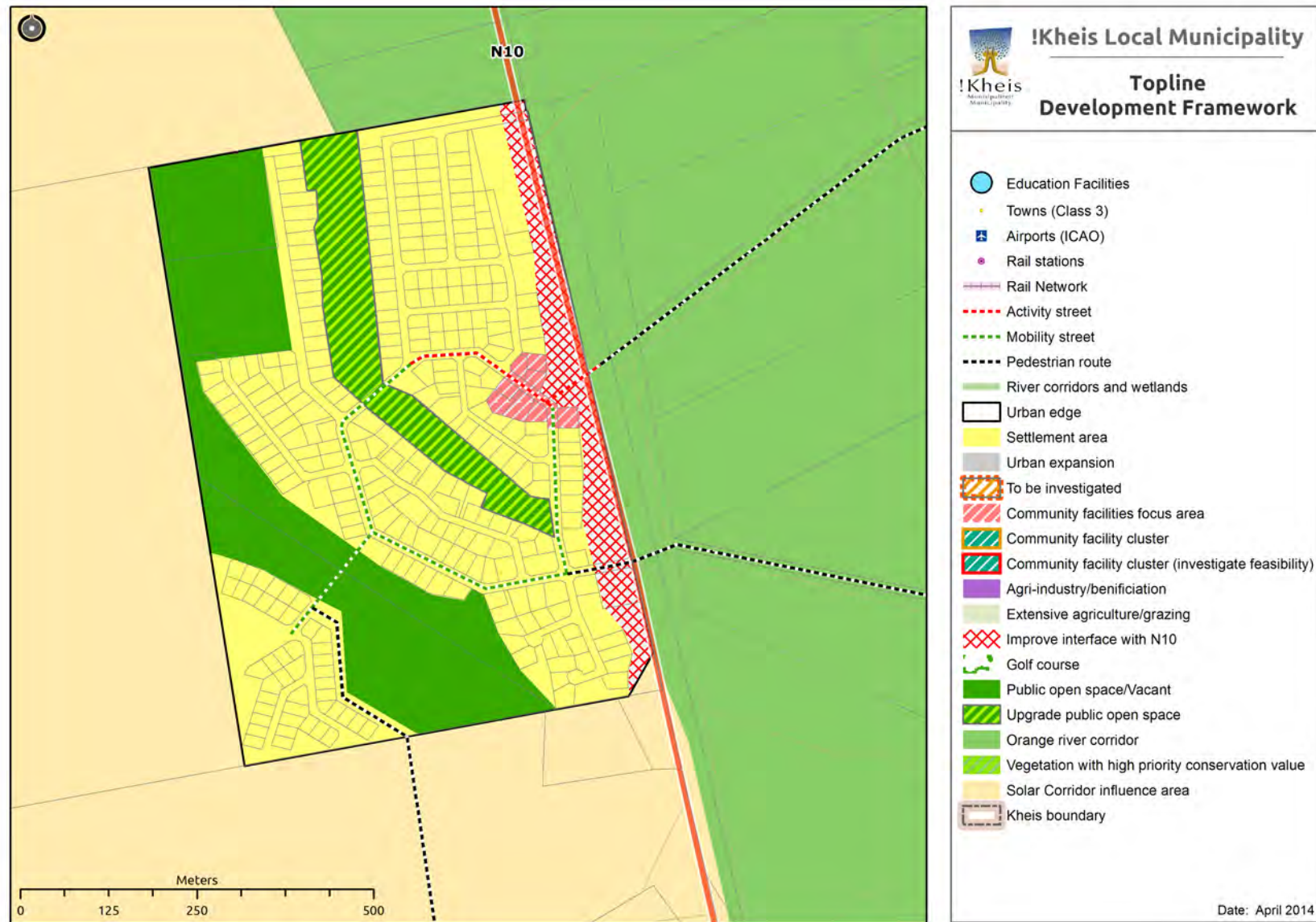
Map 81: Boegoeberg Development Framework



Map 82: Topline Urban Edge



Map 83: Topline Development Framework



6.6 BROAD SPATIAL PLANNING CATEGORIES

A fundamental phase of bioregional planning is to undertake appropriate land-use classification throughout the planning area in accordance with a classification system that is based on a structure of interrelated cores, corridors and matrices. In order to give effect to this, the NCPSDF 2012 identified the following six *Spatial Planning Categories* (SPCs):

Table 55: NCPSDF Spatial Planning Categories



The KLM SDF makes use of these SPC as far as possible in the depiction and capturing of the SDF. According to the NCPSDF (2012), the KLM has to undertake detailed land-use planning in accordance with the guidelines put forward in NCPSDF, and prepare the KLM Town Planning Scheme accordingly. Below, in **Table 56**, is an overview of the SPCs, their sub-categories, types of development allowed and the conditions under which they are allowed. **Table 57** in Chapter Three provides development guidelines for the different land use zones proposed in the KLM SDF, and aligns these categories with the NCPSDF SPCs as and where possible.

Table 56: NCPSDF Spatial Planning Categories and Sub-Categories

SPATIAL PLANNING CATEGORY	CODE	SPATIAL PLANNING SUB-CATEGORIES	TYPE OF DEVELOPMENT	CONDITION
Core	A.a	Statutory Protected Areas	No development allowed	
Buffer	B.a	Non-Statutory Conservation Areas	a) Resort development b) Infrastructure required for research	a) To be changed to SPC D, depending on the proposed type of development b) Must be undertaken in accordance with site-specific design and planning guidelines
	B.b	Ecological Corridors		
	B.c	Urban Green Areas		
Agricultural Areas	C.a	Extensive Agricultural Areas	a) Agricultural development and infrastructure for extensive and intensive agricultural land-uses b) Resort development on game farms c) Agricultural industry	a) To be changed to SPC D, depending on the proposed type of development b) Must be undertaken in accordance with site-specific design and planning guidelines
	C.b	Intensive Agricultural Areas		
Urban Related	D.a	Main Towns	All urban-related developments	Must be undertaken in accordance with site-specific design and planning guidelines
	D.b	Local Towns		
	D.c	Rural Settlements		
	D.d	Tribal Authority		
	D.e	Communal Settlements		
	D.f	Institutional Areas		
	D.g	Authority Areas		
	D.h	Residential Areas		
	D.i	Business Areas		
	D.j	Service Related Business		
	D.k	Special Business		
	D.l	SMME Incubators		
	D.m	Mixed Use Development Areas		
	D.n	Cemeteries		
	D.o	Sportsfields & Infrastructure		
	D.p	Airport and Infrastructure		
	D.q	Resort and Tourism Related		
	D.r	Farmsteads and Outbuildings		
Industrial Areas	E.a	Agricultural Industry	Full spectrum of industrial developments	a) Must be undertaken in accordance with

	E.b	Industrial Development Zone	required by the economic sector	site-specific design and planning guidelines b) All industrial activities must be regulated and managed in accordance with sustainability standards (e.g. ISO 14001)
	E.c	Light Industry		
	E.d	Heavy Industry		
	E.e	Extractive Industry		
Surface Infrastructure & Buildings	F.a	National Roads	All surface infrastructure and buildings that are required for sustainable socio-economic development and resource use	a) Must be undertaken in accordance with site-specific design and planning guidelines b) All industrial activities must be regulated and managed in accordance with sustainability standards (e.g. ISO 14001)
	F.b	Main Roads		
	F.c	Minor Roads		
	F.d	Public Streets		
	F.e	Heavy Vehicle Overnight Facilities		
	F.f	Railway Lines		
	F.g	Power Lines		
	F.h	Telecommunication Infrastructure		
	F.i	Renewable Energy Structures		
	F.j	Dams and Reservoirs		
	F.k	Canals		
	F.l	Sewerage Plans and Refuse Areas		

