



COLLINS CHABANE

LOCAL MUNICIPALITY

**FINAL
SPATIAL DEVELOPMENT
FRAMEWORK**

2017

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1. BACKGROUND AND PURPOSE

1.1. MUNICIPAL OVERVIEW

Collins Chabane Local Municipality (CCLM) was established in terms of Section 12 of the Municipal Structures Act (No. 117 of 1998), following the local government elections held on 3 August 2016. The municipality is now the fourth Local Municipality (Category B) within the Vhembe District. It is situated in the Northern parts of the Limpopo Province and shares borders with Musina in the north, Thulamela in the north-east, the Mopani District in the south and Makhado in the west. The municipal area is 5 467.216 km² which is made up by land which was previously part of Thulamela and Makhado Local Municipality.

Currently, the municipality consist of 36 wards, 173 villages and has approximately 347 974 people residing within its borders. The municipality has one node of district importance namely Malamulele and three municipal nodes which includes Saseleman, Vuwani, and Hlanganani. The municipality is flanked by two dominant roads, namely the R578 and the R81. The R578 links the municipality to the N1 which runs through Musina to Gauteng. While the R81 connects the Municipality via Giyani to Mopane and Capricorn District.

1.2. THE PURPOSE OF A SPATIAL DEVELOPMENT FRAMEWORK

The Spatial Development Framework (SDF) functions at a municipal scale and exists in a multi-disciplinary environment. An SDF is a long term (10-20 year) development framework which articulates the vision, goals and objectives of a municipality spatially through strategies designed to address physical, social and economic shortcomings.

A municipal SDF is not confined only to the Integrated Development Plan (IDP) related projects and programmes, however it should aim to integrate and coordinate development proposals and related strategies within the various spheres of government, local municipal sectors and adjacent municipalities.

1.2.1. *The significance of an SDF*

An SDF is an indicative framework concerned with growth and development of the municipality and local communities (see **Chapter 8**). A SDF is strategic in nature providing a framework in which area based spatial plans (precinct plans) can be developed to ensure strategies and project initiatives are not generic but specific to deal with development pressures found within a particular municipal area. An SDF guides decision-making on land development, however it does not confer land use rights to any property. Its aim is to revise the legacy of apartheid spatial planning, to eliminate all traces of segregation, fragmentation and inequalities found in municipal space. As such, the SDF restores dignity, creates a sense of place and ownership as it provides communities with a voice and vision on how they will want to see their areas developed. A SDF can empower communities to contribute ideas and solutions in all matters affecting them and it places accountability to the municipality to deliver services and allow development in a manner that is progressive, coherent and just.

1.2.2. *How will the SDF affect the Municipality*

The SDF ultimately is a place making tool, as it analyses and synergises various plans and policies that indicate current and propose future spatial, economic, social, and environmental management as well as infrastructure development projects and programmes of the municipality.

It is a framework that influences the nature and quality of local communities by balancing developmental needs and reducing developmental anarchies. SDF's are formulated around development principles and it uses structuring elements such as nodes and corridors, and development concepts such as densification, containment, protection and growth areas to indicate how land uses within a municipality can be managed to achieve the desired future spatial form.

1.2.3. Legal status of a SDF

Section 26 (e) of the Municipal Systems Act, 2000, requires that a SDF be prepared as part of the IDP. However, Section 20(1) of SPLUMA states that the Municipal Council must by notice in the Provincial Gazette adopt a municipal SDF for a municipality. Furthermore, Section 22 (1) of SPLUMA states that a Municipal Planning Tribunal or any authority required or mandated to make land development decisions in terms of SPLUMA or any other law relating to land development, may not make decisions which are contradictory to the municipal SDF.

1.2.4. The interrelationship between land use management and spatial planning

SPLUMA links the content of a municipal SDF and a municipal land use scheme by requiring that a SDF:

- determines the purpose, desired impact and structure of the land use management scheme to apply in that municipal area; and
- Include an implementation plan that includes (among other) necessary amendments to a land use scheme.

Linking these two planning instruments has, in the past, proven to be challenging. While the SDF guides municipal wide planning and provides a future spatial form of the municipality, a land use scheme deals with existing property rights. The timeframes of the two instruments has also varied drastically in the past. SDF's are reviewed every 5 years, whilst land use schemes tend to be in use a bit longer. The existing Town Planning Schemes for Thulamela is dated 2006 and Makhado is dated 2009. Even-though scheme are 'amended' through development applications (i.e. rezoning, consent use application), these applications only affect individual properties. In the past, the scheme was not amended or updated as a spatial tool thereof. One example of how to link the SDF and the Land use scheme comes from the KZN LUMS Guidelines (KZN, 2011). The guidelines proposes linking elements which include:

- A spatial representation of the municipal area indicating the location of:
 - Areas where prescriptive regulations are required, and areas where more flexible policy-based decision-making is required;
 - Special areas that need detailed action plans;
 - Environmentally sensitive and/or conservation areas requiring special provisions with regards to environmental management; and
 - High potential agricultural land that needs to be protected to ensure ongoing food provision.
- A link to institutional decision-making indicating where special decision-making processes are appropriate or when delegated powers are required, e.g. in redevelopment areas with special purpose implementation agencies;
- A dictionary of land use zones to be used in the municipality;

- Appropriate quantification of broader SDF proposals;
- A phasing plan to guide the introduction of the Scheme across a municipality. This component assumes there is insufficient capacity within the municipality to introduce the same levels of detail in all areas at the same time;
- Generic urban design guidelines, where appropriate; and
- The detailing of principles suggested in the SDF to guide the preparation of the Scheme and decision-making on applications for land use change.

1.2.5. SPLUMA requirements for SDF's

In analysing the existing spatial form of the city and deciding on the future spatial structure, planners use structuring and restructuring elements and tools, the outcomes of which are documented in the municipal SDF. The SPLUMA establishes the following (among other) as components of a municipal SDF:

- **Clearly define WHO and WHAT are being planned for:**
 - Include a five-year population growth estimate and indicate how this growth will translate into a need for housing across different socioeconomic groups (and where in space this will occur); and
 - Include five-year estimates of economic activity and employment trends and locations in the municipal area.
- **Spatially identify WHERE and WHEN development will occur.**
 - Identify current and future significant structuring and restructuring elements of the spatial form of the municipality, including development corridors, activity spines and economic nodes where public and private investment will be prioritised and facilitated; and
- Include a written and spatial representation of five-, 10- and 20-year spatial development patterns (in other words where the quantum of residential and non-residential land uses identified above will spatially occur over time at specific locations within the municipality).
- **Link future development needs with infrastructure requirements.**
 - Identify, quantify and provide location requirements of engineering infrastructure and services provision for existing and future development needs for the next five years.
- **Determine who will be responsible for implementing proposals.**
 - Provide the spatial expression of the coordination, alignment and integration of sectoral policies of all municipal departments; and
 - Include an implementation plan comprising sectoral requirements, including budgets, resources for implementation, institutional requirements, targets, dates and monitoring indicators.
- **Spatially determine where money should be spent.**
 - Determine a capital expenditure framework for the municipality's development programmes, depicted spatially.

2. LEGISLATION AND POLICY CONTEXT

2.1. NATIONAL LEGISLATION AND POLICY DIRECTIVES

2.1.1. *Spatial Planning and Land Use Management Act*

The Spatial Planning and Land Use Management Act No 16 of 2013 sets the legal framework for all spatial planning and land use management legislation in South Africa. It seeks to promote consistency and uniformity in procedures and decision-making. Other objectives include addressing historical spatial imbalances and the integration of the principles of sustainable development into land use and planning regulatory tools and legislative instruments. SPLUMA requires national, provincial, and municipal spheres of government to prepare SDF's that establishes a clear vision which must be developed through a thorough inventory and analysis based on national spatial planning principles and local long-term development goals and plans. SDF's are thus mandatory at all three spheres of government.

Section 12 (1) sets out general provisions which are applicable to the preparation of all scales of SDFs. These provisions require that all SDF's must:

- a. interpret and represent the spatial development vision of the responsible sphere of government and competent authority;
- b. be informed by a long-term spatial development vision;
- c. represent the integration and trade-off of all relevant sector policies and plans;
- d. guide planning and development decisions across all sectors of government;
- e. guide a provincial department or municipality in taking any decision or exercising any discretion in terms of this Act or any other law relating to spatial planning and land use management systems;
- f. contribute to a coherent, planned approach to spatial development in the national, provincial and municipal spheres;
- g. provide clear and accessible information to the public and private sector and provide direction for investment purposes;
- h. include previously disadvantaged areas, areas under traditional leadership, rural areas, informal settlements, slums and land holdings of state-owned enterprises and government agencies and address their inclusion and integration into the spatial, economic, social and environmental objectives of the relevant sphere;
- i. address historical spatial imbalances in development;
- j. identify the long-term risks of particular spatial patterns of growth and development and the policies and strategies necessary to mitigate those risks;
- k. provide direction for strategic developments, infrastructure investment, promote efficient, sustainable and planned investments by all sectors and indicate priority areas for investment in land development;
- l. promote a rational and predictable land development environment to create trust and stimulate investment;
- m. take cognizance of any environmental management instrument adopted by the relevant environmental management authority;
- n. give effect to national legislation and policies on mineral resources and sustainable utilisation and protection of agricultural resources; and
- o. Incorporate the outcomes of substantial public engagement, including direct participation in the process through public meetings, public exhibitions, public debates and discourses in the media and any other forum or mechanisms that promote such direct involvement.

Sub-section 12(2) confirms that all three spheres of government must participate in each other's processes of spatial planning and land use management and each sphere must be guided by its own SDF when taking decisions relating to land use and development. The section stipulates the following:

1. The national government, a provincial government and a municipality must participate in the spatial planning and land use management processes that impact on each other to ensure that the plans and programmes are coordinated, consistent and in harmony with each other.
2. A SDF adopted in terms of this Act must guide and inform the exercise of any discretion or of any decision taken in terms of this Act or any other law relating to land use and development of land by that sphere of government.

Chapter 2 of SPLUMA sets out the development principles that must guide the preparation, adoption and implementation of any SDF, policy or by-law concerning spatial planning and the development or use of land. These objectives include the redress of spatial injustices and the integration of socio-economic and environmental considerations in land use management in order to balance current development needs with those of the future generations in a transformative manner.

SPLUMA reinforces and unifies the NDP's vision and policies in respect of using spatial planning mechanisms to eliminate poverty and inequality while creating conditions for inclusive growth by seeking to foster a high-

employment economy that delivers on social and spatial cohesion. The five founding principles as set out in **Section 7 (a) to (e)** of SPLUMA:

- a. *Spatial Justice*: past spatial and other development imbalances must be redressed through improved access to and use of land by disadvantaged communities and persons.
- b. *Spatial Sustainability*: spatial planning and land use management systems must promote the principles of socio-economic and environmental sustainability through; encouraging the protection of prime and unique agricultural land; promoting land development in locations that are sustainable and limit urban sprawl; consider all current and future costs to all parties involved in the provision of infrastructure and social services so as to ensure for the creation of viable communities.
- c. *Efficiency*: land development must optimise the use of existing resources and the accompanying infrastructure, while development application procedures and timeframes must be efficient and streamlined in order to promote growth and employment.
- d. *Spatial Resilience*: securing communities and livelihoods from spatial dimensions of socio-economic and environmental shocks through mitigation and adaptability that is accommodated by flexibility in spatial plans, policies and land use management systems.
- e. *Good Administration*: all spheres of government must ensure an integrated approach to land use and land development and all departments must provide their sector inputs and comply with prescribed requirements during the preparation or amendment of SDFs. This principle is the fulcrum of this framework largely because implementation of the spatial planning vision and objectives is not only highly dependent upon a strong coordinating role of central

government but is also predicated upon good governance mechanisms, incorporating meaningful consultations and coordination with a view to achieving the desired outcomes across the various planning spheres and domains.

The benefits of a SDF can be summarised as follows:

- The municipality will have a written and spatial representation of a five-year spatial development plan for the spatial form of its area including a longer term spatial development vision statement;
- The municipality will be able to identify current and future significant structuring and restructuring elements of the spatial form;
- The municipality will be able to identify population growth estimates and housing shortages and demands within its area;
- The municipality will be able to identify estimates of economic activity and employment trends and locations;
- The municipality will be able to identify, quantify and provide location requirements for engineering infrastructure and services provision for existing and future development needs;
- The municipality will be able to strategically assess environmental pressures and opportunities;
- The municipality will be able to spatially depict capital expenditure framework for the municipality's development programmes; and
- The municipality will be able to determine the purpose, desired impact and structure of the land use scheme.

2.1.2. Municipal Systems Act No. 32 of 2000

In 2000, the Municipal Systems Act no. 32 established a framework for municipal planning and performance management. The Act changed the

way in which municipalities develop policies as it seek to clarify sustainable development within local governance and the role that communities should play in the integrated development planning phase. **Section 26 (e)** states that a SDF should accompany the municipal IDP and that the SDF should provide guidelines for the compilation of a land use management system within the affected municipality.

2.1.3. Traditional Leadership and Governance Framework Act No. 41 of 2003

This Act demands for the participation of traditional authorities in the development of municipal policies that affect communities located in areas administered by traditional leaders. The Act states that the functions of a local house of traditional leaders are to advise the district municipality and/or metropolitan municipality in question, on the development of planning frameworks that impact on traditional communities and to participate in local programmes that have the development of rural communities as an objective. With the enactment of SPLUMA, areas previously excluded from any planning frameworks are now incorporated.

The proposed SDF will incorporate areas under the administration of traditional authorities. Importantly, the traditional authorities and the affected communities will form an integral part of the compilation of the SDF, so as the final SDF is entirely accepted as a true reflection of the needs of the rural communities and the entirety of the CCLM. This Act is important for the municipal area because there are a number of traditional authorities that exist within the jurisdiction of the municipality. Furthermore, a number of rural settlements are administered by these traditional authorities. As a result, it is vital that these authorities should play a significant role in the development of the 2017 municipal SDF.

2.1.4. Preservation and Development of Agricultural Land Bill 2015

Amongst its objectives, the Bill aims to provide for the preservation of agricultural land; provide for agricultural regulations pertaining to the subdivision and change of land use applications on agricultural land and to provide for protected agricultural areas. Food production and environmental protection are one of the twelve items identified in the Government Outcomes approach adopted by the Cabinet. In this case there is conflict between a municipal based legislation and bylaws, the Bill prevails. The Bill requires municipalities to develop policies protecting valuable agricultural land such as an agricultural sector plan.

The reviewed SDF will play a significant role in legal compliance on the protection of agricultural land. The objective of the agricultural sector plan, envisaged by the Bill, is to ensure the preservation and further development of agricultural land. Upon the approval of the sector plan, all organs of the State will be legally bound by its contents. The Bill also calls for the protection of agricultural areas through the development and listing of such areas. The Collins Chabane SDF shall further emphasise the importance of this by spatially depicting the areas showing high potential for agricultural purposes and protecting them.

2.1.5. Limpopo Spatial Planning and Land Use Management Bill (SPLUMB)

The Provincial SPLUMB states that the Municipal Council must by notice on the Provincial Gazette adopt a municipal SDF for the municipality. Before adopting the municipal SDF, the Municipal Council must give notice of the proposed municipal SDF in the Gazette and the media.

The Council must invite the public to submit written representations in respect of the proposed municipal SDF to the Municipal Council within 60 days after publication of the latter notices. Furthermore, the Council must consider all representations received in respect of the proposed municipal SDF.

A Municipal Planning Tribunal or any other authority required or mandated to make a land development decision in terms of this Act or any other law relating to land development, may not make a decision which is inconsistent with a municipal SDF. A Municipal Planning Tribunal or any other authority required or mandated to make a land development decision may depart from the provisions of a municipal SDF only if; site specific circumstances justify a departure from the provisions of such municipal SDF. Where a provincial SDF is inconsistent with a municipal SDF, the Premier must take necessary steps, including the provision of technical assistance to support the revision of those SDF's in order to ensure consistency between the two.

2.1.6. Thulamela Spatial Planning and Land Use Management By-Law

The Thulamela Spatial Planning and Land Use Management By- Law states that the municipality should convene an inter-governmental steering committee and a project committee when it intends to prepare, amend or review its SDF. A notice must then be published in the Provincial Gazette and a local newspaper circulating in the municipal area as per the Municipal Systems Act **Section 28 (3)**. The notices must be in two different official languages and must adhere primarily to the languages spoken within the area of jurisdiction of the municipality. The relevant Member of the

Executive Council (MEC) must be informed in writing of the municipality's intentions pertaining to its SDF.

The purpose of the intergovernmental steering committee is to coordinate the applicable contributions into the MSDF and to;

- Provide technical knowledge and expertise;
- Provide input on outstanding that is required to draft the MSDF or an amendment or review thereof;
- Communicate any current or planned projects that have an impact on the municipal area;
- Provide information on the locality of projects and budgetary allocations; and
- Provide written comment to the project committee on various phases of the process.

The Municipality must, before commencement of the preparation, amendment or review of the MSDF, in writing invite nominations for representation to serve on the intergovernmental steering committee from departments in the national, provincial and local sphere of government, community representatives and other organs of state, as well as any other body or person that may assist in providing information and technical advice on the content of the municipal SDF (MSDF). The purpose of the project committee is to;

- Prepare, amend or review the MSDF for adoption by the Council;
- Provide technical knowledge and expertise;
- Monitor progress and ensure that the drafting or amendment of the MSDF is progressing according to the approved process plan;

- Guide the public participation process, including ensuring that the registered key public sector stakeholders remain informed; and
- Ensure alignment of the MSDF

Public participation undertaken by the Municipality must contain and comply with all the essential elements of any notices to be placed in terms of the Act or the Municipal Systems Act. The Municipality may for the purposes of public engagement on the content of the draft MSDF arrange specific consultations with professional bodies, ward communities or other groups as well as public meetings. The notice contemplated above must specifically state that any person or body wishing to provide comments shall:

- Do so within a period of 60 days from the first day of publication of the notice;
- Provide written comments; and
- Provide their contact details as specified in the definition of contact details.

2.1.7. New Growth Path & National Infrastructure Plan

In 2010, national government adopted a the New Growth Path (NGP) which recognised that structural unemployment remains extremely high; poverty continues to afflict millions; oppression of workers continues; and that inequalities are now deeper than ever before. In this regard, the NGP was envisioned to accelerate growth in the South African economy, and to do so in ways that rapidly reduce poverty, unemployment and inequality. The main intention of the NGP was to lay down a dynamic vision on how the country can collectively achieve a more developed democratic and equitable economy and society over the medium-term, in the context of

sustainable growth. The NGP's goal was to create 5 million new jobs through 5 job leavers. Significantly, infrastructure development (Job driver 1) and spatial development (Job driver 5) were both identified as foundations for more jobs and addressing rural under-development (National Planning Commission., 2011, p. 2).

The Presidential Infrastructure Coordinating Commission (PICC) assessed South Africa's infrastructure gaps through a spatial mapping exercise which analysed future population, projected economic growth and areas of the country which are not served with water, electricity, roads, sanitation and communication infrastructure. Twenty mapping exercises were conducted that set out the key 'corridors' in a spatial framework which will guide infrastructure development. Based on this work, 18 Strategic Infrastructure Projects (SIP) were developed and approved to support economic development and address service delivery in the poorest provinces. The 18 SIPs have been grouped according to five geographically-focussed SIPs, 3 energy SIPs, 2 spatial SIPs, 3 social infrastructure SIPs, 2 knowledge SIPs, 1 regional integration SIP and 1 water and sanitation SIP. Each SIP comprises of a number of specific infrastructure components and programmes which forms part of the National Infrastructure Plan. Even-though there are no proposed infrastructure projects which directly affects CCLM, several projects do apply all over RSA. These include:

Energy SIPs - SIP 8 is geared towards supporting a diverse range of clean energy or green energy production, amongst which the development of bio-fuel production facilities will be necessary. However, SIP 9 and 10 calls for increased production of energy/electricity as well as the expansion of the distribution network to address historical imbalances. The increased

production of energy / electricity will require increased coal mining activities which will impact both water and land resources.