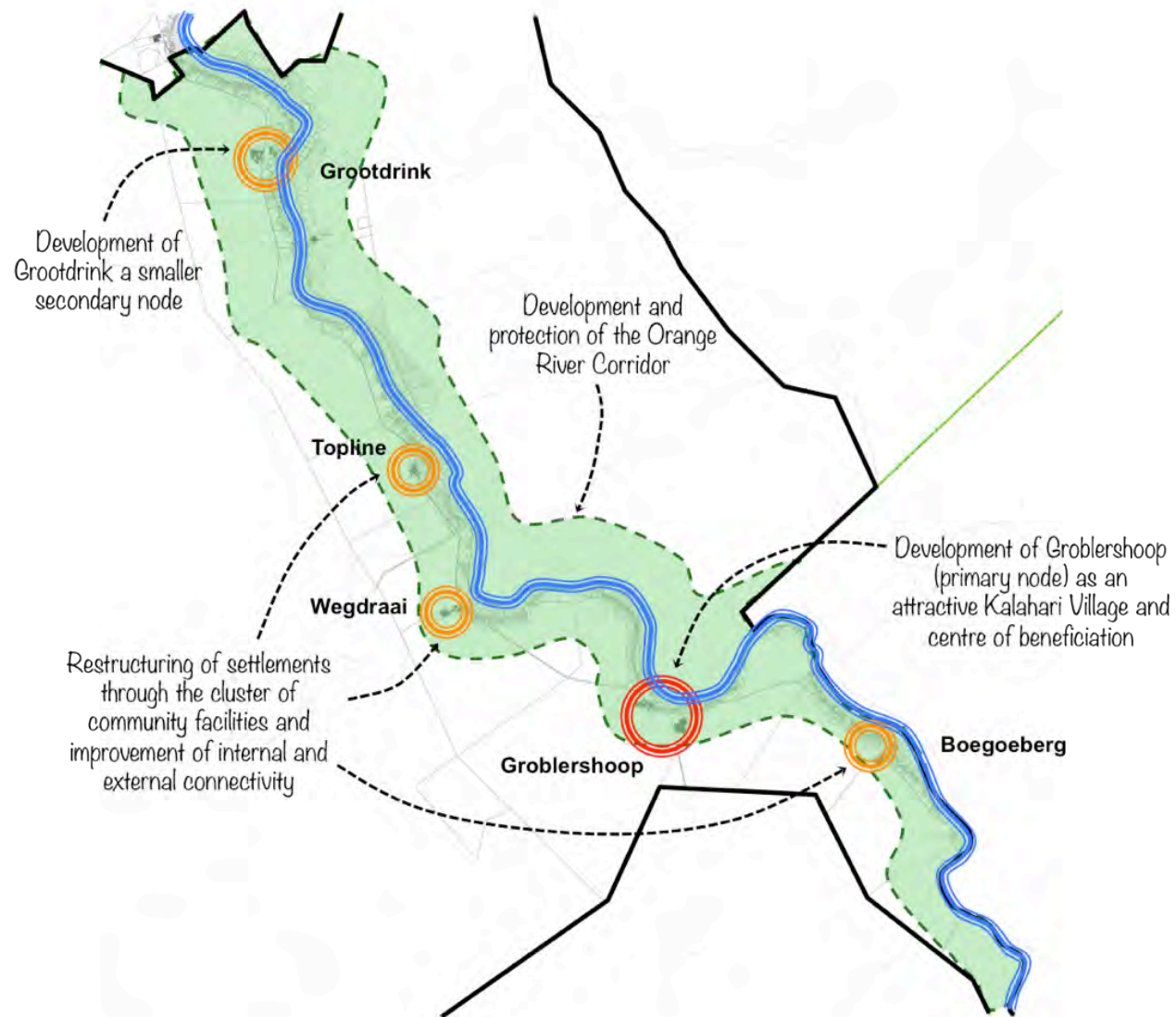
6.7 VERTICAL AND HORIZONTAL ALIGNMENT

The KLM SDF has, as far as is possible, been aligned with the NCPSDF and the FZMDM SDF.

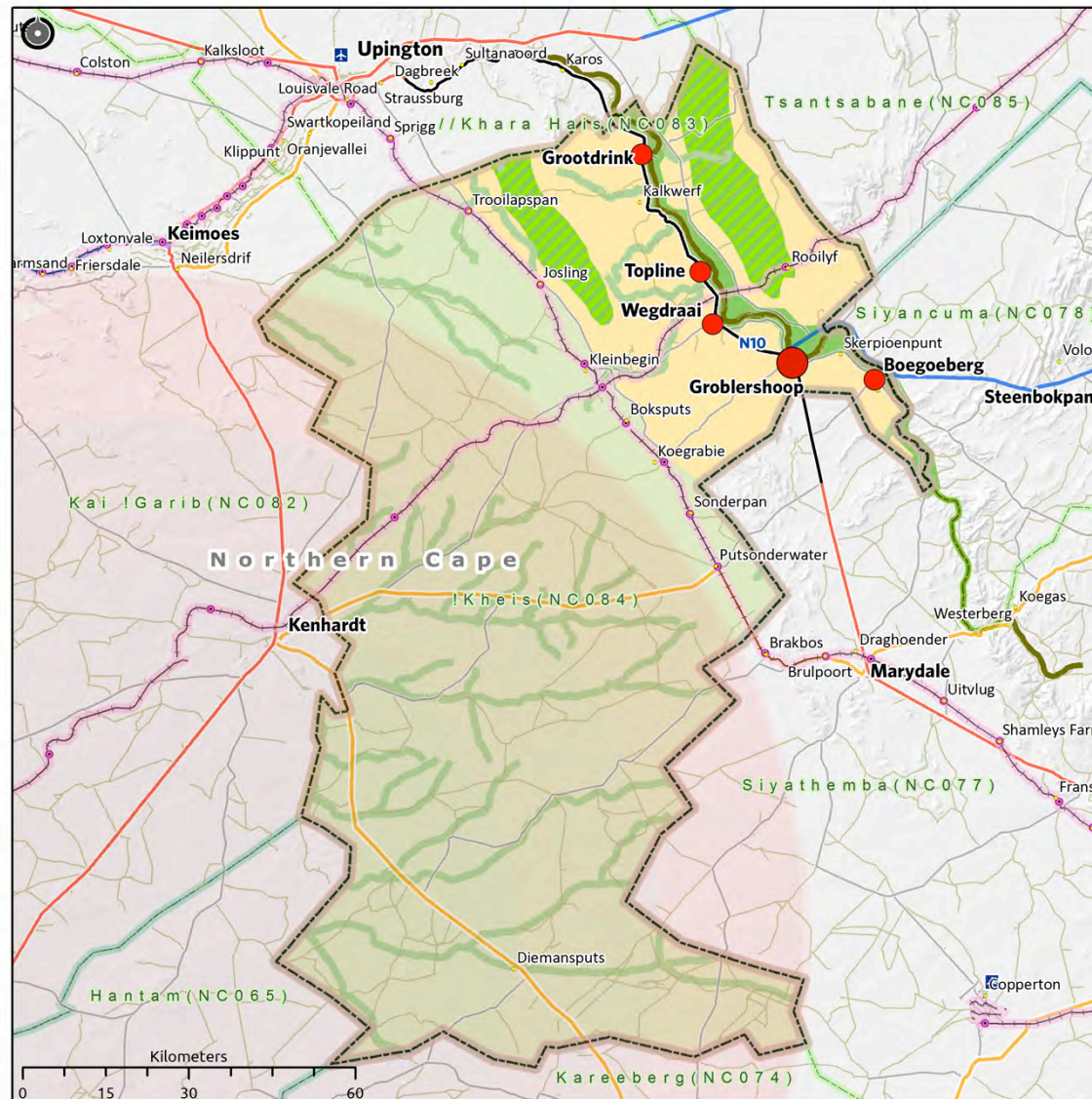
6.8 CONSOLIDATED KLM SDF

By combining all the separate components of the SDF, a consolidated SDF is developed, with each proposal and land-use zone supporting the other on a municipal level. Due to the enormous size of the KLM, the consolidated SDF does not depict the development frameworks of the settlements. **Figure 18 and Map 84** below depicts two graphic illustrations of the *Consolidated KLM SDF*.

Figure 18: KLM SDF Spatial Logic



Map 84: Consolidated KLM SDF



CHAPTER 7: SPATIAL STRUCTURING ELEMENTS AND DESIGN GUIDELINES



7.1 SPATIAL STRUCTURING ELEMENTS AND DESIGN GUIDELINES

The NCPSDF (2012) identifies six **Spatial Structuring Elements** to guide renewal and future development throughout the Northern Cape, viz.:

- Urban Edge;
- Precinct;
- Node;
- Activity Corridor;
- Activity Street; and
- Municipal Open Space System.

The key functions of the Structuring Elements are to facilitate the following (NCPSDF 2012):

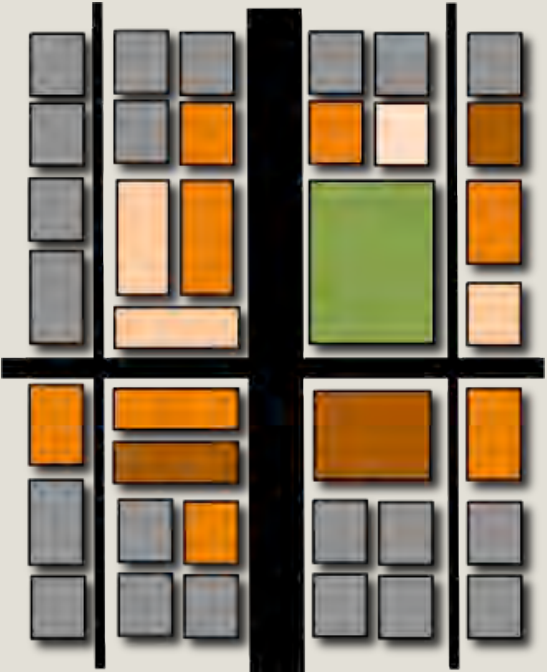
- Containment of urban sprawl (urban sprawl implies higher per capita cost of providing essential services and loss of valuable agricultural or natural land);
- Promotion of urban and social integration by creating compact urban areas (compact urban areas, i.e. mixed use areas where as wide a range of urban activities/facilities as possible are accommodated within walking distance of living areas, which contributes to the accessibility of economic, social and recreational opportunities to the community);
- Promotion of acceptable higher densities (higher densities imply more efficient use of available urban land, natural resources and service infrastructure);
- Creation of quality urban environments through urban renewal and landscaping (priority should be given to the conservation and re-use of buildings, infrastructure and materials and the beautification of the urban environment through intensive landscaping);

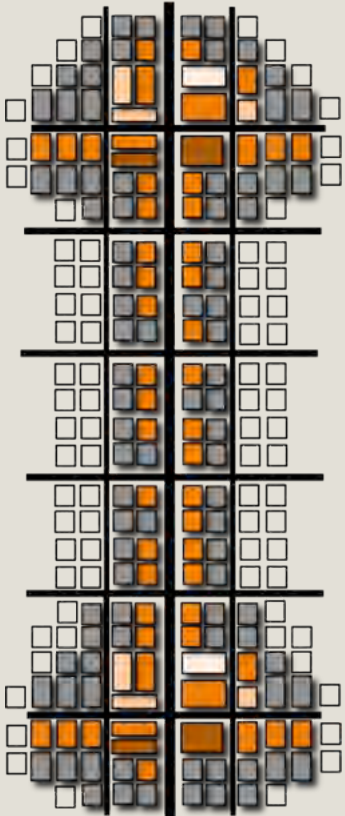
- Reduction of the need for traffic movement and promotion of pedestrian and non-motorized movement patterns (the price-signals of transport, such as construction costs and cost of petrol given by the transport market, because they ignore environmental costs, mislead the users into believing that personal mobility is cheaper than it really is); and
- Restoration and maintenance of a defined sense of place (urban areas must reflect the culture-historical character of the area and its people and unique local land uses).

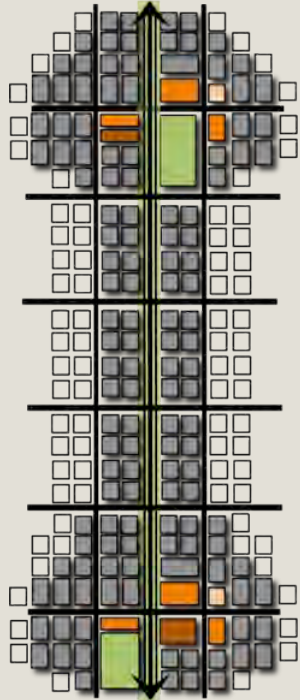
Table 57 below provides a short description of each Spatial Structuring Element as well Design Guidelines for its implementation in the KLM.

Table 57: Spatial Structuring Elements and Development Guidelines

SPATIAL STRUCTURING ELEMENT	LOCATION	DEVELOPMENT GUIDELINES
MUNICIPAL NODE These are the primary nodes in a municipality and are towns of significance in terms of scale, location, impact, diversity and agglomeration of functions.	Groblershoop	Develop Groblershoop into an attractive ‘Kalahari Village’ and regional node for beneficiation of local produce, storage and distribution point for products from the area and raw material to be beneficiated further, coming into the area. While provision is also made for such economic activities in the other settlements, Groblershoop will perform a nodal function for these activities. Commission the development of an Urban Design Framework
URBAN EDGE The Urban Edge is the demarcated outer boundary of urban areas and marks the transition between urban and rural land-uses. The Urban Edge is demarcated to manage, direct and control the outer limits of development and protect valuable natural environments and resources. It is also an important tool to contain urban sprawl and <i>ad hoc</i> low-density development which adds to the life cycle costs of urban areas and places an unnecessary heavy burden on communities. The urban edge consists of the following components: Urban Edge Line: The Urban Edge Line is the demarcated outer boundary within which urban expansion can be accommodated within a defined period of time. Built Edge Line: The Built Line defines the outer boundary of the existing built up area and will always be contained by, or coincide with, the Urban Edge Line. Urban Fringe: The Urban Fringe is the area located between the Urban Edge Line and the Built Edge Line. The Urban Edge is	Groblershoop Grootdrink Wegdraai Boegoeberg Topline	The key objectives of urban edges in the KLM are to prevent the transformation and fragmentation of high potential agricultural land and the degradation of the Orange River Corridor. For the KLM to consider non-agricultural development to be undertaken on agricultural land, applicants have to provide assurance that such development would not fragment high potential agricultural land. The proposed development must, therefore, imply a direct, or indirect, positive impact on, for example, regional tourism, agriculture, environmental conservation and the interest of previously disadvantaged people. The urban edges identified in Maps 4, 6, 8 and 10 will be applicable for a ten year period (2014 to 2024) but subject to evaluation together with the KLM SDF on a 5-year cycle.