Spatial SIPs - The Spatial SIPs, 6 and 7 broadly aims to facilitate the integration of municipal infrastructure project, specifically to address all maintenance backlogs and upgrades required for water, electricity and sanitation bulk infrastructure and to coordinate planning and implementation human settlement into sustainable urban settlements connected by densified transport corridors. Both SIP's will holds positive spin-offs for water and land resources as the maintenance and upgrading of existing infrastructure will reduce water losses and water pollutions and densified, sustainable urban settlements will reduce sprawling footprints. SIP 11, Agri-logistics and rural infrastructure, which also falls under the spatial SIP, focuses on improving investment in agricultural and rural infrastructure that supports expansion of production and employment, small-scale farming and rural development by expanding irrigation schemes to poor areas.

Social infrastructure SIPs - Social infrastructure SIPs, which includes 12, 13 and 14 calls for the revitalisation old and the development of new public hospital, health facilities, schools and higher education infrastructure.

Knowledge SIPs - The knowledge SIPs which includes SIP 15 and 16 aims to provide for broadband coverage to all households by 2020 by establishing core Points of Presence (POPs) in district municipalities, extend new Infracore fibre networks across provinces linking districts, establish POPs and fibre connectivity at local level, and further penetrate the network into deep rural areas. While the private sector will invest in ICT infrastructure for

urban and corporate networks, government will co-invest for township and rural access, as well as for e-government, school and health connectivity.

The school roll-out focus is initially on the 125 Dinaledi (science and maths-focussed) schools and 1525 district schools. Part of digital access to all South Africans includes TV migration nationally from analogue to digital broadcasting.

Water and sanitation infrastructure SIP - SIP 18, plans to address and supply the estimated backlog of 1.4 m households with adequate water infrastructure and 2.1 m households with basic sanitation. Projects will provide for new infrastructure, rehabilitation and upgrading of existing infrastructure, build new waste water treatment works and as well as improve management of water infrastructure. The latter will be achieved by consolidating water services institutions and implement water leak management and water demand awareness programmes. The project will involve provision of sustainable supply of water to meet social needs and support economic growth.

2.1.8. National Development Plan: Vision 2030

In 2012, government announced the adoption of a National Development Plan (NDP)-2030 which will be South Africa's long-term socio-economic development roadmap. The NDP was released after the New Growth Path: Framework, and sets out the Country's Vision for 2030 which looks beyond the current constraints to the transformation imperatives over the next 20 to 30 years (National Planning Commission., 2011). The Plan aims to ensure that all South Africans attain a decent standard of living through the elimination of poverty and reduction of inequality.

The NDP defines a desired destination and identifies the role different sectors of society need to play in reaching that goal. The following section summarises the aims and objectives from the NDP. Note that specific objectives such as social protection, fighting corruption and nation building have not been included as these do not have a spatial implication on the SDF.

Economy and Employment – The NDP aims to eliminate poverty and reduce inequality. In order to do so, RSA requires faster and more inclusive growth. Key elements of this strategy include raising exports, improving skills development, and lowering the costs of living for the poor. It further includes investing in a competitive infrastructure, reducing the regulatory burden on small businesses, facilitating private investment and improving the performance of the labour market. Many of South Africa's economic challenges lies within the distorted pattern of ownership and economic exclusion created by apartheid policies. The SDF should structure proposed development in such a manner that it promotes sustainable and equitable spatial development. Placing proposed housing development close to social and economic opportunities and vs. the SDF can redress the spatial imbalances of racial exclusion that are still evident in both employment levels and income differentials.

Economic infrastructure – RSA needs to maintain and expand its electricity, water, transport and telecommunications infrastructure in order to support economic growth and social development goals. The role and effectiveness of sector regulators needs to be reviewed. In addition to issuing licenses and setting tariffs, regulators need to place more emphasis on stimulating market competition and promoting affordable access to quality services. This will require capacity-building in regulatory institutions.

Policy planning and decision making often requires trade-offs between competing national goals. South Africa needs to invest in a strong network of economic infrastructure designed to support the country's medium and long-term economic and social objectives. This economic infrastructure is a precondition for providing basic services such as electricity, water, sanitation, telecommunications and public transport. It needs to be robust and extensive enough to meet industrial, commercial and household needs.

Priority needs to be given to infrastructure programmes that contribute to regional integration. These include the African Union's north-south corridor and sector-specific projects such as enhancing border facilities, improving energy access and information and communications technology (ICT) connectivity, and revising transport links. State owned enterprise performance may be improved by combining cooperation and competition. Mechanisms are also needed to ensure local industry remains regionally and globally competitive while meeting domestic needs. Access to basic electricity, water and sanitation, and public transport for many South Africans, particularly in poor rural and peri-urban communities, accessing electricity, safe water, sanitation, telecommunications and public transport is a challenge. The SDF seeks to create sustainable and efficient societies through land development optimisation the use of existing resources and the accompanying infrastructure and services in order to meet basic domestic needs.

Environmental sustainability and resilience - South Africa has rich endowment of natural resources and mineral deposits, which if reasonably used can fund the transition to a low-carbon future and a more diverse and inclusive economy. Developmental challenges to be addressed in a

manner that ensures environmental sustainability and builds resilience to the effects of climate change, specifically in poorer communities. Investment in skills, technology and institutional capacity is critical to support the development of more sustainable society and the transition to a low-carbon economy. Consumer awareness initiatives and sufficient recycling infrastructure should result in South Africa becoming a zero-waste society. The development of environmentally sustainable green products and services will contribute to the creation of jobs in niche markets where South Africa has or can develop a competitive advantage.

Inclusive Rural Economy - Rural communities to have better opportunities to participate in the country's economic, social and political scope. Access to high-quality basic services. To be supported by agriculture, mining, tourism, agro-processing and fisheries. Improvement of integration through successful land reform, infrastructure development, job creation and poverty alleviation.

Transforming Human Settlements - The SDF should promote spatial development patterns that exacerbate social inequality and economic inefficiency. It should also implement catalytic interventions in order to achieve spatial transformation in such a way that supports locally driven spatial governance. Municipalities should aim to achieve a desired balance between spatial equity, economic competitiveness and environmental sustainability.

Improving education, training and innovation - Education, training and innovation should play a major role in building an inclusive society, providing opportunities and assisting people discover and release their full potential. Different parts of the education system should inform learners of

different pathways, as well as the difference between schools, FET colleges, universities and university of technology.

Promoting Health – The NDP’s health objective is to raise the life expectancy of South Africans to at least 70 years, ensure that the generation of under 20s is largely free of HIV and to significantly reduce the burden of disease. Lastly to achieve an infant mortality rate of less than 20 deaths per thousand live births, including an under 5 mortality rate of less than 30 per thousand. To achieve this, the municipality must plan for a health system that works for the benefit of everyone and produces positive health outcomes.

2.1.9. State of the Nation Address 2017

President Jacob Zuma announced “Guided by the National Development Plan (NDP), we are building a South Africa that must be free from poverty, inequality and unemployment” (SONA, 2017). The annual state of the nation address is based upon a nine-point plan to ignite growth and create jobs. This plan was first introduced in the 2015 State of the Nation Address¹. In the address five priorities were highlighted, creating decent jobs, education, health, fighting crime and rural development. Of these priorities, rural development stood out as a key directive, especially when focusing on the rural areas of CCLM. In terms of this key priority, Minister of Rural Development and Land Reform and MECs have signed delivery agreements for Outcome 7: Vibrant, Equitable and Sustainable Rural Communities and Food Security for All. In terms of this agreement the following outputs are considered important:

- Output 1: Sustainable agrarian reform,

- Output 2: Improved access to affordable and diverse food
- Output 3: Rural services and sustainable livelihoods
- Output 4: Rural job creation linked to skills training and promoting economic livelihoods
- Output 5: Enabling institutional environment for sustainable and inclusive growth

2.1.10. Industrial Policy Action Plan (IPAP)

Those key sectors most relevant to Limpopo Province would be:

- Exploitation of opportunities arising from mining equipment capital investment
- Upstream oil and gas (Coal in the case of Limpopo Province)
- “Green” and energy-saving industries
- Agro-processing, linked to food security and food pricing imperatives
- Forestry, paper, pulp and furniture
- Creative and cultural industries linked to tourism in the Province
- Business process services
- Electro-technical and ICT

2.1.11. Regional Industrial Development Strategy

Limpopo’s critical advantage is its tourism, agricultural and mining, alongside the service industry in Polokwane. In a nutshell, it has a well-developed primary sector which is its national advantage over other and in particular the adjoining provinces.

¹ <http://www.gov.za/issues/key-issues>

2.1.12. Agricultural Policy Action Plan (APAP)

APAP stems from a concern that South Africa increasingly relies on imports of crops (wheat) and livestock products (poultry), while the agricultural sector increasingly relies on imports of inputs (e.g. fertiliser, feed, mechanisation). It argues that we need to establish a more sustainable and productive agricultural sector; to strengthen our competitiveness by supporting localization where potential exists, and to promote agricultural development in a manner that translates into rural development and poverty alleviation.

2.1.13. National Transport Master Plan

The main purpose of the National Transportation Master Plan 2005-2050 is to motivate a prioritised programme for interventions to upgrade the transportation system in South Africa.

2.1.14. Integrated Resource Plan for Electricity

The electricity expansion projects for the Province that emanated from the Eskom Transmission Development Plan (2015-2024) are namely to extend the 400 kV and 275 kV networks to establish the 765 kV network (operated at 400 kV) integrating the Medupi Power Station, and to install additional transformers at existing and new substations. The focus of this plan is primarily on coal rich areas such as Lephalale Local Municipality, and are therefore less relevant to the circumstances of CCLM.

2.1.15. Integrated Urban Development Framework

The IUDF provides a holistic agenda for the management of urban areas and is designed to unlock the development synergy that comes from

coordinated investments in people and places. Four overall strategic goals are introduced:

- Access: To ensure people have access to social and economic services, opportunities and choices.
- Growth: To harness urban dynamism for inclusive, sustainable economic growth and development.
- Governance: To enhance the capacity of the state and its citizens to work together to achieve social integration.
- Spatial transformation: To forge new spatial forms in settlement, transport, social and economic areas.

These goals, in turn, informed the priority objectives of the eight levers proposed by the IUDF, listed below:

- Policy lever 1: Integrated Spatial Planning
- Policy lever 2: Integrated Transport and Mobility
- Policy lever 3: Integrated and Sustainable Human Settlements
- Policy lever 4: Integrated Urban Infrastructure
- Policy lever 5: Efficient Land Governance and Management
- Policy lever 6: Inclusive Economic Development
- Policy lever 7: Empowered Active Communities
- Policy lever 8: Effective Urban Governance

2.1.16. National Comprehensive Rural Development Programme

Applicable objectives include the following:

Agrarian Transformation:

- Facilitate the establishment of rural and agro-industries, co-operatives, cultural initiatives and vibrant local markets;

- Increase production and sustainable use of natural resources by promoting farming and related value chain development (exploring all possible species of food and economic activity).

Rural Development:

- Access to community and social infrastructure, especially well-resourced clinics;
- Focus on the development of new and the rehabilitation of existing infrastructure;
- Improve and develop infrastructure conducive to economic development, for example distribution and transportation infrastructure, agricultural infrastructure, water and electricity infrastructure, market and storage infrastructure, retail infrastructure and telecommunications infrastructure.
- Improve and develop infrastructure conducive to social development, for instance sanitation infrastructure, health infrastructure, sports and recreation infrastructure and education infrastructure (especially ABET centres).

Land Reform:

- Promote restitution, tenure reform and redistribution in a sustainable manner.
- Increase access to land by previously disadvantaged people.
- Establish agri-villages for local economic development on farms.
- Up-to-date information pertaining to land claims.
- Provide reliable and efficient property (deeds) registration system.
- Contribute to economic growth and housing development by providing government and private agents with essential land

information in order to engage in planning as well as economic transactions.

- Provide spatial planning information and services to local municipalities and other public and private institutions that may require these services for development purposes.

2.1.17. The Agri-Parks Initiative

The Department of Rural Development and Land Reform has been allocated R6bn over the next three years for Agri-park projects across South Africa and will draw in financial contributions from other departments and the private sector. The plan dovetails with the Department of Trade and Industry's focus on agro-processing to create jobs and boost exports, with some of the planned Agri-parks linked with the department's special economic zones. Although the Agri-park concept has been launched recently, it has major implications on the development of the Rural Development Plan, especially linked to the vision and development objectives of the plan. Some of the key definitions of the Agri-park concept is highlighted below.

Agri-park (AP) - The Agri-park is a system innovation of agro-production, processing, logistics, marketing and training and extension services located in District Municipalities. As a network it enables a market-driven combination and integration of various agricultural activities and rural transformation services.

Rural Urban Marketing Centre (RUMC) - RUMCs are located on the periphery of large urban areas, these facilities provide market intelligence assist farmers, processors in managing a nexus of contracts. With large warehousing and cold storage facilities to enable market management.

Both FPSU's and Agri-hubs provide inputs to the RUMC. Agri-parks share RUMCs. A RUMC should have a reach of between 150km - 250km.

Agri-Hubs (AH) - Agri-hubs are located in central places in a District Municipality, preferably places both sufficient, physical and social infrastructure to accommodate; storage/warehousing facilities; Agri-processing facilities; packaging facilities; logistics hubs; agricultural technology demonstration parks; accommodation for extension support training; housing and recreational facilities for labourers. Agri-hubs receive primary inputs from FPSU's for processing, value adding and packaging which is through-put into the Rural Urban Market Centres or exported directly to markets. Location parameters:

- centrality and accessibility
- available infrastructure
- close to logistics brokerage networks (transport networks)
- has a reach of between 60km and 120km

Farmer Production Support Units (FPSU) - Are centres (more than one per district) of agricultural input supplies, extension support, mechanization support, local logistics support, primary produce collection, and through-put to Agri-hubs. The FPSU's have limited sorting, packaging, storage, processing for local markets with through-put of excess product to Agri-hubs. Parameters: 10 – 30 Km reach depending on density from where agricultural activity takes place.

Logistics Brokerage - Are transport networks that operate between the FPSU's - Agri-hubs - RUMCs and various derivatives thereof.

Producers of agricultural goods - This is where cropping takes place and can include both large scale farmers (LSH) and small holder farmer (SHF) or even communal farmers.

The Vhembe District Rural Development Plan and its implementation within the Collins Chabane Municipality is discussed in **Section 8.6**

2.2. PROVINCIAL POLICY OBJECTIVES

2.2.1. Limpopo State of the Province Address

The Limpopo State of the Province Address of 2016 highlighted the following key aspects that may impact on spatial planning:

- Commitment of resources towards skills development and job creation. More emphasis will be on technology, integration of digital systems and zero wastage in line with the knowledge economy.
- Beneficiation of mineral deposits, throughout the entire value chain to leverage the competitive advantage of this economic sector to the province.
- An emphasis was placed on Special Economic Zones to attract investment (specific referrals to Musina and Tubatse)
- The tourism sector remains one of the strategic economic competitive advantages of the province.
- An emphasis should be on business to cooperatives in villages and vast farmlands of Limpopo to stimulate the rural economy.
- Agriculture is important both for the creation of the much needed jobs and for our food security
- Emphasis on bettering education by addressing such critical issues as the inappropriate school infrastructure, the repairs to storm damaged schools, the provisioning of additional classrooms to areas experiencing growth, and the provisioning of water and sanitation in all schools

- Adoption of a multi-year Human Settlement Delivery Turnaround Strategy that is anchored on four pillars. These pillars include beneficiary management, geo-technical reports and foundation designs, partnership with material supplier, and contract management.

2.2.2. Limpopo Development Plan

The vision of this plan (2015-2020) is to fulfil the potential for prosperity of Limpopo Province in a socially cohesive, sustainable, prosperous and peaceful manner. Critical provincial objectives include:

- Create decent employment through inclusive economic growth and sustainable livelihoods.
- Improve the quality of life of citizens.
- Prioritise social protection and social investment.
- Promote vibrant and equitable sustainable rural communities.
- Raise the effectiveness and efficiency of a developmental public service.
- Ensure sustainable development.

The following initiatives or concepts affect CCLM Local Municipality and therefore the formulation of the SDF:

- Enhance economic growth through Provincial Growth Points
- Establishment of Special Economic Zones (SEZ), an economic tool to promote growth and investment.
- Opportunities for the expansion of horticultural production lie in productivity increases on land reform projects, on the development of State-owned land and in the improvement of infrastructure and logistics in these areas.

- Red and White Meat Cluster. The entire Limpopo is suitable for grazing although the carrying capacity of the veld varies in different parts of the province. There is opportunity for considerable increases in output, employment and value chain development in all parts of the province.
- Agro Processing including the revitalisation of irrigation schemes, construction of packaging plants, operationalisation of existing Fresh Produce Markets, strengthening of agri-business capacity.
- A large part of CCLM LM forms part of the Kruger National Park and therefore should form part of the tourism clusters.
- Rural development with emphasis of the following:
 - Improved land administration and spatial planning for integrated development in rural areas;
 - Sustainable land reform for agrarian transformation;
 - Improved food security; smallholder farmer development and support (technical, financial, infrastructure) for agrarian transformation;
 - Increased access to quality basic infrastructure and services, particularly in education, healthcare and public transport in rural areas;
 - Support for sustainable rural enterprises and industries characterised by strong rural urban linkages; and
 - Increased investment in agro-processing, trade development and access to markets and financial services resulting in rural job creation.

2.2.3. Limpopo Green Economy Plan

The report concludes that Limpopo Province has the following advantages, which could position it as leader in this field:

- Perfect geographic position to develop a variety of green industries and economies of scale;
- Invaluable mineral resource base for local beneficiation;
- Unexploited biodiversity resources for green tourism and payment for ecosystem services; and
- Vibrant young population to enthusiastically engage in new, innovative and developmental economic activities.

Implications for any SDF in the province are as follows:

- All natural economic resources should be retained and indeed strengthened;
- Resource conservation and management is key (i.e. natural resources must be protected);
- Economic production is vital, and spatially this should be included in the SDF;
- Sustainable transport and infrastructure is critical for economic growth;
- Agriculture, food production and forestry are key i.e. productive agricultural land must be protected and retained since the Province must retain its status as ‘food basket in the subcontinent’;
- All local municipalities are part of this because the resource base is existing and vulnerable;
- Silicon reserves and the silicon smelters (in Polokwane) must be protected; and
- Development of solar farms should be considered.

2.2.4. Limpopo Provincial SDF (2016)

- **Development Principle 1:** Define and protect a Provincial Regional Open Space System which ensures that ecosystems are sustained and natural resources are utilised efficiently. This includes:
 - River courses and dams
 - All mountains and ridges
 - Declared conservation areas, nature reserves and conservancies
 - Critical biodiversity areas
 - Waterberg Biosphere
- **Development Principle 2:** Facilitate efficient spatial targeting through the identification of a range of provincial, district, municipal and rural nodal points to serve as focal points for investment and service delivery.