SPATIAL STRUCTURING ELEMENT	LOCATION	DEVELOPMENT GUIDELINES
significant because it is the area in which urban expansion must be accommodated.		
Community Facility Clusters Community Facility Clusters provide all government services in a central location in a settlement. These clusters are linked to public open space and sport fields and makes small-scale economic activities more feasible. 	Groblershoop Grootdrink Wegdraai Boegoeberg Topline	Government services should be clustered in each node, and further enhanced with paved, greened and shaded squares linked to entertainment and sports facilities for the youth. These Community Facility Clusters will not only make small-scale economic activities in these areas more feasible, but also provide spaces where periodic markets or festivals can be held. The following guidelines should be applied: • Concentrate public facilities; • Promote the development of mixed use; • Create safe and interesting public settings; and • Ensure that the interface with adjoining lower-intensity residential developments is treated sensitively. In Boegoeberg and Topline, the feasibility of clustering these facilities is limited by the lack of a central open space. Studies need to be undertaken regarding the feasibility of using the current open spaces in these settlements (next to the main road and close to a non-perennial river) for sport facilities and entertainment purposes.

SPATIAL STRUCTURING ELEMENT	LOCATION	DEVELOPMENT GUIDELINES
ACTIVITY STREET Activity streets are linear development areas along smaller, local streets. The focus in this type of development is predominantly on the land uses and pedestrian movement. Traffic mobility is not an important consideration and fast moving traffic through an activity streets must be avoided. Land uses tend to be retail and service-oriented. 	Groblershoop Grootdrink Wegdraai Boegoeberg Topline	The development of Activity Streets in the KLM settlements will allow for a concentration of uses along prominent spines inside settlements providing structure to the general dispersed nature of public facilities and retail opportunities in KLM. The following guidelines for the development of Activity Streets are proposed: • Low-intensity mixed uses with a focus on community services and economic opportunities; • Low to medium-density residential developments; • The interface with adjoining lower-intensity residential developments has to be treated sensitively; and • Pedestrian/cyclist oriented environment.

SPATIAL STRUCTURING ELEMENT	LOCATION	DEVELOPMENT GUIDELINES
MOBILITY STREET Mobility streets are proposed as structuring elements focused on facilitating safe pedestrian and bicycle movement in the settlements through the provision of sidewalks along roads or pedestrian routes through public open space, vacant land and buffers. These Mobility Streets, in combination with Activity Streets, link up all the Community Facility Cluster and through the provision street lighting, street furniture and trees create high-intensity use streets that are not only safer for the communities, but may in time allow for the development of a range of diverse/mixed land-uses along the spines. 	Groblershoop Grootdrink Wegdraai Boegoeberg Topline	The development of Mobility Streets in the KLM settlements aims to provide focus with regard to the upgrading of the public environment, and the development of pedestrian and bicycle-friendly environments. The following guidelines for the development of Mobility Streets are proposed: • Sidewalks and bicycles lanes; • Street lighting; • Public furniture; • Link up public open spaces; • Planting of trees; and • Public transport.

SPATIAL STRUCTURING ELEMENT	LOCATION	DEVELOPMENT GUIDELINES
PEDESTRIAN ROUTES Pedestrian routes function as linkages to the surrounding area where the focus is not on beautification, but on the creation of safe movement systems for the local community. This is achieved through the provision of lighting and the creation of safe pedestrian crossings at roads, streams and canals.	Groblershoop Grootdrink Wegdraai Boegoeberg Topline	The development of Pedestrian Routs in KLM settlements aims to connect communities to the surrounding farms and schools through safe pedestrian routes that provide sufficient lighting and safe roads, river and canal-crossings.

7.2 ALIGNMENT OF THE KLM SDF WITH THE NCPSDF SPCs

In order to assist the KLM with aligning the KLM SDF with the NCPSDF SPCs, the major proposed use zones in the KLM SDF are categorised according to the proposed (1) SPCs and (2) policy guidelines provided for their management. These policy guidelines, in combination with 'Toolkit 16: Pre-Application Checklist' of the NCPSDF (2012), has to be consulted in relation to major development proposals.

Table 58: Land Use Zone Policy Guidelines

LAND USE ZONE	LAND USE PERMITTED	POLICY GUIDELINES
Buffer (B.a)	Non-statutory conservation areas of Critical Biodiversity Areas (DBAs)	- Conservation of Critical Biodiversity Areas has to be encouraged through the promotion of conservancies and stewardship projects with limited eco-tourism development rights and/or donations to formal conservation agencies. - When proclaimed, those portions of a property to be used only for conservation and low impact (no building) tourism purposes shall be proclaimed as B.a. - Any development application should show the sustainable desirability of the proposal, and only ecologically sensitive developments should be permitted.
Buffer (B.b)	Ecological corridors such as river corridors and wetlands	- River corridors and wetlands, including ephemeral pans, must be protected from urban, agricultural and mining activities to a distance of at least 32 meters from their banks unless closer setback lines have been determine, e.g. 1:50 year flood-line by a geohydrologist and freshwater ecologist. - Only agricultural practices should be permitted between this setback line and the 1:100 flood-line. - Any activity within the 1:50 year or 1:100 year flood-line requires a permit form DWAF and DENC. - Mining and other activities that may cause permanent damage in wetlands should be discouraged.
Agriculture (C.a)	Extensive agriculture/grazing	- Rotational grazing and other veld management best practices shall be promoted so as to improve biodiversity and stocking rates. - High potential agricultural land should be excluded from non-agricultural development. - Any non-agricultural development that is permitted must be subject to appropriate environmental off-sets.
Agriculture (C.b)	Irrigation and dry-land crop farming	- All existing and potential land suitable for intensive agriculture shall be protected from conversion to other uses including conservation. - Agriculture water demand management must be practiced and intensive agriculture water

		supplies shall be protected and not diverted to other uses. Any non-agricultural development that is permitted must be subject to appropriate environmental off-sets.
Agriculture (C.c)	Controlled Agriculture in Buffer Areas	- This is to permit existing agriculture such as stock and game farming that does not exceed carrying capacity in sensitive biodiversity areas (e.g. CBAs). - Any new developments or changes should be subject to an EIA.
Agri-Industry/Beneficiation Zone (E.a & E.c)	- Industrial activities related agri-processing - Industrial activities that provide support to the agri-processing and the agricultural community - Industrial activities related beneficiation, storage and transport	- Must be undertaken in accordance with site-specific design and planning guidelines. - All industrial activities must be regulated and managed in accordance with sustainability standards (e.g. ISO 14001). - Where development applications are inconsistent with the prescribed uses, the onus is on the applicant to prove, through the undertaking of an Impact Study, that the relevant application is consistent with the overarching objectives of the SDF. - New development must be undertaken in line with the Agri-Industry Precinct Development Plan.
Urban Related (D)	All land used for urban purposes in towns, villages and hamlets	- New developments must be undertaken with due consideration of the design guidelines provided in Toolkit 12 of the NCPSDF (2012). - Where development applications are inconsistent with the prescribed uses, the onus is on the applicant to prove, through the undertaking of an Impact Study, that the relevant application is consistent with the overarching objectives of the SDF. - As a general rule non-agricultural development should not be permitted outside of Urban Edges except for bona fide holiday/ tourism accommodation and agri-industry development, agri-settlements, and social facilities and infrastructure necessary for rural development shall be subject to appropriate conditions. - Compaction of urban settlements and the development of all in-fill areas with due regard to heritage and environmental constraints should be appropriately exhausted before Urban Edges are extended.