The following table is a summary of the different types of nodes identified in the CCLM:

Table 1: Limpopo SDF - nodal classification

Node category	Areas affected	Description
Provincial Growth Point.	Musina Makhado	Provincial Growth Points represent the highest order nodes in the Province. In most cases, these cities and towns have an established and diverse economy, together with a range of higher order social and government services. Most importantly, these nodes have immense resource potential, predominantly mineral-related, which render them existing and/or future core nodes in the provincial, and even national economy. The bulk of future

		economic development will be undertaken by the private sector, but should be supported by public investment in sufficient and high quality engineering infrastructure, and additional social services to serve the fast-growing local populations.
District Growth Points	Thohoyandou	
Municipal Growth Point	Elim Sibasa Malamulele	Municipal Growth Points represent large rural settlement clusters (between 75 000 and 100 000 people), but with very small economic and institutional bases, and very limited local resources on which to build. However, they are accessible via the provincial road network, and thus well located to serve the respective population clusters. It is proposed that these areas be prioritised for the provision of engineering infrastructure, higher order community facilities, as well as economic infrastructure where relevant.
Rural Node Service Delivery Points	Phaphazela Vuwani Ka Bungani	Rural Nodes/ Service Nodes are villages situated in the midst of a high number of small scattered villages that are isolated/ removed from the provincial road network. The isolated location of these villages is deterring efficient service delivery, hence the identification of a nodal point among these villages where services will be clustered to the benefit of the broader area. Limited economic and institutional bases at present. Social services are to be consolidated at these nodes to efficiently serve the extensive surrounding rural communities. Although small local economies might emerge over time as a result of the proposed agglomeration of

		public services, it is acknowledged that the economic potential of these nodes is less than the three types of Growth Points described above. The focus should thus be on community infrastructure and not necessarily economic infrastructure.
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- Development Principle 3:** Establish a multi modal transport network to optimise the movement of people and goods between nodes within the province and to all major destinations in Southern Africa. The proposed priority road network – comprising the provincial road network and selected secondary route sections – seeks to capitalise on Limpopo’s strategic location within southern Africa by linking to all eight border posts in the Province in order to support import and export activity and cross-border tourism. It links to all major tourism destinations such as the Kruger National Park and Waterberg and Vhembe Biospheres, and to all major nodes identified in Limpopo. The proposed priority road network – comprising the provincial road network and selected secondary route sections – seeks to capitalise on Limpopo’s strategic location within southern Africa by linking to all eight border posts in the Province in order to support import and export activity and cross-border tourism. It links to all major tourism destinations such as the Kruger National Park and Waterberg and Vhembe Biospheres, and to all major nodes identified in Limpopo.
- Development Principle 4:** Direct engineering infrastructure investment towards the priority nodal points where the majority of economic activity and human settlement will establish.
 - Prioritise infrastructure maintenance and expansion projects in line with the proposed provincial nodal network
 - These nodes represents a combination of well-located (in other words economically viable) points, where population

numbers are expected to continuously increase as urbanisation trends prevail. If the bulk of future economic and residential development is consolidated around the proposed nodal network – as proposed in sub-sections that follow – then infrastructure investment in these nodes will serve a much larger population than what is currently possible. This will enhance the cost-benefit ratio to investments made in these areas.

- **Development Principle 5:** Prioritise consolidation of community infrastructure at the identified nodal points and in line with the concept of multi-purpose Thusong Centres/ Rural Development Centres in Rural Nodes.
- **Development Principle 6:** Create conditions conducive to development in multifunctional business areas and implement Urban Revitalisation Strategies in such areas where required.
- **Development Principle 7:** Optimise the utilisation of agricultural potential of Limpopo Province to provide sustainable livelihoods to marginalised communities in rural areas in partnership with commercial farms.
- **Development Principle 8:** Utilise the provincial environmental resources as attractions to promote sustainable tourism development (and conservation) in all parts of the Province.
- **Development Principle 9:** Promote mining activity and associated job creation potential in an environmentally sustainable manner.
- **Development Principle 10:** Address industrial sectoral diversification by way of area specific investment in high value production and value added technologies and industries. The sectors are namely 'Green' industries; Agro-processing; and Metal fabrication. More specifically,

Limpopo Province is particularly well-placed to focus on the following priority sectors:

- Food, beverage and tobacco;
 - Textile, clothing and leather goods;
 - Petroleum products, chemicals, rubber and plastic;
 - Other non-metal mineral products; and
 - Metals, metal products, machinery and equipment.
 - Value chains in the provincial economy are generally very short, and there is especially potential for increased beneficiation in the mining and agricultural sectors
- **Development Principle 11:** Sustainable Human Settlement in urban and rural Limpopo Province. Future 'urban' development (housing, economic infrastructure, community infrastructure, etc.) be consolidated around the identified nodes and that it be done to achieve the IUDF vision which reads as follow:
"Liveable, safe, resource-efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life".

2.3. LOCAL POLICY OBJECTIVES (DISTRICT/MUNICIPAL)

2.3.1. Vhembe District IDP and SDF

Vhembe District Municipality of is a Category C Municipality, established in the year 2000 in terms of Local Government Municipal Structures Act No. 117 of 1998. Vhembe District Municipality is located in the Northern part of Limpopo Province and shares borders with Capricorn, Mopani District municipalities in the eastern, and western, directions respectively.

The District covers 21 407 km² of land and is home to approximately 533 868 million people according to Stats SA Community Survey (2016). The northern and western parts of the Vhembe District are developed at a fairly low intensity. The south-eastern extents, on the other hand, include multiple rural villages. Its eastern extent forms part of the Kruger National Park (KNP). Thohoyandou is a fully-fledged town and the largest service centre in this precinct. There is strong correlation between the higher order road network traversing the District and the location of larger villages and settlements.

The Vhembe District Municipality has the following powers and functions assigned to it in terms of the provisions of Section 84 (1) of the Municipal Structures Act, no 117 of 1998:

- Integrated development planning for the district municipality as a whole, including a framework for integrated development plans of all municipalities in the area of the district municipality
- Bulk supply of electricity that affects a significant proportion of municipalities in the district. This function is currently being rendered by ESKOM whilst the district play a coordinating role of electricity
- Domestic waste – water and sewage disposal system
- Solid waste disposal sites serving the area of the district municipality as a whole
- Regulation of passenger transport services
- Municipal health services serving the area of the district municipality as a whole
- Firefighting services serving the area of the district municipality as a whole

- The establishment, conduct and control of fresh produce markets and abattoirs serving the area of a major proportion of the municipalities in the district
- The establishment, conduct and control of cemeteries and crematoria serving the area of a major proportion of the municipalities in the district
- Promotion of local tourism for the area of the district municipality
- Municipal public works relating to any of the above functions or any other functions assigned to the district municipality
- The receipt, allocation and, if applicable, the distribution of grants made to the district municipality
- The imposition and collection of taxes, levies and duties as related to the above functions or as may be assigned to the district municipality in terms of national legislation.
- The District is both the water services authority and provider
- It should be noted that Environmental/Municipal Health Services is transferred from Limpopo Department of Health and Social Development to Vhembe District Municipality.

Generally, a district municipality must seek to achieve the integrated, sustainable and equitable social and economic development of its area as a whole by ensuring integrated development planning for the district as a whole:

- Promoting bulk infrastructural development and services for the district as a whole;
- Building the capacity of local municipalities in its area to perform their functions and exercise their powers where such capacity is lacking; and

- Promoting the equitable distribution of resources between the local municipalities in its area to ensure appropriate levels of municipal services within the area.

The Vhembe District IDP sets out development priorities for the entire district, which should be adopted by the local municipalities situated within the District. The District's IDP includes a chapter on spatial development also referred to as the SDF Chapter. The SDF chapter sets out directives and guidelines for future development forms and patterns. It also presents a spatial rationale which is derivative from provincial level. Derived from the Provincial Spatial Rationale, which has identified settlement hierarchy for the whole Province, the District SDF makes provision for settlement hierarchy for Vhembe District Municipality. The Spatial Rationale highlighted the settlement hierarchy based on the classification of individual settlements (i.e. towns and villages) in which the hierarchy is characterized as follows:

- First order settlement (Growth Points) which are further characterized into three categories i.e.
 - Provincial Growth Point;
 - District Growth Point;
 - Municipal Growth Point - **Hlanganani, Bungeni**
 - Local Service Point: **Olifantshoek**
- Second Order Settlements (Population Concentration Point);
- Third Order Settlement (Local Service Points);
- Fourth Order Settlement (Villages Services Areas);
- Fifth Order Settlement (Remaining Small Settlements);

Settlement Clusters indicate priority development areas/ nodes in which primarily first order settlement and second order settlements are identified.

Growth Points are therefore the highest order in the settlement hierarchy, with population concentration points being the second order in the settlement hierarchy.

Proposed Development Corridors

- Makhado to Messina- Along road N1 North Makhado
- Punda Maria Corridor- Along road R524 East of Makhado to Thohoyandou
- Makhado to Capricorn- Along road N1 South of Makhado to Polokwane
- Makhado to Elim- Road R578 south east of Makhado to Giyani
- Elim to Vuwani- From Elim heading East through villages to Vuwani

The significance of Makhado and Thulamela Local Municipality to this SDF is that CCLM was established by consolidating a portion of Thulamela as well as Makhado Local Municipality.

2.3.2. Makhado Integrated Development Plan 2016/2017

Makhado Municipality has five formal towns namely, Makhado, Vleifontein, Vuwani, Waterval and Dzanani with about 279 villages, 38 ward councillors, 37 proportional councillors, and 14 traditional leaders. The main administrative office is situated in Makhado town with three supporting regional administrative offices in Dzanani, Vuwani, and Waterval.

2.3.3. Thulamela Integrated Development Plan 2017/18

Thulamela Local Municipality covers 2 893 936 km² which includes vast areas of mainly tribal land. Thulamela LM has a Municipal Spatial Planning

and Land Use Management (SPLUMA) Bylaw in operation as well as a 2010 Thulamela SDF and the 2011 Mutale SDF until the Municipality develops a SDF which encompass all areas of the municipal area as per the new demarcation. The main thrust of the Municipality's SDF's revolves around clearly defined nodal point development and a hierarchy of settlements based on the priorities of the residents, as well as the direction that the municipality intends to take in relations to the following identified areas:

- Strategic and potential development areas;
- Service upgrading;
- Hierarchy of business centre as well as areas for future industrial development;
- Open space system and nature conservation areas;
- Radial road network;
- Future spatial form and major directions of desired growth;
- National, Provincial and Municipal routes and nodal points as well as strategic development initiatives and functional development areas.

More detail in this regard is documented in the actual SDF document. The 2016/17 projects identified within Makhado LM and Thulamela LM will continue to be implemented. However, projects for 2017/18 and onwards are being reviewed and new priorities have been established for CCLM LM. This includes a review of the list of projects at various stages of planning and implementation (including budget provision) by Makhado LM and Thulamela LM.

2.3.4. CCLM IDP 2017/2018

CCLM vision reads **"A sustainable, spatially integrated and inclusive municipality with a vibrant, job creating local economy."** The above picture

is an inspiring picture of a preferred future for the municipality. The municipality's value system is built around transparency; accountability; responsiveness; being professional and creative and showing integrity.

It is not time bound and serves as a foundation for all policy development and planning, including strategic and integrated development planning. The municipality's mission is "To ensure the provision of sustainable basic services and infrastructure to improve the quality of life of our people and to grow the local economy for the benefit of all our citizens." However, the municipality is not directly responsible for providing all services, the municipality has the responsibility to ensure optimal provision of services from sector departments and SOE's.

Table 2: Roles and responsibility CCLM

	Key Roles / Functions	Mandate
Primary	Roads and Stormwater	CCLM
	Waste Management	CCLM
	Promote Local Economic Development	CCLM
	Sports and recreation facilities	CCLM
	Provision of grave sites for burials	CCLM
	Traffic Law Enforcement	CCLM
Secondary	Basic services: Housing, water and sanitation, electricity	Province and District
	Disaster management	Province and District
	Education	Province
	Health and transport	Province

The 2016/17 projects will continue to be implemented by Makhado LM and Thulamela LM. However, projects for 2017/18 and onwards are being reviewed and new priorities set by CCLM. This includes a review of the list

of projects at various stages of planning and implementation (including budget provision) by Makhado LM and Thulamela LM.

Table 3: Three year capital budget plan

CURRENT PROJECTS			
Projects	2016/17	2017/18	2018/19
Upgrading Saselemani Stadium	R 28 011 196		
Xikundu Ring Road	R 48 135 325	R 10 000 000	
FUTURE PROJECTS			
Projects	2016/17	2017/18	2018/19
Xithleni Ring Road	R 1 157 386	R 18 423 005	R 10 000 000
Malamulele DCO to Hospital		R 1 000 000	
Malamulele B Internal Streets	R 14 216 763	R 52 249 904	
Malamulele D Internal Streets	R 2 244 708	R 612 193	R 30 376 433
Malamulele Hospital Trading areas	R 101 871	R 555 131	R 28 564 658

Xigalo Landfill Site		R 1 000 000	R 2 000 000
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A projects prioritisation framework has been established to ensure projects are prioritised against the strategic priorities of the municipality and the input received from communities via the IDP process. The following are some of the guidelines that will apply to prioritising projects:

- 1. Developments at major economic hubs** areas that will include roads, electricity to public centre's (i.e. clinics, traditional councils, schools, etc.); high traffic volume roads; public transportation roads (i.e. bus routes, taxi routes etc.); road maintenance; backlogs of electricity, housing and roads should be prioritised as basic service delivery; and engagement with WSA (VDM) on water and sanitation projects.
- 2. Expanded Public Works Programme (EPWP):** Opportunities for implementing the EPWP have been identified in the infrastructure, environmental, social and economic sectors. The programme involves reorienting line function budgets so that municipality's expenditure results in more work opportunities, particularly for unskilled labour.

CCLM's short term to medium term priorities include:

1. Urgent establishment of Section 79/80 committees, and appointment of Audit/ Performance and Risk Committees, and the Municipal Development Tribunal;
2. Urgent transfer / absorption of staff and assets from Thulamela and Makhado;
3. Grading of the municipality by SALGA to enable advertisement and other related processes;
4. Identify mechanisms to implement EPWP this financial year, in light of no budget allocation;

5. Conduct road shows on the payment of services, as part of the revenue enhancement strategy of local government;
6. Conduct a land audit and invoke legal action against those who invaded municipal land;
7. Urgent appointment of SCM committees as soon as staff become available;
8. Develop our municipal infrastructure investment plan, and a procurement plan aligned to the priorities identified, as well as operations and maintenance plans;
9. Finalise the 2016/17 SDBIP, and rollout the approved IDP development process;
10. Procure insurance services for Human and Capital assets;
11. Audit tenants at the civic centre for leasing purposes;
12. Conduct skills audit for personnel, particularly those at the Traffic Service Centre;
13. Appointment of contractors for MIG projects;
14. Review the PMU business plan; and
15. Open an account with Eskom and the district in relation to services at the DCO.

The spatial analysis exercise provides a visual picture of the existing spatial pattern (that nodes, networks and areas) that has emerged in the municipal area. The analysis serves to describe the municipal area in spatial terms and understand how space is utilized in the municipality. It also looks at settlement patterns and growth points (nodes), population concentration areas, land claims and their socio-economic implications. All these aspects have a bearing on future land usage, infrastructure investment, establishment of sustainable human settlements, public transport and local economic development.

- District Growth Point: **Malamulele**
- Municipal Growth Point: **Saselemani Vuwani and Hlanganani**
- Local Service Points: **Mukhomi , Xikhundu Olifanshoek and Tshimupfe A & B**
- Population Concentration Points: **Magoro which include areas such as Mahatlani, Majosini, Ribungwani and Bungeni Tshino which include areas such as Tshino, Tshivhazwaulu, Ramukhuba**

The spatial challenges experienced in CCLM such as scattered settlements has become too costly to provide services. The apartheid spatial pattern is still evident with sprawling rural villages situated in traditional authority areas located far away from employment opportunities, thus become too costly for people to travel to their working places. State-owned land is mostly under the custodianship of Traditional Authorities. Large percentage of land is held under leasehold title and Permission to Occupy. Because of this, land ownership is regarded as insecure, which in turn acts as a hurdle to land development.

3. BIOPHYSICAL ENVIRONMENT

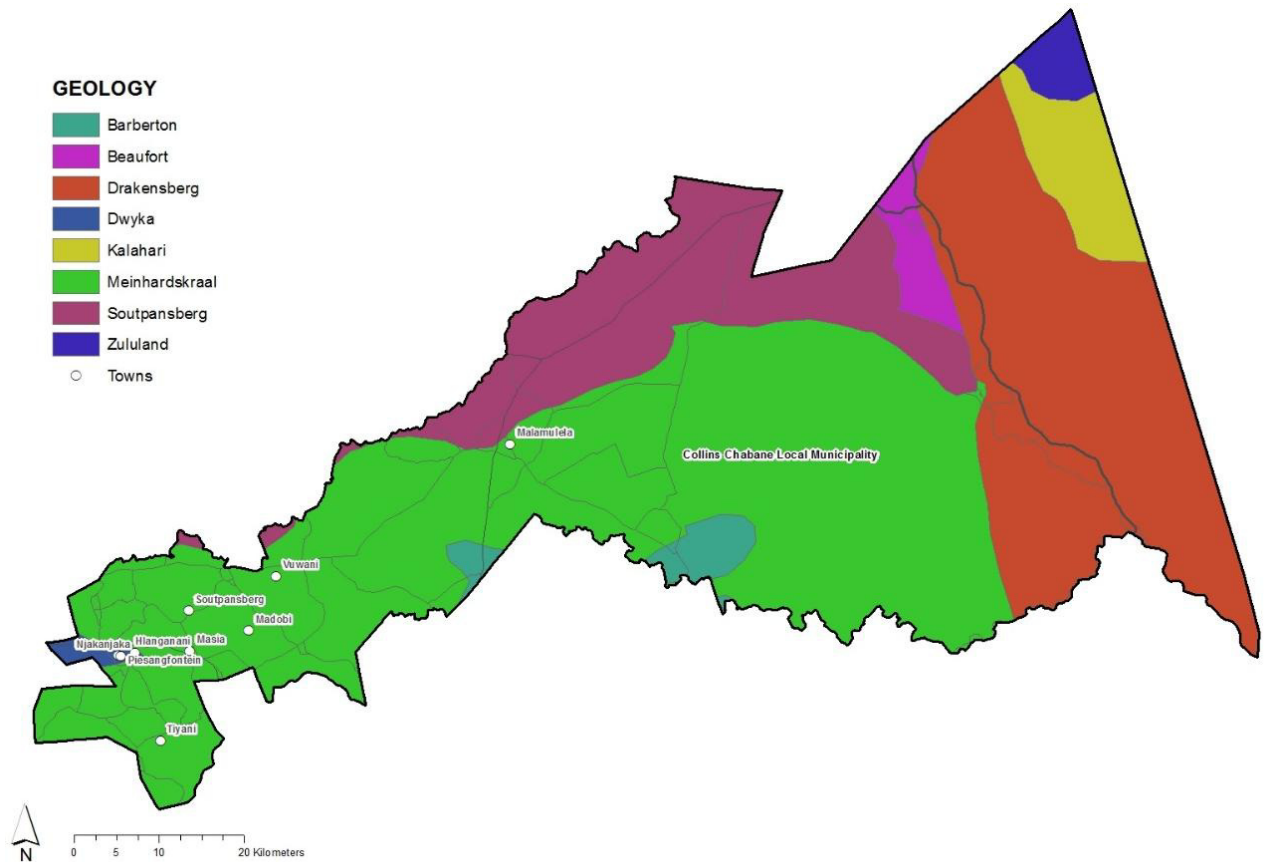
Map 1: Geology

3.1. GEOLOGY

Geology deals with the physical structures and substance of the earth. An area's geological composition largely influences its topographic nature, soil type as well as the agricultural potential of that area.