CHAPTER 8: IMPLEMENTATION FRAMEWORK



8.1 INTRODUCTION

The Implementation Framework consists of two sections: (1) The unpacking of each spatial development strategy project; and (2) the Priority Matrix, as outlined by the DRDLR.

8.2 SPATIAL DEVELOPMENT STRATEGY 1: Improve the quality of Government Services

Indicators for Achievement

- Better understanding of the quality of current health service;
- Improved health services in KLM;
- Better understand by communities and relevant stakeholders of the locational requirements of ECDCs;
- Sites identified for ECDCs;
- Understanding of Community Facility Clusters concept by KLM, ZFM DM and provincial officials; and
- The clustering of all new government investment in the identified nodal locations.

Table 59: Requirements for the implementation of Spatial Development Strategy One

SDS 1	PROJECT DESCRIPTION
SDS 1.1	Preparation of a KLM Health Service Revitalisation Plan based on a comprehensive study of the exact needs of each settlement.
SDS 1.2	Identification of appropriate sites for Early Childhood Development Centres in consultation with existing service providers and communities in each settlement.
SDS 1.3	Ensuring that all government investment, notably in the areas of education and health services, is provided in the proposed Community Facility Clusters in each of the settlements.

Table 60: SDS 1.1 Implementation Framework: Health Service Revitalisation Plan

SDS 1.1: KLM Health Service Revitalisation Plan		
OBJECTIVES	TARGET GROUPS	LOCATION
Creation of a KLM Health Service Revitalisation Plan based on a comprehensive study of the exact needs of each settlement	KLM Population	Groblershoop, Grootdrink, Wegdraai, Topline and Boegoeberg
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
- A comprehensive study on the health service-related needs in each settlement - A KLM Health Service Revitalisation Plan	2014 to 2015	- KLM - NCP Department of Health
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Establishment of an intergovernmental Health Service Revitalisation Task Team to manage the project - Undertake the comprehensive study on the Health Service-related needs in each settlement - Preparation of the KLM Health Service Revitalisation Plan	R350k	- KLM - ZFM DM - NCP Department of Health

Table 61: SDS 1.2 Implementation Framework: Identification of appropriate sites for Early Childhood Development Centres

SDS 1.2: Identification of Appropriate Sites for Early Childhood Development Centres		
OBJECTIVES	TARGET GROUPS	LOCATION
Identification of appropriate sites for Early Childhood Development Centres (ECDC) in consultation with existing service providers and communities in each settlement.	- Individuals currently running ECDCs located in inappropriate locations - Individuals that aim to establish ECDCs - Children attending ECDCs	Groblershoop, Grootdrink, Wegdraai, Topline, Boegoeberg
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
- Better understanding by communities and other stakeholders regarding the needs of ECDCs - Identification of all current ECDC sites and their appropriateness - Identified sites in each settlement for ECDCs (linked to Community Facility Cluster's)	2015 to 2016	- KLM - NCP Department of Education - NCP Department of Social Development
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Comprehensive assessment of current location and appropriateness of ECDCs - Community and stakeholder consultation session to identify needs as well as improve understanding regard to needs of ECDCs - Identification of appropriate ECDC sites linked to the proposed Community Facility Clusters	R150k	- KLM - NCP Department of Education - NCP Department of Social Development

Table 62: SDS 1.3 Implementation Framework: Aligning Government Service Provision with the KLM SDF Community Facility Clusters

SDS 1.3: Aligning Government Service Provision with the KLM SDF Community Facility Clusters		
OBJECTIVES	TARGET GROUPS	LOCATION
Ensuring that all government investment, notably in the areas of education and health services, is developed in the proposed Community Facility Clusters in each of the settlements	- KLM officials - FZM DM officials - Officials from the NCP Department of Education; Social Development, Women, Children and People with Disabilities officials; and Health	Groblershoop, Grootdrink, Wegdraai, Topline, Boegoeberg
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
- Understanding of all relevant officials of the rationale behind the Community Facility Clusters - Commitment by all relevant municipal and provincial officials to locate any new government investment in the Community Facility Clusters	Continuous, after initiation in 2014	- KLM - NCP Department of Education - NCP Department of Social Development
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Undertake SDS 2 (The Creation of Community Facility Clusters) in order to gather the required information and design and development guidelines - Communicate information to all relevant KLM, ZFM DM and provincial department and officials	N/A: Part of normal operational tasks of relevant departments and officials	N/A

8.3 SPATIAL DEVELOPMENT STRATEGY 2: The Creation of Community Facility Clusters

Indicators for Achievement

- Provide direction for government investment;
- Concentrate government investment;
- Nodal development in settlements (concentration of non-residential land uses);
- Development of business activities close to government service clusters/nodes;
- Development of periodic markets; and
- Sport and entertainment facilities for the youth.

Table 63: Requirements for the implementation of Spatial Development Strategy Two

SDS 2	PROJECT DESCRIPTION
See SDS 1.3	Commitment by KLM, the FZMDM and all relevant provincial government departments to the clustering of services from hence forward.
SDS 2.1	Establishment of a Community Facility Cluster Task Team to manage the development of these clusters and ensure that a functional rural-regional approach is used in the allocation of the various government facilities/services in the various settlements in the municipality.
SDS 2.2	Development of detailed design guidelines for the development of the Community Facility Clusters that take the extreme climatic conditions into consideration.
SDS 2.3	Detailed delineation of the Cluster areas.
SDS 2.4	Maintenance and upgrading of Cluster areas.
SDS 2.5	Only allowing applications for non-residential land-uses that could strengthen the Community Facility Clusters.

Table 64: SDS 2.2 Implementation Framework: Establishment of a Community Facility Cluster Task Team

SDS 2.1: Establishment of a Community Facility Cluster Task Team		
OBJECTIVES	TARGET GROUPS	LOCATION
Establishment of a Community Facility Cluster Task Team to manage the development of these clusters and ensure that a functional rural-regional approach is used in the allocation of the various government facilities/services in the various settlements in the municipality	- KLM officials - Community Representatives	KLM-wide
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
Functioning Community Facility Cluster Task Team	Continuous, starting in 2014	KLM officials
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Identification of relevant KLM officials and community representatives - Educate task team members on the concept of Community Facility Clusters - Establishment of a network of district and provincial officials to consult and communicate with	N/A: Part of normal operational tasks of relevant departments and officials	N/A

Table 65: SDS 2.3 Implementation Framework: Development of Detailed Guidelines for the Community Facility Clusters

SDS 2.2: Development of Detailed Design Guidelines for the Community Facility Clusters		
OBJECTIVES	TARGET GROUPS	LOCATION
- Development of detailed design guidelines for the development of the Community Facility Clusters that take the extreme climatic conditions of the KLM into consideration - To streamline the process of developing the Community Facility Clusters	Officials and companies responsible for implementation and construction	N/A
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
Detailed Design Guidelines for the development of the Community Facility Clusters	2014 to 2016	KLM
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Terms of Reference drawn up by the Community Facility Task Team - Identification of appropriate service provider - Preparation of design guidelines	R200k	- KLM - ZFM DM - DRDLR (NC)

Table 66: SDS 2.3 Implementation Framework: Delineation of Community Facility Cluster Locations

SDS 2.3: Delineation of Community Facility Cluster Locations		
OBJECTIVES	TARGET GROUPS	LOCATION
- Refining locations for Community Facility Clusters - KLM SDF identifies potential locations which need to be verified	Relevant Communities	Groblershoop, Grootdrink, Wegdraai, Topline and Boegoeberg
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
Identification of specific locations for Community Facility Clusters in each settlement in the KLM	2015	KLM
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Terms of Reference drawn up by the Community Facility Task Team - Identification of appropriate service provider - Refinement of KLM SDF 'cluster sites' based on detailed study of each settlement, as well as the design guidelines as developed in SDS 2.2	R180k	- KLM - ZFM DM - DRDLR (NC)

Table 67: SDS 2.4 Implementation Framework: Maintenance and upgrading of Cluster Areas

SDS 2.4: Maintenance and upgrading of Cluster areas		
OBJECTIVES	TARGET GROUPS	LOCATION
Maintenance and upgrading of Cluster Areas	KLM LUM officials	Grobbershoop, Grootdrink, Wegdraai, Topline, Boegoeberg
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
Continued monitoring, upgrading and maintenance of Community Facility Clusters	Continuous, after initiation in 2015	- KLM - NCP Department of Education - NCP Department of Social Development
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Identification of Community Facility Clusters and relevant sites to be upgraded and maintained - Upgrading and maintenance of clusters and sites - Monitoring of clusters - Notification of relevant officials/department of problems and implementation of corrective measures	To be determined	- KLM - ZFM DM - NCP Department of Education - NCP Department of Social Development

Table 68: SDS 2.5 Implementation Framework: Strengthening of Community Facility Clusters through Land Use Management

SDS 2.5: Strengthening of Community Facility Clusters through Land Use Management		
OBJECTIVES	TARGET GROUPS	LOCATION
Only allowing applications for non-residential land-uses that could strengthen the Community Facility Clusters	KLM LUM officials	KLM
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
Understanding and support of KLM officials for the need of the development of Community Facility Clusters	Continuous, after 2014	- KLM - DRDLR (NC)
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
Education of all KLM officials regarding the importance of concentrating non-residential land uses in clusters	R60k (Training provided by DRDLR (NC) officials)	DRDLR (NC)

8.4 SPATIAL DEVELOPMENT STRATEGY 3: Job Creation

Indicators for Achievement

- Better understanding of the KLM economy;
- Improved economic performance in/of the KLM;
- Improved cooperation between the public and private sector and communities;
- Youth involved in local economic development;
- Improved employment opportunities;
- Availability of appropriate land for community needs;
- Establishment of Local Economic Development Forum; and
- Establishment of Youth Development Forum.

Table 69: Requirements for the implementation of Spatial Development Strategy Three

SDS 3	PROJECT DESCRIPTION
SDS 3.1	Undertaking a detailed study of 'real economic opportunities' in the municipality.
SDS 3.2	Establishing a Local Economic Development Forum to focus on maximising on economic opportunities in the area, including negotiations with relevant sector departments in the NC provincial government and the local business and farming community.
SDS 3.3	Establishing a Youth Development Forum to ensure the involvement of youth in all economic activities in the area.
SDS 3.4	Identifying sites for the start-up/roll-out of economic activities.
SDS 3.5	Entering into negotiations around land swapping with the private sector, should State and Commonage Land not be located in areas suitable for utilisation by the communities in the municipality.

Table 70: SDS 3.1 Implementation Framework: Economic Study

SDS 3.1: Economic Study		
OBJECTIVES	TARGET GROUPS	LOCATION
• Identification of the real economic opportunities in the municipality	• Private sector (current businesses as well as start-ups)	• KLM
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
• An economic study which provides: ○ A detailed analysis of the KLM economy; and ○ Proposals regarding the exploitation/utilisation of opportunities for economic development in the KLM	2014 to 2015	• KLM • DRDLR (NC) • NCP Department of Economic Development, Tourism and Environmental Affairs
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
• Drafting of Terms of Reference • Publication of ToR and appointment of service provider • Undertaking of study • Publication and dissemination of findings • Utilisation of findings in all planning, budgeting and implementation actions in the KLM by all organs of state	R450k	• KLM • DRDLR (NC) • NCP Department of Economic Development, Tourism and Environmental Affairs

Table 71: SDS 3.2 Implementation Framework: Establish a Local Economic Development Forum

SDS 3.2: Establish a Local Economic Development Forum		
OBJECTIVES	TARGET GROUPS	LOCATION
Establishing a Local Economic Development Forum to focus on maximising on economic opportunities in the area, including negotiations with relevant sector departments in the NC provincial government and the local business and farming community	- KLM officials - Private Sector in KLM - Farming community - Community Leaders	KLM
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
- Functioning Local Economic Development Forum (LEDF) - Establishment of a network of stakeholders in the NC provincial government, private sector and farming community, which can function as participants, support and/or sources of information for the Local Economic Development Forum	Continuous, after establishment in 2014	- KLM - NCP Department of Economic Development, Tourism and Environmental Affairs
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Prepare Terms of Reference for the LEDF - Identify key stakeholders - Invite and put out call for registration as stakeholder/participant - Convene first meeting and assist with getting the LEDF off the ground	R80k	- KLM - NCP Department of Economic Development, Tourism and Environmental Affairs

Table 72: SDS 3.3 Implementation Framework: Establish a Youth Development Forum

SDS 3.3: Establish a Youth Development Forum		
OBJECTIVES	TARGET GROUPS	LOCATION
- To organize and coordinate youth development actions in the KLM - To improve skills levels of youth in the KLM and enhance their opportunities for participation in the economy - To ensure the involvement of youth in economic activities in the KLM - To enhance the possibilities for youth to pass Matric well, secure bursaries, be accepted at universities and make a success of higher education	- Youth - NGOs focused on Youth Development	KLM-wide
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
- Functioning Youth Development Forum (YDF) - Cooperation between the Youth Development Forum and the Local Economic Development Forum - Greater numbers of youth business development, employment and completion of post-Matric qualifications	Continuous, after establishment in 2014	- KLM - NCP Department of Economic Development, Tourism and Environmental Affairs - NGOs focused on Youth Development
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Prepare Terms of Reference for the YDF - Identify key youth stakeholders - Invite and put out call for registration as stakeholder/participant - Convene first meeting and assist with getting the YDF off the ground	R80k	- KLM - NCP Department of Economic Development, Tourism and Environmental Affairs - NGOs focused on Youth Development - Farmers and organised Agricultural Associations

Table 73: SDS 3.4 Implementation Framework: Identify sites for start-up/roll-out of economic activities

SDS 3.4: Identifying sites for the start-up/roll-out of economic activities		
OBJECTIVES	TARGET GROUPS	LOCATION
Identifying sites for the start-up/roll-out of economic activities	- Land owners - Private Sector - KLM - Local Economic Development Forum - Youth Development Forum	KLM
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
Sites for economic development identified, based on the Economic Study (SDS 3.1), and in cooperation with the Local Economic Development Forum and the Youth Development Forum	2014 to 2015	- KLM - DRDLR (NC) - NCP Department of Economic Development, Tourism and Environmental Affairs
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Identify criteria for suitable site/land selection - Prepare ToR for service provider - Publish ToR and select and appoint service provider - Constitute project and steering committees with broad-based local stakeholder involvement - Undertake study and publish and make further use of findings in all strategic and land-use planning processes in the KLM	R350k	- KLM - DRDLR (NC) - NCP Department of Economic Development, Tourism and Environmental Affairs