For the purposes of the SDF, an overview of the geology of the municipality is provided, however, as variations occur, development must be subject to a geotechnical analysis.

The geology map shows that the dominant geological formation within the municipality is Meinhardskraal (light green), found on the southern and western parts of the municipal area.



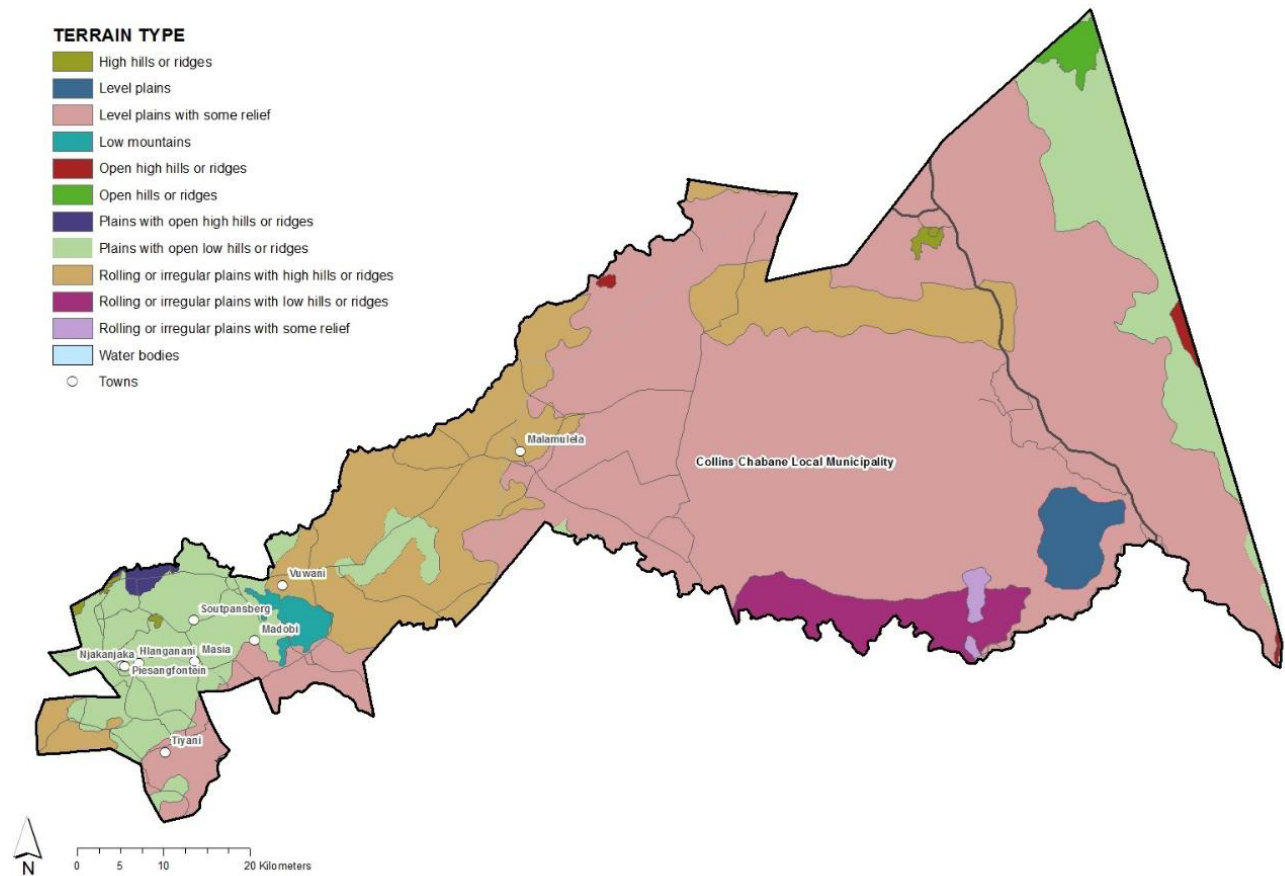
3.2. TERRAIN TYPES

Terrain type data is used to describe the relief or terrain of an area by means of percentage level land and relief. The terrain of an area is described through a gradient from level plains or plateaus to high mountains.

The eastern part of the municipality consists largely of level plains with some relief, which is the dominant terrain type in the municipality. The far south western area, where many of the settlements within the municipality are located, consists mainly of plains with open low hills or ridges and some traces of level plains with some relief as well as low mountains.

A large part of this area (western) also consists significantly of rolling or irregular plains with high hills or ridges.

Map 2: Terrain Type



3.3.SLOPE

The steepness of an areas slope is a determinant of development within that area, as the slope becomes steeper development becomes problematic and costly. A slope is commonly measured in the form of a percentage, of which steep slopes are classified between the ranges of 12% to 33%.

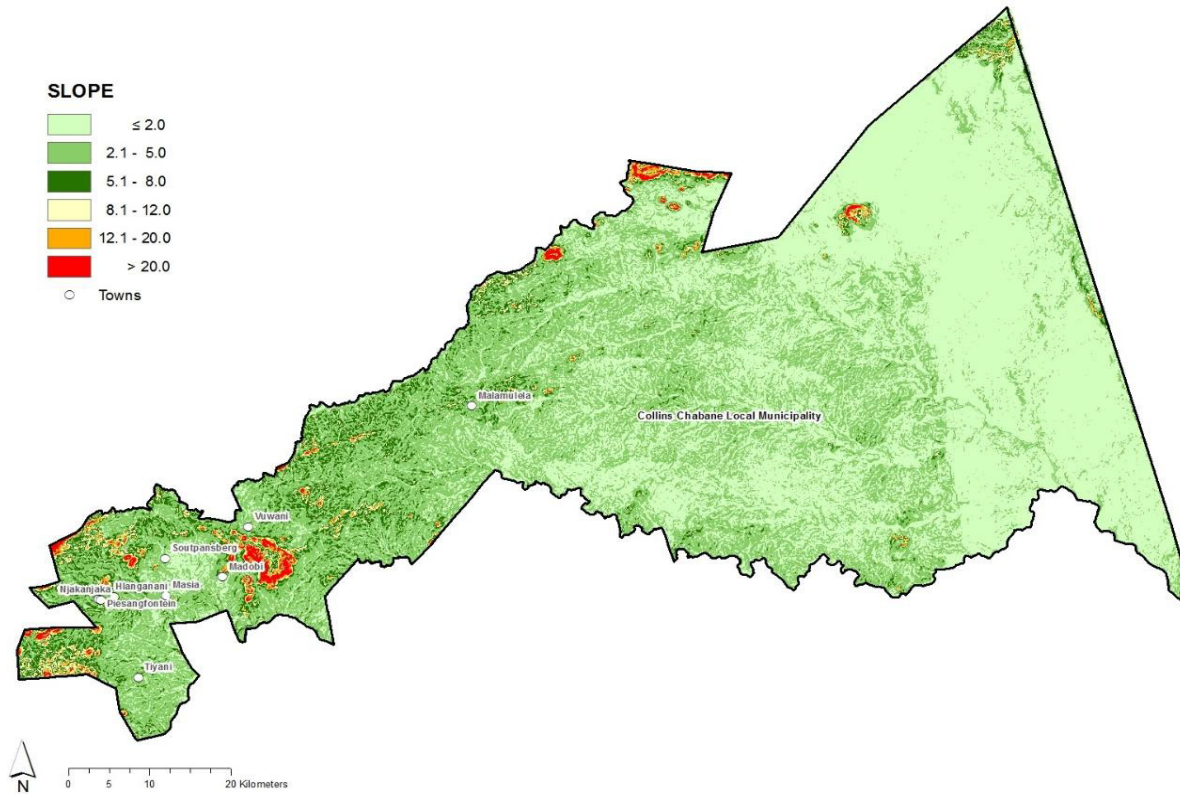
The average slope of an area is used to regulate steep slopes within that area. The table below specifies the development potential at various degree levels of the slope.

The Slope map shows that the municipality is predominantly flat, with some slightly steep slope areas in its western parts. Steep slopes limits and constrains development, hence it is crucial to indicate these areas within a municipality's SDF.

Table 4: Degree of slope

Degree of slope (%)	Development Potential
0% - 3%	Generally suitable for al development and uses.
3% - 8%	Suitable for medium density residential development, agriculture, industrial and institutional uses.
8% to 15%	Suitable for moderate to low-density residential development, but great care should be exercised in the location of any commercial, industrial or institutional uses.
15% to 25	Only suitable for low-density residential, limited agricultural and recreational uses.
Over 25%	Only used for open space and certain recreational uses.

Map 3: Slope

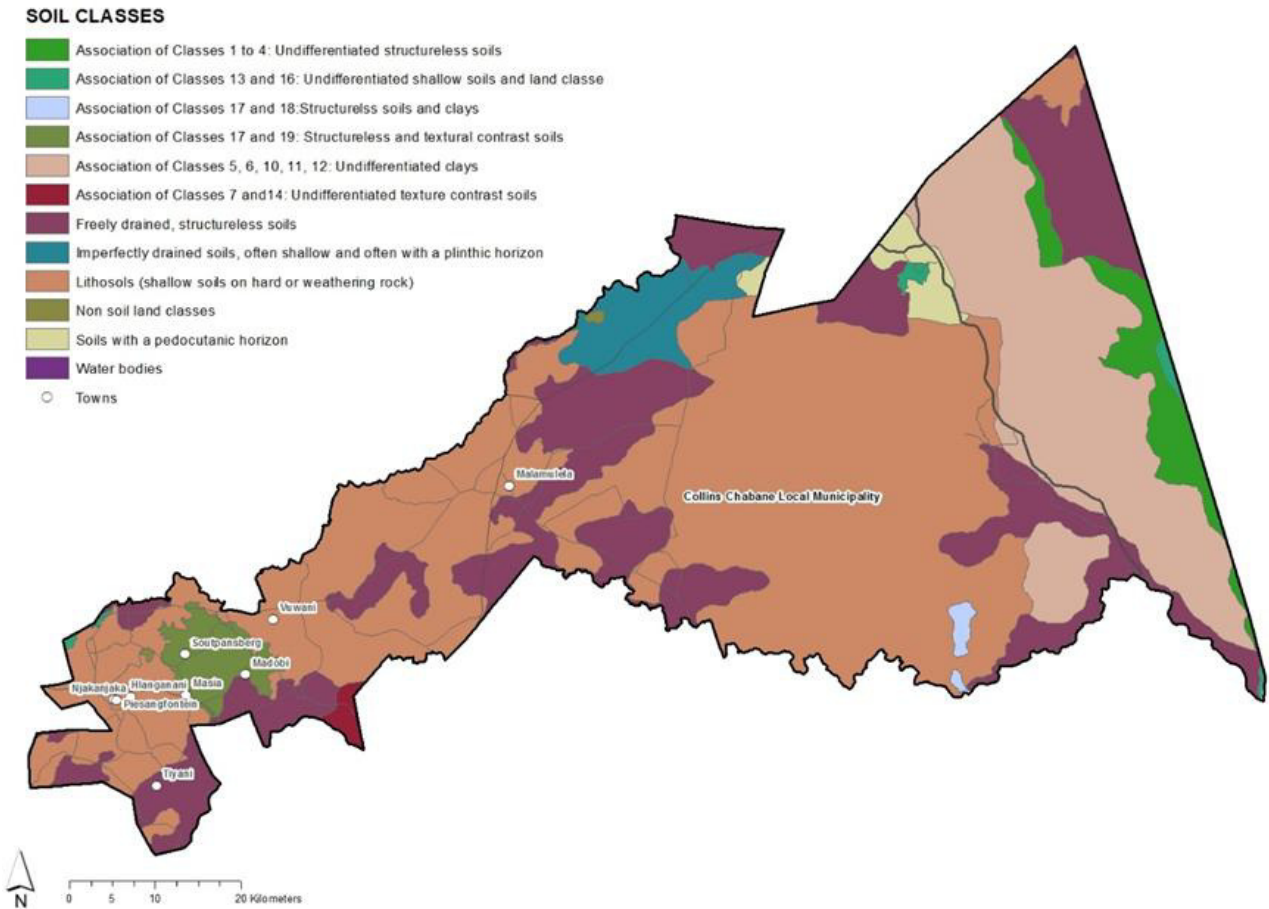


3.4. SOIL CLASSES

Dominant soil classes were developed to be used in algorithms in order to assess agricultural potential in combination with rainfall and soil depth data. The municipality is mainly made up of lithosols (shallow soils on hard or weathering rock) which may receive water runoff from associated rock, but has restricted soil depth; associated with rockiness.

The western part of the municipality where majority of the municipality's settlements are situated comprises of lithosols, soils association of classes 17 and 19 i.e. structure less and textural contrast soils as well as freely drained structure less soils. The following table and map depict the soil classes found within CCLM.

Map 4: Soil Classes



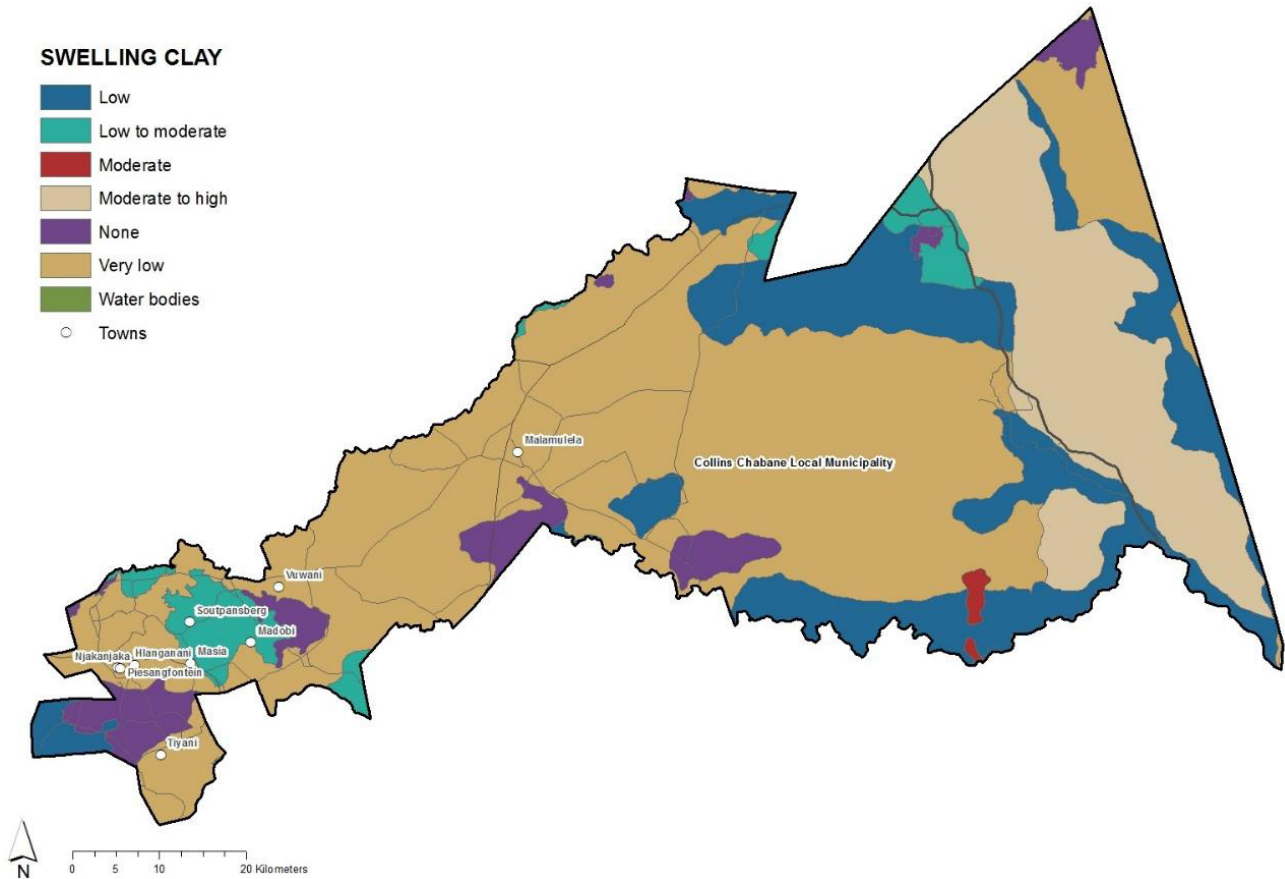
3.5. SWELLING CLAYS

Collectively swelling clays have a relatively high natural fertility and a resilience against nutrient depletion, particularly clays with high and moderate to high swell-shrink potential. These cracking clays take in water readily when dry but exhibit high runoff when wet and expanded.

They retain water very strongly and release it to plant roots very slowly. This class of swelling clay can be found on the eastern part of the municipal area. The dominant swelling clays found in CCLM has a very low swell-shrink potential.

The western part of the municipality has swelling clay with low to moderate swell-shrink potential, these swelling clays covered by sealing topsoil, though naturally fertile, suffer from susceptibility to surface sealing, slow water infiltration, draughtiness and susceptibility to erosion

Map 5: Swelling Clay



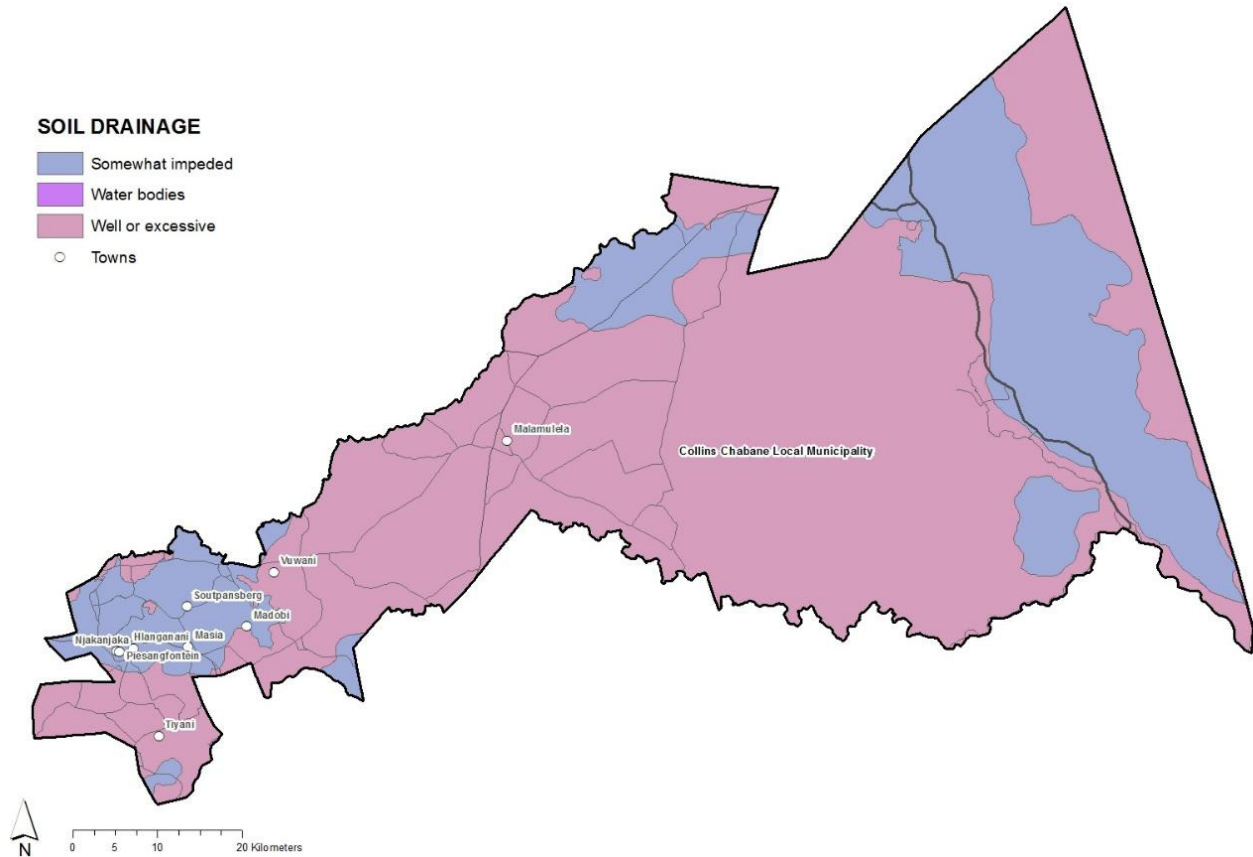
3.6. SOIL DRAINAGE

With South Africa being a water scarce country, soils with poor or impeded drainage constitute a potentially valuable resource. In the eastern high rainfall areas in South Africa, soils with poor drainage commonly support wetlands, highly valued for their role in hydrology, biodiversity and water quality.

Soils with impeded drainage in high rainfall areas can become a challenge with regards to best practice land use technologies. In drier parts of the country, some of the soil groups with impeded drainage constitute a valuable contribution to agricultural resource.

The rain-fed production of small grains in the summer rainfall area is largely dependent on soils with impeded drainage. While these soils may be too wet in most years during the production of summer crops, water transfer from the summer season to the subsequent winter enables diversified land use options (ARC-ISCW, 2005). Soil drainage throughout most of the municipality's land area is deemed to be well or excessive with some parts of it being somewhat impeded.

Map 6: Soil Drainage

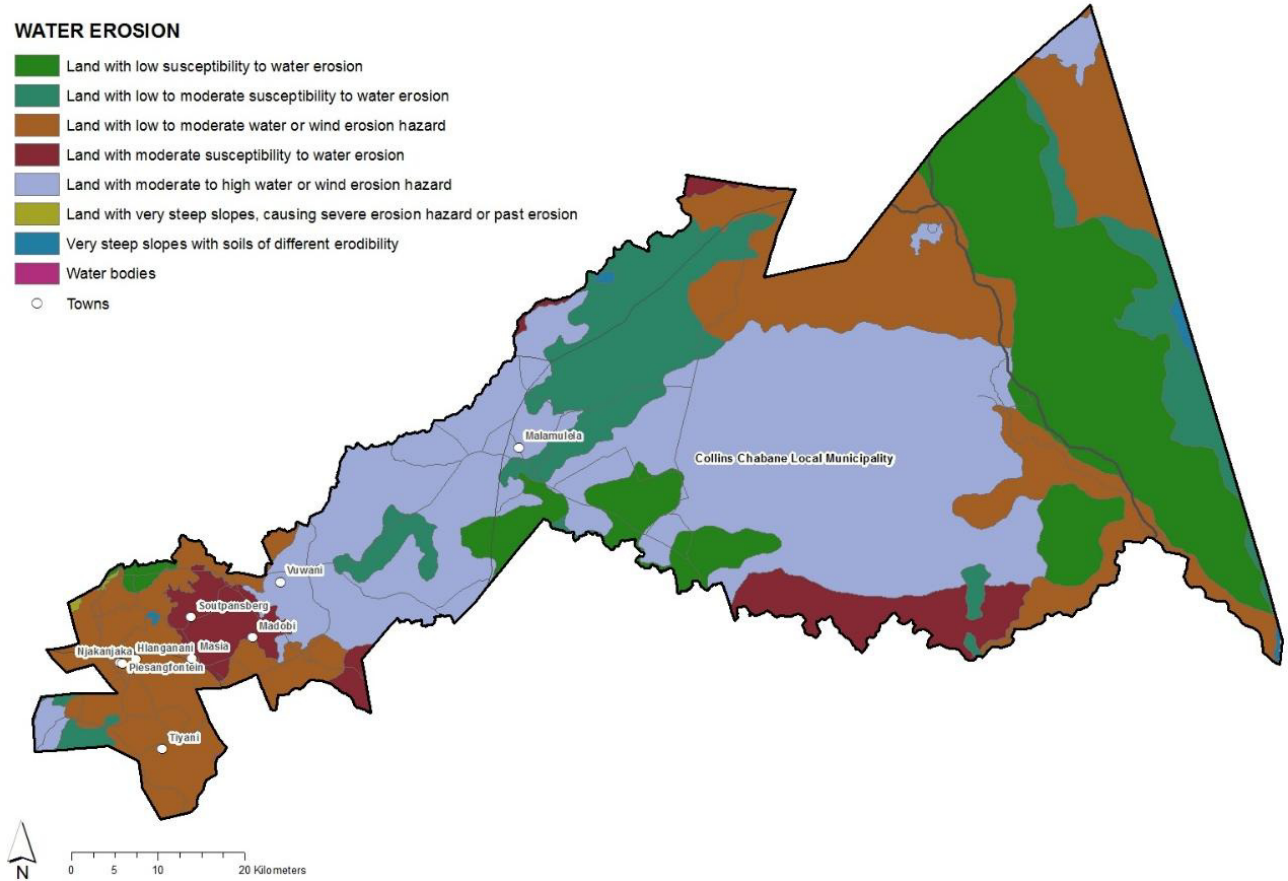


3.7. WATER EROSION

Map 7: Water Erosion

There are four characteristics that determine the susceptibility of land to water erosion, these are slope gradient, slope length, soil erodibility and rainfall erosivity. In combination with factors such as vegetation cover and management practices these land characteristics determine erosion hazard.

The western part of the municipality consists largely of land with low to moderate water erosion hazard, with a significant part of this area being land with moderate susceptibility to water erosion and land with moderate to high water erosion hazard which takes up majority of the municipality's area. The eastern part of the municipality is dominated by land with low susceptibility to water erosion.

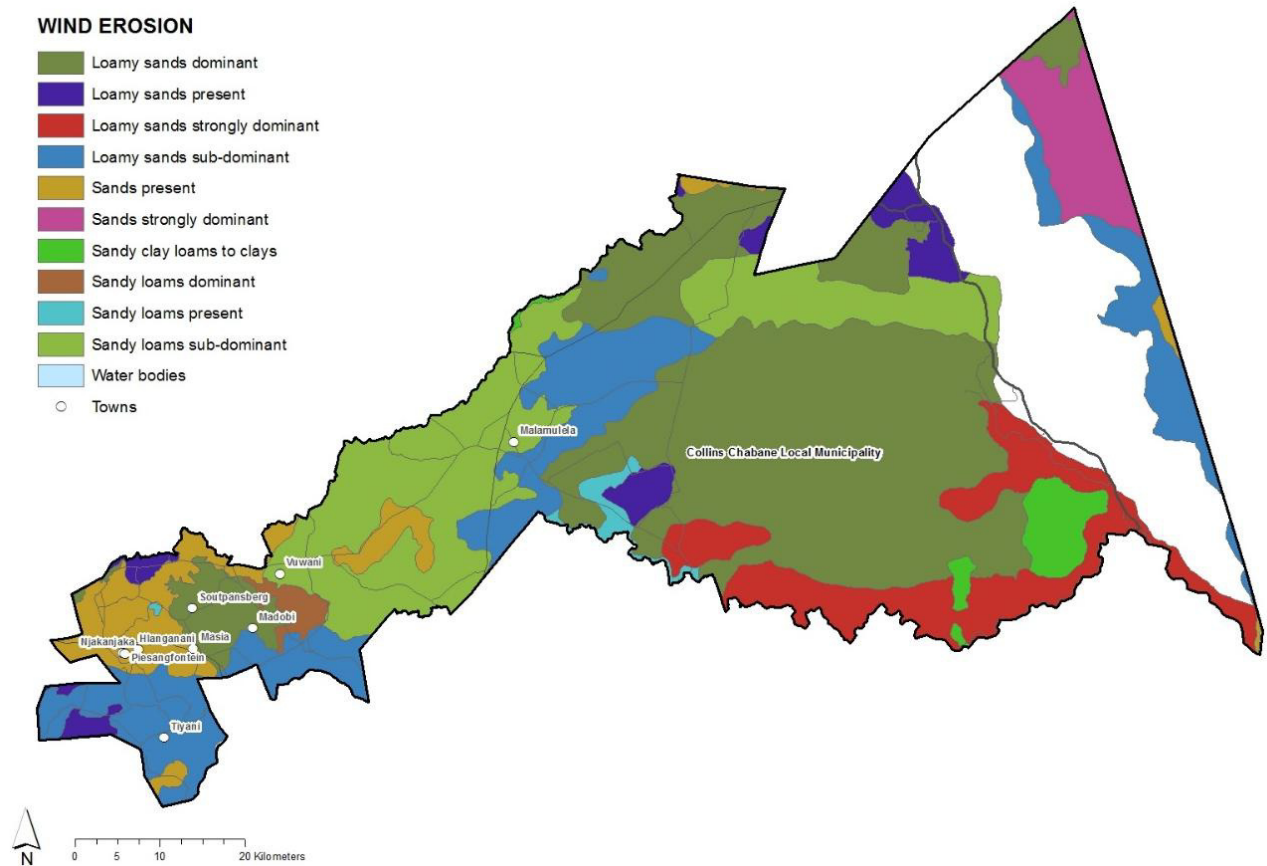


3.8. WIND EROSION

The main danger of wind erosion is the loss of fine materials from topsoil in the form of dust. By losing fine materials (fine silt and clay), the soil loses much of its ability to provide plants with nutrients and water. The main factors in determining the susceptibility to wind erosion are particle size of the topsoil, wind speed, topography, soil cover, soil water content and aggregation of soil particles (ARC-ISCW, 2005).

The municipality's far western area consists mainly of loamy sands dominant and sub-dominant which are moderately susceptible, as well as sands present which are susceptible to wind erosion.

Map 8: Wind Erosion



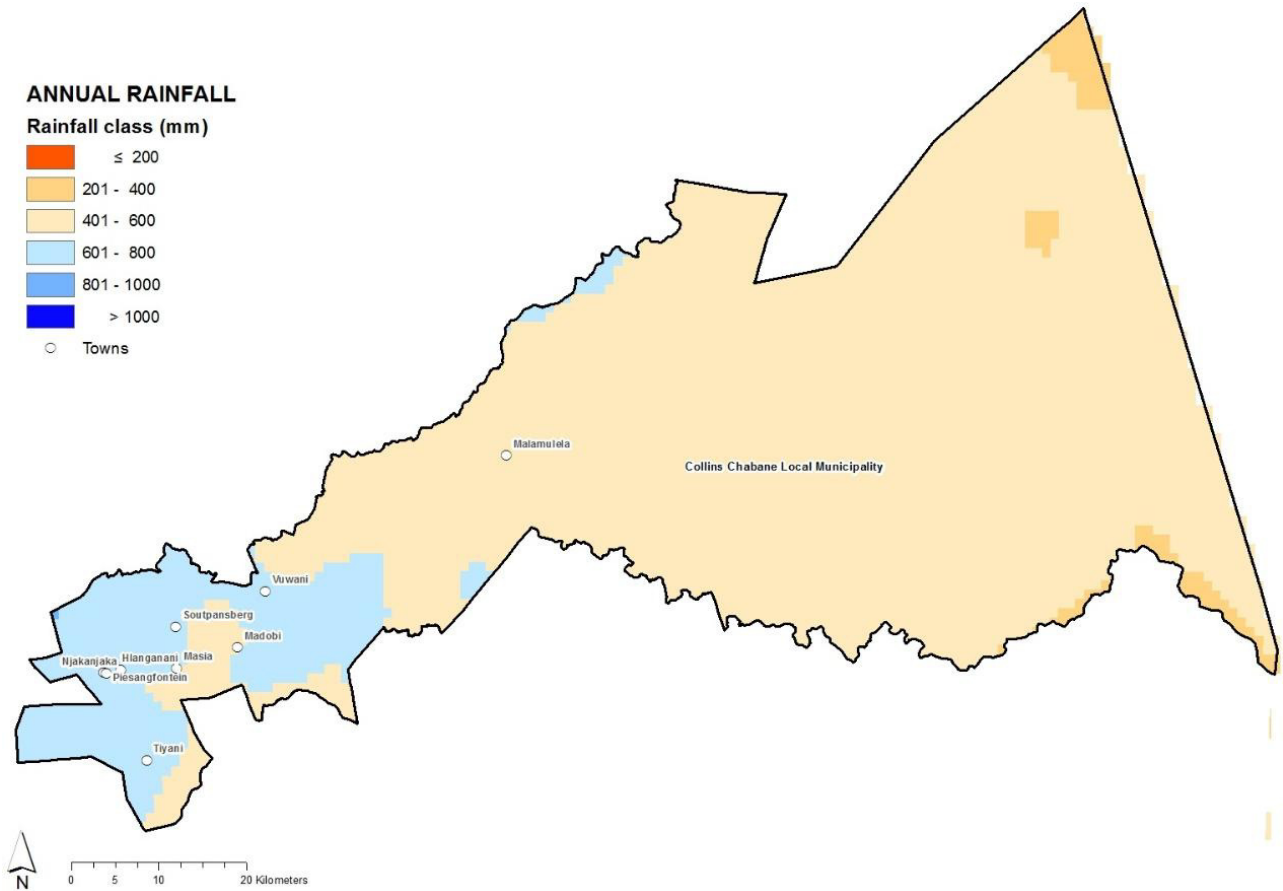
3.9. CLIMATE

Map 9: Annual Rainfall

The temperature in CCLM

municipality in which its settlements are located experiences some of the hottest and coldest weather, which could have a negative impact on agriculture where farming takes place.

Rainfall in the municipality averages between 401 mm to 600 mm annually. The western parts of the municipality averages between 601 mm to 800 mm a year which is the populated areas of the municipality.

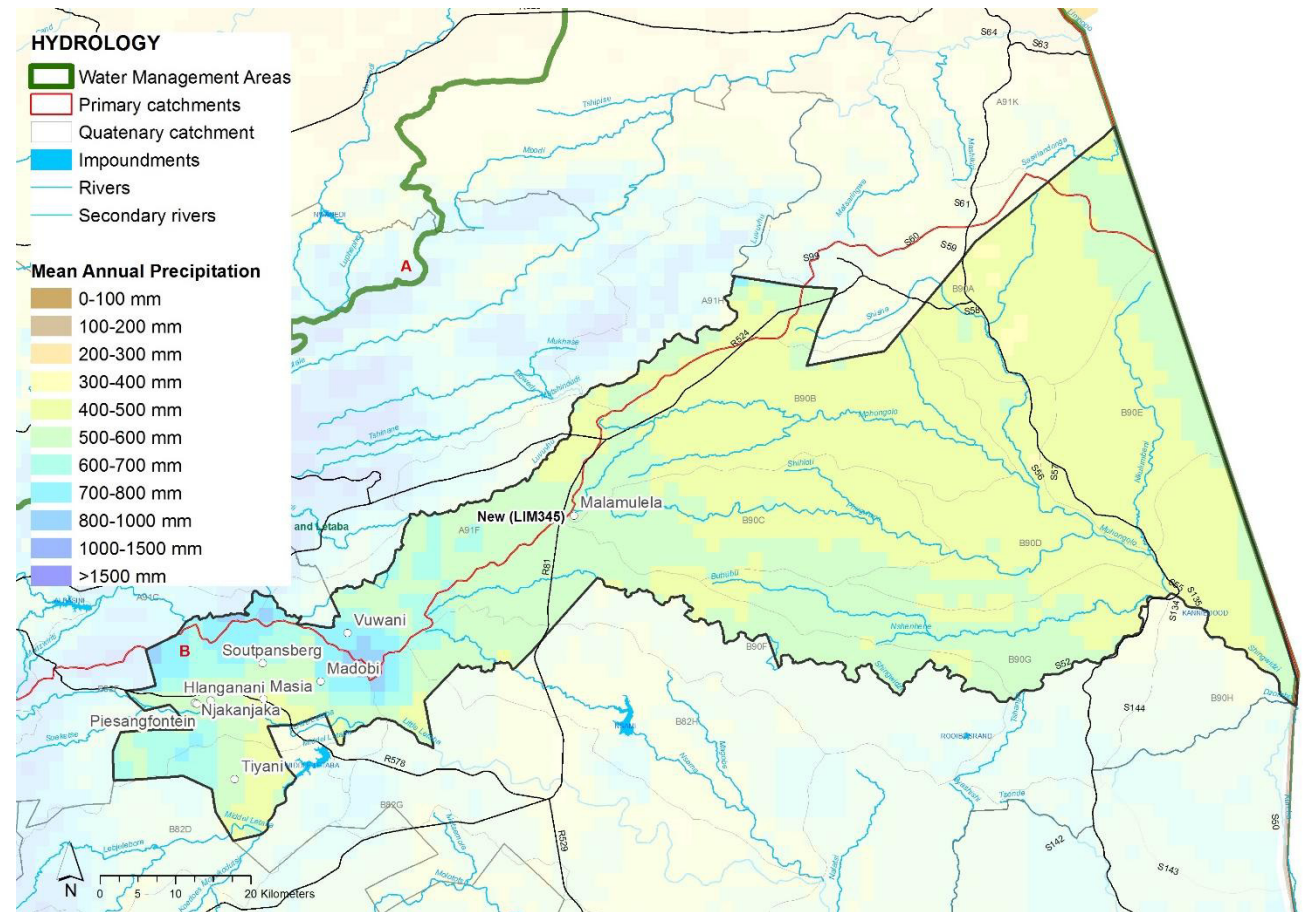


3.10. HYDROLOGY

Map 10: Hydrology

CCLM forms part of the Luvuvhu and Letaba Water management area, primary catchment B. There are 16 quaternary catchment; A91C; A91F; A91H; A91K; B82D; B82F; B82G; B82H; B90A; B90B; B90C; B90D; B90E; B90F; B90G and B90H.

There three primary rivers, which includes the Middel and Little and Letaba running across the western part of the municipality into Makhado and Greater Giyani Local Municipalities; the Luvuvhu which seeps into the Mutshindudi and runs along the municipal boundary and also the Mphongolo river on the eastern side of the municipality. As shown on the map, the municipality has a number of secondary rivers as well. There are four dams that can be found within CCLM. The Middle Letaba which is situated on the south western boundary of the municipality, Langtoondam, Sirhenidam and Stangenedam can all be found in the eastern part of the municipality. Rainfall in the municipality averages between 401mm to 600 mm annually. The western parts of the municipality averages between 601 mm to 860mm a year which is the populated areas of the municipality.

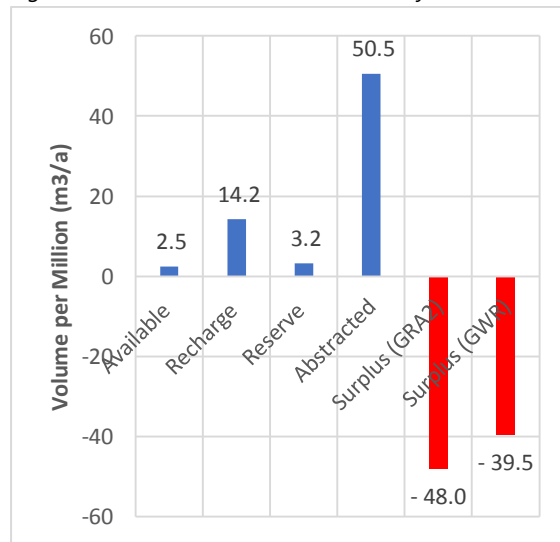


Surface water quality is determined by the Total Dissolved Solids (TDS) in the water. The TDS is moderate to high (1000-1500 mg/l) throughout the majority of the municipality. However very low levels (0-500 mg/l) is found in areas with high population density. This is an unusual occurrence.