Table 74: Negotiations for land swapping

SDS 3.5: Negotiations for Land Swapping		
OBJECTIVES	TARGET GROUPS	LOCATION
Entering into negotiations around land swapping with the private sector should State and Commonage Land not be located in areas suitable for utilisation by the communities in the municipality	Land owners	Groblershoop, Grootdrink, Wegdraai, Topline, Boegoeberg
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
- State land swapped for agricultural land in close proximity of settlements - Deeds transfers successfully completed - Settlement of emerging farmers on land acquired in land swapping exercise	2015 to 2016	- KLM - ZFM DM - DRDLR (NC)
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Prepare ToR for service provider - Advertise ToR and select and appoint service provider - Do a detailed agricultural land and State land audit in the KLM - Identify emerging farmers and cooperative farming groups in need of land - Match land needs with land availability - Enter into negotiations and undertake land transfers with the support of the DRDLR	R650k	- KLM - ZFM DM - DRDLR (NC) - NCP CoGSTA

8.5 SPATIAL DEVELOPMENT STRATEGY 3: Development of Groblershoop as an attractive Kalahari Village

Indicators for Achievement

- A Groblershoop spatial structure which promotes the development of economic activities and take advantage of its interface with the N10;
- Stronger connection between Groblershoop and Sternham;
- Improved employment opportunities;
- Facilities which promote the development of economic opportunities;
- Facilitate and assist informal traders;
- Decrease in pollution levels; and
- A Land-Use Management System (LUMS) which supports the effective functioning of Groblershoop.

Table 75: Requirements for the implementation of Spatial Development Strategy Four

SDS 4	PROJECT DESCRIPTION
SDS 4.1	Commissioning the preparation of an urban design framework that will both enable (1) the development of Groblershoop into an attractive 'Kalahari village' and (2) the development of a vibrant agri-processing and manufacturing economy through: • Connecting up Groblershoop and Sternham through activities that can grow the local economy and create jobs using a 'job creation corridor', and by providing adequate shaded and shielded walkways for pedestrians from both settlements; and • Providing a proper open market space with adequate municipal services, shade and protection from the heat and the rain, for informal traders in Groblershoop.
SDS 4.2	Putting in place adequate pollution control measures in the areas where beneficiation will be undertaken to protect the crucially important water source in the area.
SDS 4.3	Taking great care when considering land-use development applications in the area to not allow the energy derived from concentration of complimentary land uses be dissipated.

Table 76: SDS 4.1 Implementation Framework: Groblershoop Urban Design Framework

SDS 4.1: Groblershoop Urban Design Framework		
OBJECTIVES	TARGET GROUPS	LOCATION
Preparation of an urban design framework that will enable the development of Groblershoop into an attractive 'Kalahari village' with a vibrant agri-processing and manufacturing economy by: - Connecting up Groblershoop and Sternham through activities that can grow the local economy and create jobs using a 'job creation corridor', and by providing adequate shaded and shielded walkways for pedestrians from both settlements; and - Providing proper open market space with adequate municipal services, shade and protection from the heat and the rain, for informal traders in Groblershoop	- Groblershoop community - Tourism operators in the KLM - Retail outlets in Groblershoop - Established agri-processing and manufacturing firms/operators in the area - Emerging individuals, companies and cooperatives	Groblershoop and Sternham
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
- Groblershoop Urban Design Framework - Creation of an enabling spatial structure in the town that supports sustainable spatial, economic and social development	2014 to 2015	- KLM - DRDLR (NC) - NCP CoGSTA
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Draw up ToR that takes the proposals as made in this SDF into consideration - Identification and appointment of appropriate service provider - Preparation of Groblershoop Urban Design Framework - Ensuring stakeholder buy-in and support to proposals as contained in the framework	R550k	- KLM - DRDLR (NC)

Table 77: SDS 4.2 Implementation Framework: Implement Pollution Control Measures

SDS 4.2: Implement Pollution-Control Measures		
OBJECTIVES	TARGET GROUPS	LOCATION
Putting in place adequate pollution-control measures in the areas where beneficiation will be undertaken to protect the crucially important water source in the area	- Groblershoop community - Established agri-processing and manufacturing firms/operators in the area - Emerging individuals, companies and cooperatives	Groblershoop
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
- Adequate pollution-control measures - Beneficiation connected to sustainable pollution control, for instance recycling	Continuous, after 2015	- KLM - NCP Department of Economic Development, Tourism and Environmental Affairs
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Assessment of current pollution levels - Development of pollution-control measures, linked where possible to beneficiation - Publication, communication and enforcement of control measures	R150k	- KLM - ZFM DM - National DEA - NCP Department of Economic Development, Tourism and Environmental Affairs

Table 78: Implementation Framework: Reinforce complimentary land uses through the appropriate LUM

SDS 4.3: Reinforce complimentary land uses through LUM		
OBJECTIVES	TARGET GROUPS	LOCATION
Utilizing LUM to manage land development in Groblershoop in such a way that it ensures the concentration of complimentary land uses in clusters/nodes and supports local economic development	KLM officials responsible for LUM	KLM-wide
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
Concentration of complimentary land uses in well well-planned, demarcated clusters/nodes, preferably in the Community Facility Clusters	Continuous, after 2014	- KLM - DRDLR (NC)
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
- Education of KLM officials regarding the importance of the appropriate management of land in Groblershoop - Commitment and cooperation of LUM officials - Not allowing land development applications that could lead to non-focused, scattered land development - Allowing complimentary land uses in clusters/nodes	R60k (Training provided by DRDLR (NC) officials)	DRDLR (NC)

8.6 KLM SDF PRIORITY MATRIX

A Priority Matrix (see **Table 79** below) was developed by the DRDLR in order to standardise the prioritisation process undertaken in all the SDF preparation and review processes in the Northern Cape. The matrix makes use of a scoring method which consists of (1) spatial fundamentals for which the KLM SDF uses the SDF Objectives, as outlined below; (2) alignment with the provincial and district SDFs; and (3) benefit to the community. This matrix was used for scoring the sixteen projects included in this SDF (see **Table 80**).

It is proposed that in future all projects and programmes proposed by any organ of state (be it municipal IDP projects, municipal sector department projects, or provincial/national sector department programmes), be put through this matrix, to establish (1) their alignment with the KLM SDF objectives, and (2) their priority for the development of the municipality. Given the legal obligation Chapter 4 of the SPLUMA, which deals with SDFs, places on all organs of state to ensure:

- Integration, coordination and alignment, and the shared pursuit of spatial, economic and social development objectives in the country in all their endeavours, and
- That their development plans, projects and programmes are aligned with provincial, and hence also municipal SDFs, as municipal and provincial SDFs have to be aligned with and be consistent with each other (see Sections 12, 17 and 22 of the Act),

This tool should become a very useful instrument in (1) achieving intergovernmental collaboration, and (2) ensuring legal compliance in terms of the provisions of this Act.

The four **Spatial Development Objectives** as included in this SDF were used in the matrix, viz:

- Objective 1:** To improve the accessibility to and quality of government services
- Objective 2:** To develop settlements that allow their inhabitants to live dignified lives
- Objective 3:** To increase participation of all the inhabitants of the municipality in the local and regional economy
- Objective 4:** To provide an attractive settlement for residents, investors and tourists

The following scoring method is provided by the DRDLR:

Table 79: Priority Matrix Scoring Method

Low			Medium			High		
Low-Low	Low-Medium	Low-High	Medium-Low	Medium-Medium	Medium-High	High-Low	High-Medium	High-High
1	3	5	6	8	10	11	13	15
	Maintaining status quo			Ensure a moderate improvement			Enable the Municipality to fulfill its mandate	

The DRDLR specifies that (1) points awarded to projects should be justified in terms of the rating per project; and (2) the proposed method of scoring is the Odd-Even-Odd number method, as indicated above.