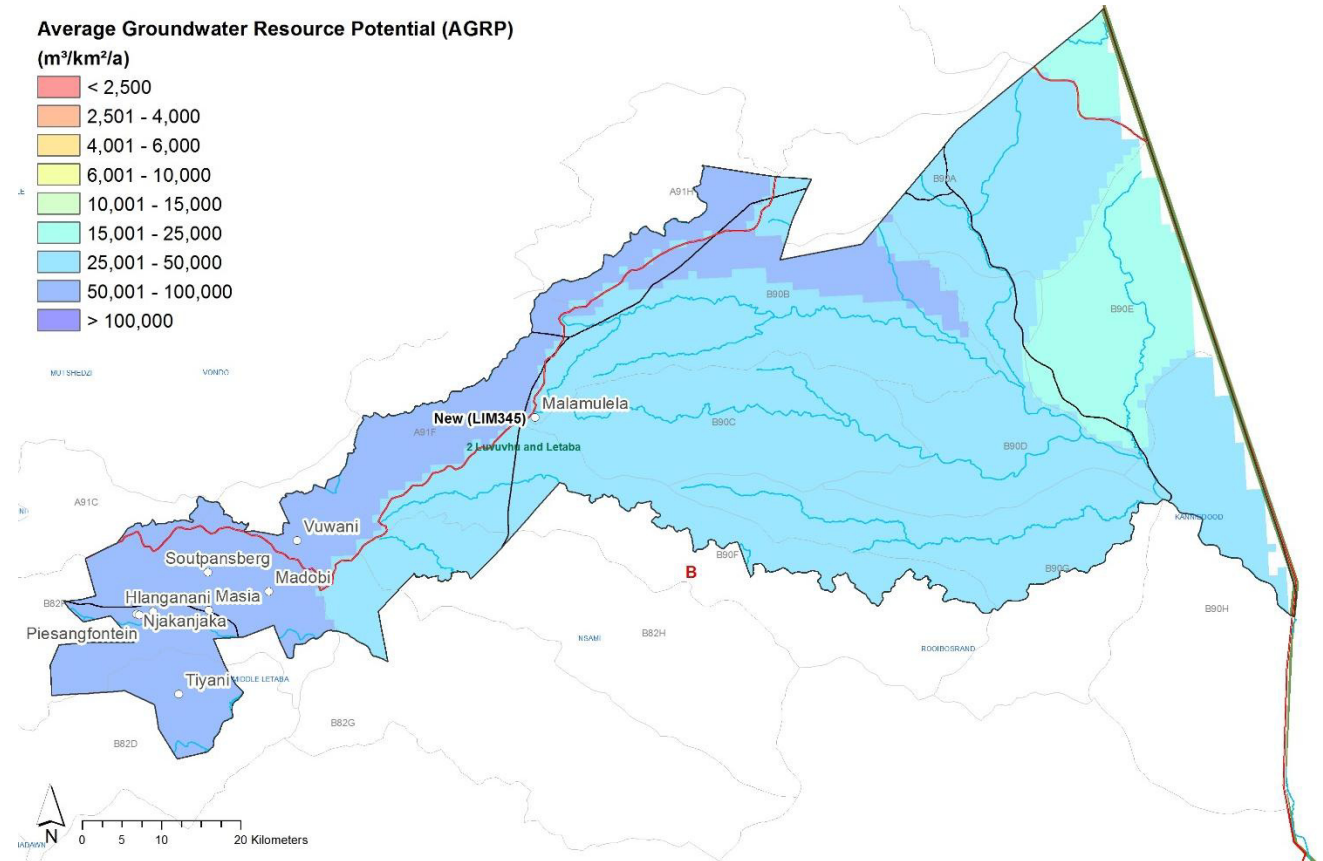
CCLM has an average groundwater resource potential which ranges between 25 000 – 50 000 m³/km²/a in the south eastern region of the municipality and 50 001-100 000 m³/km²/a in the western regions. The average groundwater resource potential is also a good indication of the groundwater exploration potential.

According to the DWS database, most quaternary catchments are not stressed except for A91C is being overextracted. This is shown in Figure 1.

Figure 1: A91C Groundwater Availability Status



Map 11: Average Groundwater Recharge Potential



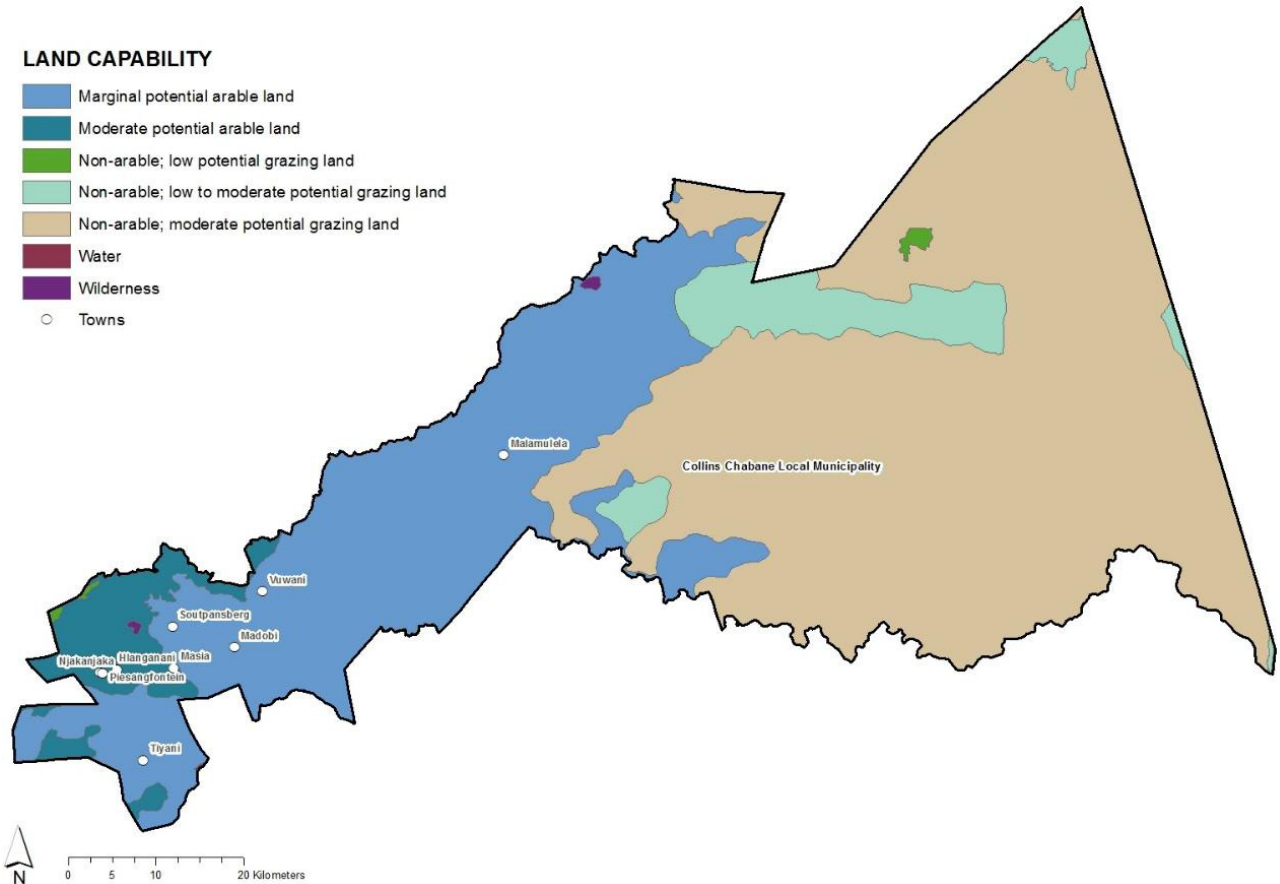
Groundwater quality is determined by the Electrical Conductivity (EC) (mS/m) of the resource. In CCLM, EC of groundwater resources ranges between 0-300 ms/m which is considered to be a fair amount. Groundwater quality is generally in good quality.

3.11. AGRICULTURE

The map on land capability indicates that the western parts of the municipality consists mainly of land with marginal and moderate potential arable land. This indicates that the land on which the settlements were developed is capable of being ploughed and is suitable for the cultivation of crops.

The eastern part of the municipality is dominated by non-arable; moderate potential grazing land which is unsuitable for growing of crops.

Map 12: Land Capability

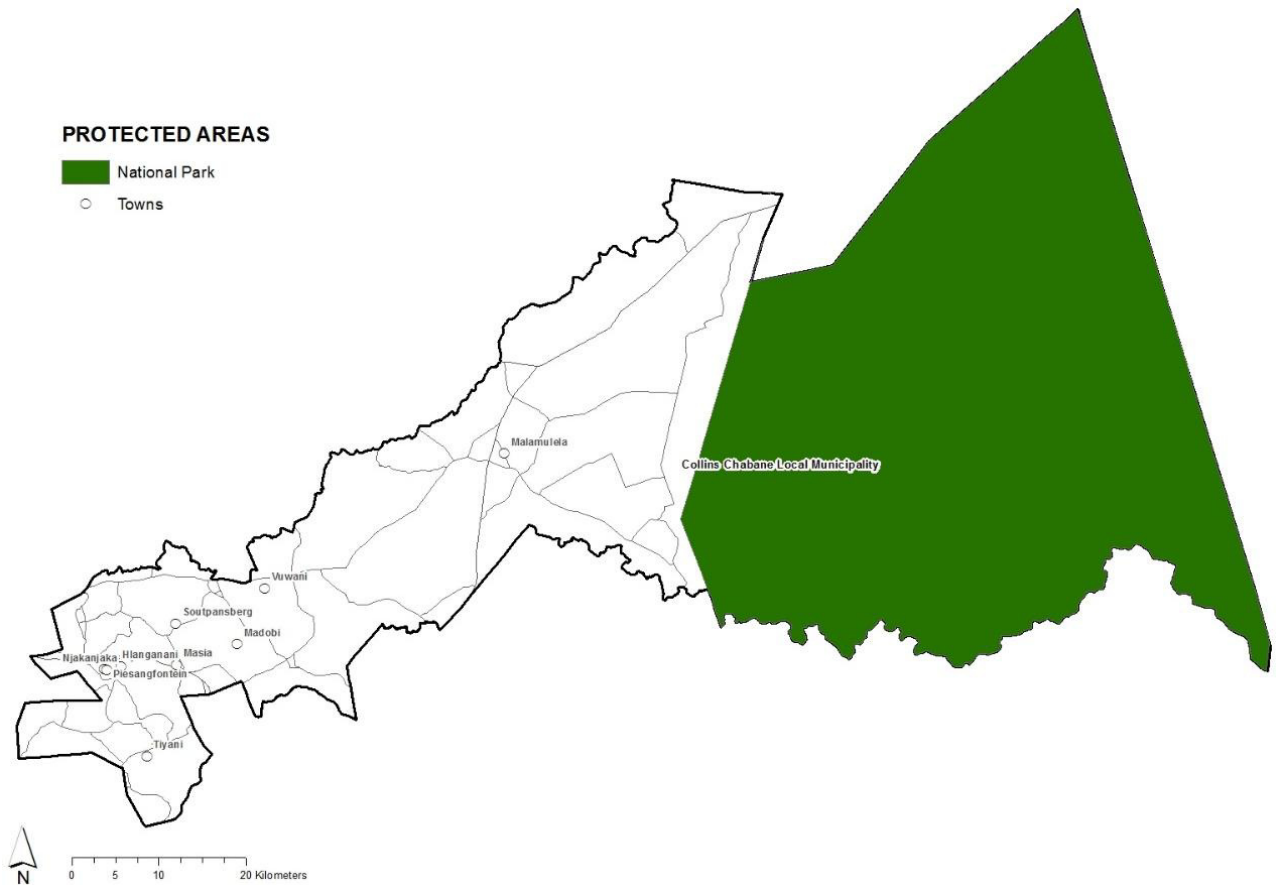


3.12. PROTECTED AREAS

There is only one protected area in CCLM, an area which is of great economic importance to the Province as well as the country. The protected area is The Kruger National Park which forms part of the municipality and takes up a land area of 1 897 960.562 ha.

The Kruger National Park is one of Africa’s biggest game reserves and one of South Africa’s core tourism sites. It is home to hundreds of animals including the Big Five i.e. Lion, Buffalo, Elephant, Leopard and Rhino. The park is part of the Kruger to Canyons Biosphere, which is the largest Biosphere in South Africa and the third largest in the world. The Kruger to Canyons Biosphere area was designated by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) as an International Man and Biosphere Reserve (UNESCO, 2007).

Map 13: Protected Area



3.13. CRITICAL BIODIVERSITY AREAS

Critical Biodiversity Areas within the bioregion are the portfolio of sites that are required to meet the region's biodiversity targets, and need to be maintained in the appropriate condition for their category. The spatial data presented in the CBA map was extracted from the 2013 Limpopo Conservation Plan v2.

The map illustrates CBA categories based on their biodiversity characteristics and its spatial configuration. The table below sets out the requirements for meeting targets for both biodiversity pattern and ecological processes.

CBA 1 covers 24 771 Ha or 2% of land. The biodiversity within these areas are considered irreplaceable in that there is little choice in terms of areas available to meet targets. The areas of land which is classified as **CBA 2's** covers 36 824 Ha or 2% of the municipal areas. These areas are considered "optimal" as they represent areas where there are spatial options for achieving targets and the selected sites are the ones that best achieve targets within the landscape design objectives of the plan.

An additional 61% of the municipality is designated as **Ecological Support Area**. This category has also been split on the basis of land-cover into **ESA 1** which covers 333 600 Ha

or 29% and **ESA 2** which covers 367 386 or 32%. ESA 1 are areas which are still largely in natural state while ESA 2 areas are no longer intact but potentially retain significant importance from a process perspective (e.g. maintaining landscape connectivity). **Other Natural Areas** make up 3% and another 3% has no remaining natural areas. Just over 26% of the municipal area is designated as formal **Protected Area**.

Map 14: Critical Biodiversity Areas

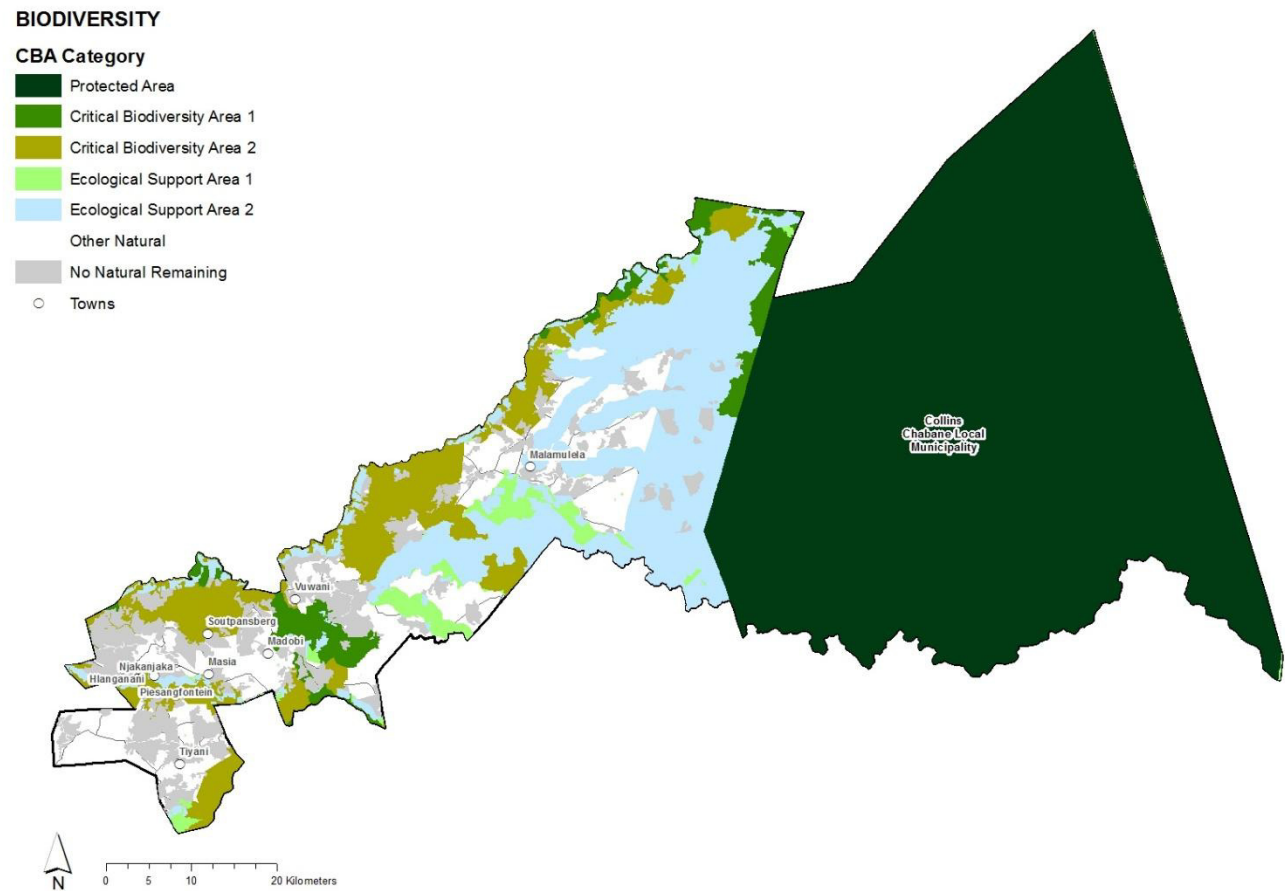


Table 5: Biodiversity areas land cover

CBA Category	Hectares (Ha)	Percentage (%)
Protected Area	293 451	26%
CBA 1	24 771	2%
CBA 2	36 824	3%
ESA 1	333 600	29%
ESA 2	367 386	32%
No Natural Remaining	36 186	3%
Other Natural Area	39 614	3%

Total	1 131 832	100%
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An objective of the CBA map is to identify a network of areas, which if managed according to the land use guidelines would meet the pattern targets for all important biodiversity features, while at the same time ensuring the areas necessary for supporting necessary ecological processes remain functional. Hence, the key measure of whether a network of Critical Biodiversity Areas is sufficient, is the extent to which targets for biodiversity features are met.

Table 6: General description of CBA Map categories and associated land management objectives

CBA map Category	Description	Land Management Objective	Land Management Recommendations	Compatible Land-Use	Incompatible Land-Use
Protected Areas	Formal Protected Areas and Protected Areas pending declaration under NEMA	Maintain in a natural state with limited or no biodiversity loss. Rehabilitate degraded areas to a natural or near natural state, and manage for no further degradation. Development subject to Protected Area objectives and zoning in a NEMPAA compliant and approved management plan.	Maintain or obtain formal conservation protection.	Conservation and associated activities (e.g. eco-tourism operations), and required support infrastructure.	All other land-uses.

<p>Critical Biodiversity Areas (1)</p>	<p>Irreplaceable Sites. Areas required to meet biodiversity pattern and/or ecological processes targets. No alternative sites are available to meet targets.</p>	<p>Maintain in a natural state with limited or no biodiversity loss. Rehabilitate degraded areas to a natural or near natural state, and manage for no further degradation.</p>	<p>Obtain formal conservation protection where possible. Implement appropriate zoning to avoid net loss of intact habitat or intensification of land use.</p>	<p>Conservation and associated activities. Extensive game farming and eco-tourism operations with strict control on environmental impacts and carrying capacities, where the overall there is a net biodiversity gain. Extensive Livestock Production with strict control on environmental impacts and carrying capacities. Required support infrastructure for the above activities. Urban Open Space Systems</p>	<p>Urban land-uses including Residential (including golf estates, rural residential, resorts), Business, Mining & Industrial; Infrastructure (roads, power lines, pipelines). Intensive Animal Production (all types including dairy farming associated with confinement, imported and improved/irrigated pastures). Arable Agriculture (forestry, dry land & irrigated cropping). Small holdings</p>
<p>Critical Biodiversity Area (2)</p>	<p>Best Design Selected Sites. Areas selected to meet biodiversity pattern and/or ecological process targets. Alternative sites may be available to meet targets.</p>	<p>Maintain in a natural state with limited or no biodiversity loss. Maintain current agricultural activities. Ensure that land use is not intensified and that are managed to minimize impact on threatened species.</p>	<p>Avoid conversion of agricultural land to more intensive land uses, which may have a negative impact on threatened species or ecological processes.</p>	<p>Current agricultural practices including arable agriculture, intensive and extensive animal production, as well as game and ecotourism operations, so long as these are managed in a way to ensure populations of threatened species are maintained and the ecological processes which support them are not impacted. Any activities compatible with CBA1.</p>	<p>Urban land-uses including Residential (including golf estates, rural residential, resorts), Business, Mining & Industrial; Infrastructure (roads, power lines, pipelines). More intensive agricultural production than currently undertaken on site. Note: Certain elements of these activities could be allowed subject to detailed impact assessment to ensure that developments were designed to CBA2. Alternative areas may need to be identified to ensure the CBA network still meets the required targets.</p>
<p>Ecological Support Areas (1)</p>	<p>Natural, near natural and degraded areas supporting CBAs by maintaining ecological processes.</p>	<p>Maintain ecosystem functionality and connectivity allowing for limited loss of biodiversity pattern</p>	<p>Implement appropriate zoning and land management guidelines to avoid impacting ecological processes. Avoid intensification of land use. Avoid fragmentation of natural landscape</p>	<p>Conservation and associated activities. Extensive game farming and eco-tourism operations. Extensive Livestock Production. Urban Open Space Systems. Low density rural residential, smallholdings or resorts where development design and overall development densities allow maintenance of ecological functioning.</p>	<p>Conservation and associated activities. Extensive game farming and eco-tourism operations. Extensive Livestock Production. Urban Open Space Systems. Low density rural residential, smallholdings or resorts where development design and overall development densities allow maintenance of ecological functioning.</p>

Ecological Support Areas (2)	Areas with no natural habitat that is important for supporting ecological processes.	Avoid additional / new impacts on ecological processes.	Maintain current land-use. Avoid intensification of land use, which may result in additional impact on ecological processes.	Existing activities (e.g. arable agriculture) should be maintained, but where possible a transition to less intensive land uses or ecological restoration should be favoured.	Any land use or activity that results in additional impacts on ecological functioning mostly associated with the intensification of land use in these areas (e.g. Change of floodplain from arable agriculture to an urban land use or from recreational fields and parks to urban).
Other Natural Areas	Natural and intact but not required to meet targets, or identified as CBA or ESA	No management objectives, land management recommendations or land--use guidelines are prescribed. These areas are nevertheless subject to all applicable town and regional planning guidelines and policy. Where possible existing Not Natural areas should be favoured for development before "Other natural areas" as before "Other natural areas" may later be required either due to the identification of previously unknown important biodiversity features on these sites, or alternatively where the loss of CBA has resulted in the need to identify alternative sites.			
No natural habitat remaining	Areas with no significant direct biodiversity value. Not Natural or degraded natural areas that are not required as ESA, including intensive agriculture, urban, industry; and human infrastructure.				

Table 7: Recommended land management guidelines for CBA's and ESA's

CRITICAL BIODIVERSITY AREAS ONE (CBA1)	
Keep In a NATURAL STATE	
General Recommendations	
<ul style="list-style-type: none"> No further loss of natural habitat should occur i.e. land in this category should be maintained as natural vegetation cover as far as possible; These areas of land can act as possible biodiversity offset receiving areas; Prioritise CBAs for land care projects, Working for Water (WfW) and NGOs to direct their conservation projects, programmes and activities; An Ecological Management Plan should be compiled where required for CBAs. EMP to include alien plant control, fire management etc.; Control of illegal activities (such a hunting and dumping), which impact biodiversity should be prioritized in CBA areas. 	
Protection	
<ul style="list-style-type: none"> CBAs not formally protected should be rezoned where possible to conservation or appropriate open space zoning, and where possible declared in terms of NEM: Protected Areas Act. The Stewardship program should prioritise privately owned erven in CBAs to be incorporated into the protected area network through Stewardship Agreements and incentives (e.g. rates rebates) 	

Rehabilitation
<ul style="list-style-type: none"> Degraded or distributed CBAs should be prioritised for rehabilitation through programmes such as Working for Water, Working for Wetlands.
Development Guidelines
<ul style="list-style-type: none"> Rezoning of properties to afford additional land-use rights that will result in increased biodiversity loss should not be granted; Permission to increase the permitted number of units per erf or per ha should not be granted; Developments should be limited to existing developed / degraded footprints, if present; Units carefully dispersed or clumped to achieve least impact, particularly with regard to habitat loss and fragmentation; The installation of infrastructure in CBAs is not desirable and should only be considered if all alternative alignment and design options have been assessed and found to be non-viable. Under conditions, at least a Basic Assessment (BA) should be undertaken, and if approved, a comprehensive EMP must be developed and best-practice restoration effort strictly implemented; Ecological Specialist to conduct the ecological assessment; <p>Where development proposals other than the preferred biodiversity-compatible land-uses:</p> <ul style="list-style-type: none"> A Screening Exercise should be undertaken by a Biodiversity Specialist or Ecologist to verify the CBA map category on site; If the site is verified as a CBA, developments other than the preferred biodiversity-compatible-land-use should be investigated in detail and the mitigation hierarchy applied in full; If the application is pursued they should be informed by a specialist biodiversity assessment.
Aquatic Ecosystems
<ul style="list-style-type: none"> Maintain water quality and flow regimes should be maintained as close to natural as possible; Where Environmental Reserves or Environmental Flow Requirements have been determined these should be strictly adhered to; All Effluent (including municipal, mining and industrial waste water) as well as acid mine drainage should be treated to required specifications before release; Stormwater flow should be managed to avoid damage to CBA areas Where CBAs include floodplains (e.g. areas within the 1:100 year flood line), riparian areas (e.g. as a minimum, a 32m buffer around rivers) or buffers around wetlands, particular attention should apply to ensure that these remain in a natural state or are rehabilitated to this state. In addition to avoiding land transformation, other activities such as livestock access may need to be controlled and alien vegetation managed to avoid damage to banks. Do not permit infilling, excavation, drainage, hardened surfaces (including buildings and asphalt), intensive agriculture or any new developments within a river or wetland. Areas that are degraded or disturbed should be rehabilitated, through programmes such as Working for Water, Working for Wetlands and a systematic alien vegetation eradication programme implemented.

CRITICAL BIODIVERSITY AREA TWO (CBA2)
Keep in a NATURAL STATE
General Recommendations
<ul style="list-style-type: none"> Loss of natural habitat should be minimized i.e. land in this category should be maintained as natural vegetation cover as far as possible These areas of land can act as possible biodiversity offset receiving areas; Control of illegal activities (such a hunting and dumping), which impact biodiversity should be prioritised in CBA areas.
Protection
<ul style="list-style-type: none"> CBAs not formally protected should be rezoned where possible to conservation or appropriate open space zoning, and where possible declared in terms of NEM: Protected Areas Act. The Stewardship program should prioritise privately owned erven in CBAs to be incorporated into the protected area network through Stewardship Agreements and incentives (e.g. rates rebates)
Rehabilitation
<ul style="list-style-type: none"> Degraded or distributed CBAs should be prioritised for rehabilitation through programmes such as Working for Water, Working for Wetlands.

ECOLOGICAL SUPPORT AREAS ONE (ESA1)	
Keep In a NATURAL STATE	
General Recommendations	
<ul style="list-style-type: none"> Maintain in a functional state, avoid intensification of land-uses, and rehabilitate to a natural or semi-natural state where possible. In transformed areas which are important for maintaining current land uses should be maintained, intensification of use should be avoided, and where possible areas should be rehabilitated. 	
Development Guidelines	
<p>• Where infrastructure is proposed, the following guidelines should be implemented:</p> <ul style="list-style-type: none"> Reasoning of properties to afford additional land-use rights that will result in increased biodiversity loss through conversion of land from agriculture should not be granted; Permission to increase the permitted number of units per lot or per hectare should not be granted; Developments should be directed to existing areas of cleared land, and should avoid encroaching on natural or agricultural landscapes; Should additional infrastructure be required, the requirements of threatened species within the CBA2 areas, and the Preferred Risk Assessment (PRA) should be undertaken in detail; development which results in the intensification of land use or land intensification, of land use in an overgrown and unproductive area must be developed to minimize impacts on threatened species; Ecological Specialist to conduct biological assessments where required for ESAs. EMP to include alien plant control, fire management etc. 	
Development Guidelines	
<p>• Where infrastructure is proposed, the following guidelines should be implemented:</p> <ul style="list-style-type: none"> If the site is verified as a CBA, developments other than the preferred biodiversity-compatible land-uses should be investigated in detail and the mitigation hierarchy applied in full; If the application is pursued they should be informed by a specialist biodiversity assessment. 	
Aquatic Ecosystems	
<ul style="list-style-type: none"> Maintain water quality and flow regimes should be maintained as close to natural as possible; Where Environmental Reserves or Environmental Flow Requirements have been determined these should be strictly adhered to; All effluent (including municipal, mining and industrial waste water) as well as acid mine drainage should be treated to required specifications before release; Stormwater flow should be managed to avoid damage to CBA2 areas Where CBA2s include floodplains (e.g. areas within the 1:100 year flood line), riparian areas (e.g. as a minimum, a 32m buffer around rivers) or buffers around wetlands, particular attention should apply to ensure that these remain in a natural state or are rehabilitated to this state. In addition to avoiding land transformation, other activities such as livestock access may need to be controlled and alien vegetation managed to avoid damage to banks. Do not permit infilling, excavation, drainage, hardened surfaces (including buildings and asphalt), intensive agriculture or any new developments within a river or wetland. Areas that are degraded or disturbed should be rehabilitated, through programmes such as Working for Water, Working for Wetlands and a systematic alien vegetation eradication programme implemented. Rehabilitation work should be undertaken in a way which does not negatively impact on the survival of threatened species. 	

- Rezoning of properties to afford additional land-use rights that will result in increased biodiversity loss through conversion of land from agriculture should not be granted, unless significant net conservation gains can be achieved, ecosystem functioning and connectivity of Ecosystem Support Areas (ESAs) will not compromise, and biodiversity impacts with regard to species and habitats are of at an acceptable significance and mitigated where possible.
- Developments should be limited to existing developed/ degraded footprints, where possible;
- Units carefully dispersed or clumped to achieve least impact, particularly with regard to impacts on ecological processes.
- Ecological Specialist to conduct the ecological assessment;

Where development proposals other than the preferred biodiversity-compatible land-uses are submitted in terms of NEMA: EIA regulations or Land Use Planning Ordinance (LUPO) for areas which remain intact:

- A Screening Exercise should be undertaken by a Biodiversity Specialist or Ecologist to verify the CBA map category on site;
- If the site is verified as an ESA, developments other than the preferred biodiversity-compatible land-uses should be carefully screened to ensure that developments are planned and activities undertaken in a way that minimises impact on ecological processes. Impacts should be mitigated;
- If the application is pursued they should be informed by a specialist biodiversity assessment.

In transformed areas which are still important for supporting ecological processes, the following guidelines should be implemented –

- Current land uses should be maintained, intensification of use (e.g. a transition from extensive agriculture to urban) should be avoided, and where possible areas should be rehabilitated.
- Developments should be screened to ensure that they do not have an unacceptable impact on ecological processes

Aquatic Ecosystems

- Water quality and flow regimes should be maintained as close to natural as possible;
- Where Environmental Reserves or Environmental Flow Requirements have been determined these should be strictly adhered to;
- All affluent (including municipal, mining and industrial waste water) as well as acid mine drainage should be treated to required specifications before release;
- Stormwater flow should be managed to avoid damage to ESA areas
- Where ESAs include floodplains (e.g. areas within the 1:100 year flood line), riparian areas (e.g. as a minimum, a 32m buffer around rivers) or buffers around wetlands, particular attention should apply to ensure that these remain in a natural state or are rehabilitated to this state. In addition to avoiding land transformation, other activities such as livestock access may need to be controlled and alien vegetation managed to avoid damage to banks. Do not permit infilling, excavation, drainage, hardened surfaces (including buildings and asphalt), intensive agriculture or any new developments within a river or wetland.
- Areas that are degraded or disturbed should be rehabilitated, through programmes such as WFW, WFW and a systematic alien vegetation eradication programme implemented.
- Creation of berms, roads, culverts, canalisation, channelization, alien vegetation, impoundment, abstraction, well points, storm-water or other point source inflows, irrigation return flows, grazing/trampling, agriculture, golf course, suburban gardens, artificial deepening, and drainage, should be avoided where possible within the 1:20 year flood line.

ECOLOGICAL SUPPORT AREAS ONE (ESA2)

Maintain in an **ECOLOGICAL FUNCTIONAL STATE**

General Recommendations

- Additional impacts on ecological processes should be avoided. In transformed areas, which are important for maintaining ecological processes, current land uses should be maintained, intensification of use (e.g. a transition from agriculture to urban) should be avoided, and where possible areas should be rehabilitated.
- The maintenance of connectivity between CBAs, continued ecosystem functioning within the CBA corridors, and the prevention of degradation of adjacent Critical Biodiversity Areas must be achieved;
- In some cases the rehabilitation of ESA2s may be suitable for land care projects, Working for Water (WfW) and NGOs to direct their conservation projects, programmes and activities;

Development Guidelines

Where infrastructure is proposed, the following guidelines should be implemented –

- Infrastructure should be designed to avoid additional impacts on ecological processes.

In transformed areas which are still important for supporting ecological processes, the following guidelines should be implemented –

- Current land uses should be maintained, intensification of use (e.g. transition from agriculture to urban) should be avoided, and where possible areas should be rehabilitated;
- Developments should be screened to ensure that they do not have an unacceptable impact on ecological processes.

Aquatic Ecosystems

- Water quality and flow regimes should be maintained as close to natural as possible;
- Where Environmental Reserves or Environmental Flow Requirements have been determined these should be strictly adhered to;
- All affluent (including municipal, mining and industrial waste water) as well as acid mine drainage should be treated to required specifications before release;
- Stormwater flow should be managed to avoid damage to ESA2 areas
- Where ESA2s include floodplains (e.g. areas within the 1:100 year flood line), riparian areas (e.g. as a minimum, a 32m buffer around rivers) or buffers around wetlands, particular attention should apply to ensure that these remain in a natural state or are rehabilitated to this state. In addition to avoiding land transformation, other activities such as livestock access may need to be controlled and alien vegetation managed to avoid damage to banks. Do not permit infilling, excavation, drainage, hardened surfaces (including buildings and asphalt), intensive agriculture or any new developments within a river or wetland.
- Creation of berms, roads, culverts, canalisation, channelization, alien vegetation, impoundment, abstraction, well points, storm-water or other point source inflows, irrigation return flows, grazing/trampling, agriculture, golf course, suburban gardens, artificial deepening, and drainage, should be avoided where possible within the 1:20 year flood line.

4. SOCIAL-ECONOMIC ANALYSIS

CCLM is African. The 2016 Census data also indicates that 64% of the population is female.

4.1. POPULATION DISTRIBUTION

The population of CCLM was approximately 330 297 in 2011. According to the 2016 Community Survey conducted by StatsSA the current population of the municipality is 347 974. Furthermore, 99.8% of the population in

Figure 2: Population 2011 – 2016

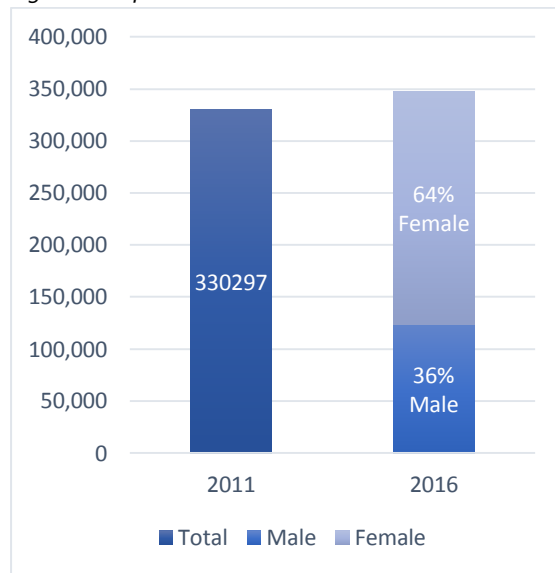


Table 8: Population 2011 - 2016

Year	2011	2016	Population increase between 2011 - 2016
Population	330 297	347 974	17 677
Male		123 647	123 647
Female		224 327	224 327

11-20	14 316
21-30	40 120
31-40	66 178
41-50	70 242
51-60	68 731
61-70	45 814
71-80	28 557
81-90	11 394
91-100	2 081
101-110	403
111-113	39
Total	347 974

A large number of the population has experienced no schooling at all, this is approximately 23% of the population. 11% of the population managed to complete Grade 12 (Matric) and only 3% furthered their studies and obtained post matric qualifications. This indicates a large level of illiteracy in the municipality, it also shows that the municipality lacks a skilled labour force.

The population is largely dominated by the group ages of 31-60. This age groups make up to approximately 59% of the municipality's population.

Table 9: Population by age

Age	Population
1-10	100

Key observations:
 CEM's population increased with 17 677 people between 2011 and 2016, which is an annual increase of 5.37%. This growth trend is likely to continue, placing increased pressure on the municipality to deliver social and infrastructure services.

The high percentage of female population in the area could be an indication of male workers that migrate to other cities and provinces to seek employment opportunities. Which would essentially mean that the municipality experiences a lack of employment opportunities for its citizens. The municipality's youth population is minimal, as it is largely dominated by the group ages between 31-60 years of age. Furthermore, the municipality is experiencing very high levels of illiteracy as approximately 23% of the population has no schooling at all.

4.2. HOUSEHOLDS DISTRIBUTION AND SERVICES PROFILE

Human settlement development is currently the sole mandate of the CoGHSTA. However, CCLM has a facilitation role to play.

The table below summarises the 2016 housing distribution within CCLM. 76.1% of households currently live in a formal dwelling/house or brick/concrete block structure. 18.0% of the remaining households live in the traditional dwelling/hut/structure made of traditional material.