Table 80: KLM SDF Priority Matrix

Project list			Scoring							Project Timeframe	Responsible Department/s	Funds		Total Score	Rating
			Spatial Fundamentals: SDF Objectives				Alignment		Benefits to the Communi- ty						
Prj nr.	Project Name	Description	1	2	3	4	NC PSDF	ZFM DM SDF						Amount/ Project Budget	Source
SDS 1.1	KLM Health Service Revitalisation Plan	Creation of a KLM Health Service Revitalisation Plan based on a comprehensive study of the exact needs of each settlement	13	13	3	5	10	10	15	2014 - 2015	KLM; NCDH	R350k	KLM; FZMDM; NCDH	69	7
SDS 1.2	Appropriate Sites for Early Childhood Development Centres	Identification of appropriate sites for Early Childhood Development Centres ECDC) in consultation with existing service providers and communities, in each settlement.	11	13	5	5	8	8	13	2015 - 2016	KLM; NCDE; NCSDS	R150k	KLM; NCDE; NCSDS	63	11
SDS 2.3	Aligning Government Service Provision with the KLM SDF Community Facility Clusters	Ensuring that all government investment, notably in the areas of education and health services is developed in the proposed Community Facility Clusters in each of the settlements	15	13	5	6	10	8	13	Cont. from 2014	KLM; NCDE; NCSDS	NA	NA	70	6
SDS 2.1	Establishment of a Community Facility Cluster Task Team	Establishment of a Community Facility Cluster Task Team to manage the development of these clusters and ensure that a functional rural-regional approach is used in the allocation of the various government facilities/services in the various settlements in the municipality	13	15	6	11	8	8	11	Cont. from 2014	KLM	NA	NA	72	4
SDS 2.2	Detailed Design Guidelines for the Community Facility Clusters	Development of detailed design guidelines for the development of the Community Facility Clusters that take the extreme climatic conditions into consideration	13	13	6	11	8	8	11	2014 - 2016	KLM	R200k	KLM; FZMDM; NCDRDLR	70	6
SDS 2.3	Delineation of Community Facility Cluster Locations	Refining locations for Community Facility Clusters	11	15	8	11	8	8	15	2015	KLM	R180k	KLM; FZMDM; NCDRDLR	76	2
SDS 2.4	Maintenance and upgrading of Cluster areas	Maintenance and upgrading of Community Facility Clusters	11	11	6	11	8	8	13	Cont. from 2015	KLM; NCDE; NCSDS	TBD	KLM; ZFMDM; NCDE; NCSDS	68	8
SDS 2.5	Strengthening of Community Facility Clusters through Land	Only allowing applications for non-residential land-uses that could strengthen the Community Facility Clusters	8	13	8	13	8	8	13	Cont. after 2014	KLM; NCDRDLR	R60k	NCDRDLR	71	5

	Use Management														
SDS 3.1	Economic Study	Identification of the real economic opportunities in the municipality	3	8	15	11	8	8	15	2014 - 2015	KLM; NCDRLR; NCDEDTEA	R450k	KLM; NCDRLR; NCDEDTEA	68	8
SDS 3.2	Establish a Local Economic Development Forum	Establishing a Local Economic Development Forum to focus on maximising on economic opportunities in the area, including negotiations with relevant sector departments in the NC provincial government and the local business and farming community	3	6	15	11	8	8	15	Cont. from 2014	KLM; NCDEDTEA	R80k	KLM; NCDEDTEA	66	9
SDS 3.3	Establish a Youth Development Forum	Establishing a Youth Development Forum to ensure the involvement of youth in all economic activities in the area	1	8	13	11	8	8	15	Cont. from 2014	KLM; NCDEDTEA; Youth Development NGOs	R80k	KLM; NCDEDTEA; Youth Development NGOs; Farmers & Organised Agricultural Associations	64	10
SDS 3.4	Identifying sites for the start-up/roll-out of economic activities	Identifying sites for the start-up/roll-out of economic activities	5	10	15	10	8	8	13	2014 - 2015	KLM; NCDRLR; NCDEDTEA	R350k	KLM; NCDRLR; NCDEDTEA	69	7
SDS 3.5	Negotiations for Land Swapping	Entering into negotiations around land swapping with the private sector should State and Commonage Land not be located in areas suitable for utilisation by the communities in the municipality	5	8	11	11	8	8	15	2015 - 2016	KLM; FZMDM; NCDRLR	R650k	KLM; ZFMDM; NCDRLR; NCCoGSTA	66	9
SDS 4.1	Groblershoop Urban Design Framework	Commissioning the preparation of an urban design framework that will both enable the development of Groblershoop into an attractive 'Kalahari village' and enable the development of a vibrant processing/ manufacturing economy	11	11	13	15	10	8	13	2014 - 2015	KLM; NCDRLR; NCCoGSTA	R550k	KLM; NCDRLR	81	1
SDS 4.2	Implement Pollution Control Measures	Putting in place adequate pollution control measures in the areas where beneficiation will be undertaken to protect the crucially important water source in the area	5	8	8	13	8	8	13	Cont. from 2015	KLM; NCDEDTEA	R150k	KLM; ZFMDM; NDEA; NCDEDTEA	63	11
SDS 4.3	Reinforce complimentary land uses through LUM in Groblershoop	Taking great care when considering land-use development applications in the area to not let the energy derived from concentration of complimentary land uses dissipate	6	11	8	13	11	11	13	Cont. from 2014	KLM; NCDRLR	R60k	NCDRLR	73	3

It is proposed that the municipal official/s responsible for the KLM SDF enter into engagements with the relevant provincial sector departments to (1) popularise the SDF, and (2) ensure that all future public and private infrastructure investment, development spending and property development and redevelopment is done within the spatial framework as provided.

It is proposed that the KLM establish a !Kheis Spatial Development Committee, consisting of (1) relevant officials and councillors, (2) FZM DM officials, (3) officials from relevant provincial departments, and (4) civil society representatives, to:

- Discuss spatial development issues in the !Kheis municipal area;
- Discuss the implementation of the KLM SDF;
- Discuss challenges with the KLM SDF, and in ensuring compliance with its provisions; and
- Identify novel ways by which the implementation of, and adherence to the KLM SDF can be enhanced.

8.7 MONITORING AND REVIEW

It is the duty of the KLM and specifically so, those officials tasked with this duty, to do everything in their power to (1) pursue progress with the implementation of the framework, and (2) ensure that all land development and land use takes place within the parameters as set. In this, they should be well supported by the proposed !Kheis Spatial Development Committee.

Given that the KLM Municipal Council has adopted this SDF, it is also the duty of the Council to (1) monitor progress with its implementation, and (2) take the necessary steps to address lack of progress in this regard. A process of regular reporting on 'the implementation of and adherence to the KLM SDF' to Council, preferably more than once a year, should also be established to ensure that Council is fully aware of the situation on the ground, and can deliberate and take the necessary remedial steps.

Just like any other plan, framework or strategy, an SDF also becomes out-dated as time passes and needs to be reviewed. The current legal framework provides for SDFs to be reviewed and updated on a five-year cycle. It is hence proposed that such a review is planned for (in terms of finances, time and human resources) well in advance of its 'due date' in 2019.