Table 10: Dwelling type

Dwelling type	RDP or government subsidised dwelling	Households	% of Households 2016
Flat or apartment in a block of flats	RDP or government subsidised dwelling	16 658	18.1%
Informal dwelling/ shack not in backyard	Not a subsidised dwelling	67	0.1%
Room/ Flatlet on a property or larger dwelling/ servants quarters	TOTAL	68	0.1%
Semi-detached house	(Statistics South Africa, 2016)		0.2%
Cluster house in complex		237	0.3%
Informal dwelling/ shack in backyard		389	0.4%
Townhouse (semi-detached house in a complex)		1 162	1.3%
Other		1 359	1.5%
Formal dwelling/house/flat/room in backyard		1 926	2.1%
Traditional dwelling/hut/structure made of traditional material		16 521	18.0%
Formal dwelling/house or brick/concrete block structure		69 952	76.1%

Total	91 936	100.0%
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(Statistics South Africa, 2016)

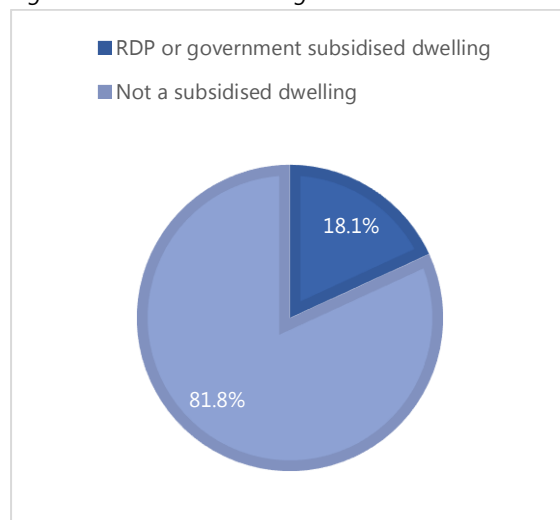
The Municipal IDP 2017/2018 highlighted several challenges related to housing. These include poor quality of housing, non-availability of land, mushrooming of informal settlements, and a lack of basic services in informal settlements. Informal settlements in the municipality includes Madonsi, Xipurapureni and Rhulani. One should take the view that all informal settlements and backyard shacks counts as housing backlog, using the above table places this figure at 456 or 0.5% for the entire municipality.

Table 11 and Figure 3 show that 81.1% of households do not live in a RDP house or any form of subsidised dwelling provided by government. However 18.1% of the households do rely on subsidised housing.

Table 11: Subsidised dwelling

RDP or government subsidised dwelling	Households	% of Households 2016
RDP or government subsidised dwelling	16 658	18.1%
Not a subsidised dwelling	67	0.1%
TOTAL	68	0.1%

Figure 3: Subsidised dwelling



(Statistics South Africa, 2016)

4.2.1. Access drinking water supply service

Vhembe District Municipality is the Water Services Authority (WSA) and the Water Services Provider (WSP). The District purchases bulk water from the Department of Water and Sanitation and then supplies water and sanitation services to CCLM. The Strategic Framework for Water Services define basic and then water supply as provision of basic water supply facilities, the sustainable operation of facilities and the communication of good water use, hygiene and related practices. Water

should be available for at least 350 days per year and not interrupted more than 48 consecutive hours per incident. Basic supply facilities is defined as the infrastructure necessary to supply 25 liters of potable water per person per day supplied within 200 meters of a household and within a minimum flow of 10 liters per minute.

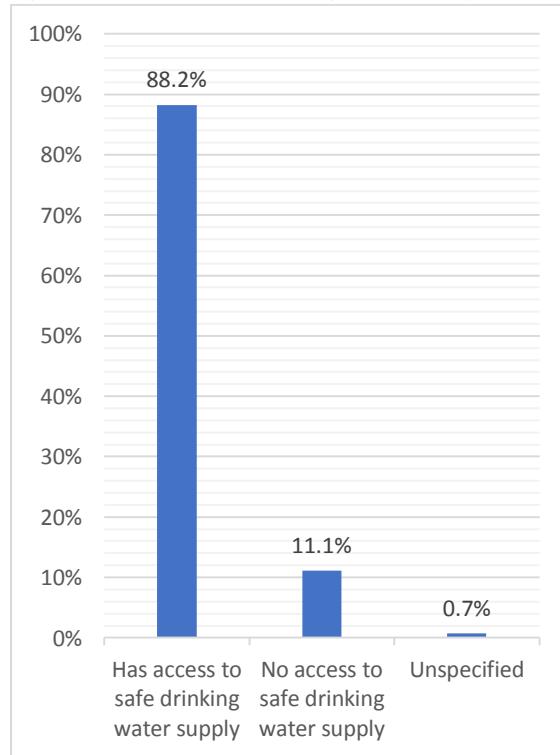
Irrespective of the fact that the municipality's biggest challenge is the lack of safe and reliable water supply, 88.2% of households do have access to safe drinking water. Only 11.1% of households to not have access and 0.7% can not specify.

Table 12: Access to safe drinking water supply

Access to safe drinking water supply	Households	% of Households 2016
Has access to safe drinking water supply	81 090	88.2%
No access to safe drinking water supply	10 220	11.1%
Unspecified	626	0.7%
TOTAL	91 936	100.0%

However, the fact that households have access to services infrastructure does not necessarily mean that they have access to water. During the past 3 months, more than half (44 915) of the municipal households experienced water interruptions. These interruptions mostly last between 2-7 days. Water interruptions are a frequent occurrence in the municipality which ponders on the municipality's biggest challenge when it comes to the provision of services. The following table and figure depict the number of households that have access to a safe drinking water supply service and ones that do not.

Figure 4: Access to safe drinking water supply

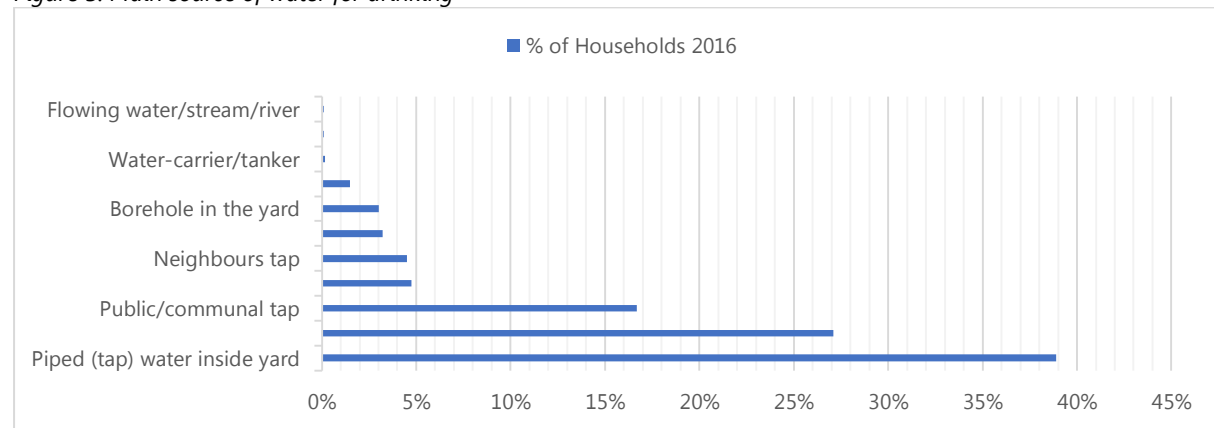


The majority of households, 39% have access to piped (tap) water inside the yard, followed by 27% of households which have access to piped water on a communal stand, and 17% on a communal/public tap. These figures indicate that that approximately 44% of households uses stand pipes outside of their yards which mean that they stand in long queues every day just to access clean drinking water.

Table 13: Main source of water for drinking

Main source of water for drinking	Households	% of Households 2016
Piped (tap) water inside yard	35 745	38.9%
Piped water on community stand	24 900	27.1%
Public/communal tap	15 348	16.7%
Piped (tap) water inside the dwelling/house	4 373	4.8%
Neighbours tap	4 136	4.5%
Borehole outside the yard	2 946	3.2%
Borehole in the yard	2 784	3.0%
Other	1 369	1.5%
Water-carrier/tanker	160	0.2%
Rain-water tank in yard	96	0.1%
Flowing water/stream/river	78	0.1%
Total	91 936	100.0%

Figure 5: Main source of water for drinking



In addition, 2016 Statistics indicate that approximately 49% of households can access a source of safe water for drinking within a radius of 1 kilometre.

4.2.2. Household access to electricity

Electricity in CCLM is supplied by Eskom. 90% of households in CCLM use in-house prepaid meters to access electricity. With 5% of its households having no access to electricity and another 5% having other forms of connections to electricity. With the large number of households using prepaid meters gives an indication that electricity payments and supply is efficient within the municipality. The following table and figure depicts the type of connection to electricity households within the municipality have.

The biggest electricity supplier in the municipality is Eskom-pre-paid, which services almost 92% of households in the municipal area. A number of Eskom-funded projects are in place. Once completed, an addition 2 277 connections will be achieved.

Table 14: Access to electricity

Connection	Households	% of Households 2016
In-house prepaid meter	82 367	89.6%
No access to electricity	4 706	5.1%
In-house conventional meter	3 506	3.8%
Connected to other source which household is not paying for	801	0.9%
Solar home system	230	0.3%
Other	216	0.2%
Connected to other source which household pays for (e.g. con)	95	0.1%
Generator	12	0.0%
Battery	5	0.0%
TOTAL	91936	100.0%

4.2.3. Refuse Removal

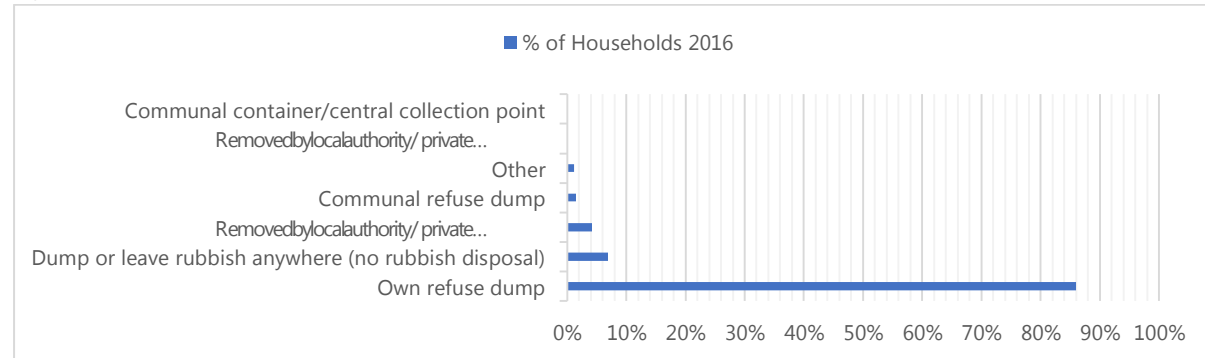
CCLM collects waste in and around urban and rural areas, where the waste gets dumped at Thohoyandou Block J landfill site. According to the IDP, the municipality do not have licensed landfill sites for disposal. However the municipality has two waste transfer stations located at Mulenshe and Xikundu village.

The collection of waste is done daily in town and once per week in villages. According to StatsSA 2016, 86% of households use their own refuse dump to get rid of waste. Only 4% of households have their waste removed by a local authority/private company/community members at least once a week. This again indicates that there is a major backlog by the municipality when it comes to service provision. The following table and figure show refuse removal within the municipal area.

Table 15: Refuse removal

Refuse removal	Households	% of Households 2016
Own refuse dump	79 045	86.0%
Dump or leave rubbish anywhere (no rubbish disposal)	6 343	6.9%
Removed by local authority/private company/community members at least once a week	3 836	4.2%
Communal refuse dump	1 394	1.5%
Other	1 117	1.2%
Removed by local authority/private company/community members less often than once a week	120	0.1%
Communal container/central collection point	80	0.1%
TOTAL	91936	100.0%

Figure 6: Refuse removal



4.2.4. Access to Sanitation services

Vhembe district is also the responsible Authority to provide sanitation services. The district has district has 9 waste water works, 11 ponds and 10 booster pumps stations. 74% of households have access to a toilet facility within their yard premises, but only 10% of households have access to their main toilet facility in their dwelling/house.

Table 16: Main toilet facility

Toilet facility	Household	% of Households 2016
In the yard	68 462	74.5%
Unspecified	11 234	12.2%
In the dwelling/house	9 335	10.2%
Outside the yard	2 905	3.2%
Total	91 936	100.0%

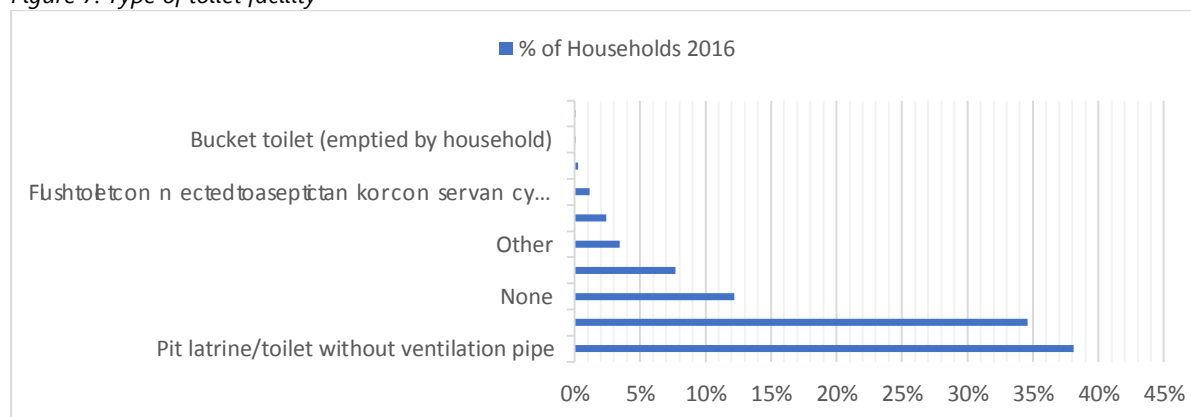
The main type of toilet facility used within the municipality is the pit latrine toilet without ventilation pipe, which is used by 38.1% of households, followed by a pit latrine toilet with ventilation pipe which is used by 34.6% of households. Table 17 shows that 73% of households within the municipality use some form of pit latrine toilet facility. Only 8% of households have access to a flush toilet

connected to a public sewerage system. The following table and figure show the types of toilet facility that are used within the municipality.

Table 17: Type of toilet facility

Toilet facility	Households	% of Households 2016
Pit latrine/toilet without ventilation pipe	35 042	38.1%
Pit latrine/toilet with ventilation pipe	31 796	34.6%
None	11 225	12.2%
Flush toilet connected to a public sewerage system	7 083	7.7%
Other	3 178	3.5%
Chemical toilet	2 233	2.4%
Flush toilet connected to a septic tank or conservancy tank	1 041	1.1%
Ecological toilet (e.g. urine diversion; enviroloo etc.)	246	0.3%
Bucket toilet (emptied by household)	56	0.1%
Bucket toilet (collected by municipality)	36	0.0%

Figure 7: Type of toilet facility



Fortunately, 65% of households do not share their toilet facilities. Shared toilet facilities are generally more unhygienic as poses risk for diseases. 70% of households within the municipality maintain their own toilet facilities, with only 9% maintained by the municipality. This shows that sanitation services from the municipality with regards to toilet facilities is very poor as a result households take on the responsibility of maintaining their own toilets. According to the Municipal IDP 2017/2018, water management within CCLM face the following challenges:

- imbalances between the supply and demand for water;
- alien invasive plant species;
- inappropriate land uses in the river valley;
- water pollution;
- poorly manages sewerage systems;
- high percentage of pit latrines;
- droughts;
- WWTW receives more water inflow than the designed capacity;
- Vandalism and the of manhole covers;
- Ageing infrastructure; and
- Overgrown shrubs and grasses at plants and poor maintenance.

4.2.5. Community Facilities

Facility location planning standards, access guidelines and threshold norms are an essential element of strategic forward planning and are used to allocate and reserve land for particular uses and facilities and develop capital budget plans within a planning area. This is particularly true of community-type facilities.

In 2012, the CSIR published guidelines for the Provision of Social Facilities in South African Settlements. Even though CCLM has over 300 000 people, they are generally scattered throughout the municipality in small villages. According to the guidelines, CCLM falls within the Village category with a catchment size of 5000 – 25 000 people.

Access to community facility analysis focus on four primary facilities, which includes access to police stations, schools, health facilities and halls.

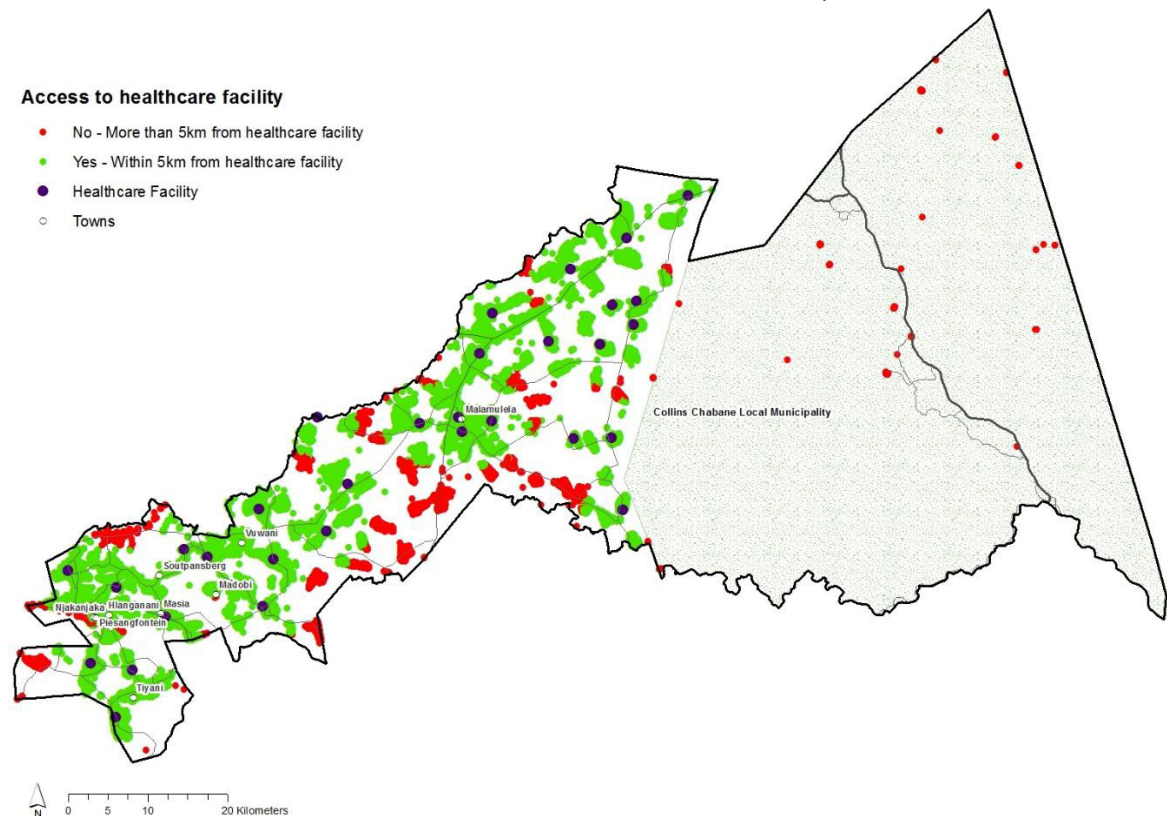
Table 18: CSIR accessibility thresholds

Facility	Villages Travel Distance
Health	5km
Education	5km
Police	24km
Halls	25km

4.2.5.1. Access to health services

According to the IDP, the municipality has only one hospital, three health care centres and 32 clinics. The spatial analysis below shows that several sub-places are not located within the desired 5 km reach to facilities. The red areas indicates that more or less 6 456 are located further than 5 km from healthcare facilities

Map 15: Access to healthcare services



The following sub places are areas of concern because they do fall within the desired 5km radius from healthcare facility.

Table 19: Sub place not within desired access to Healthcare facilities

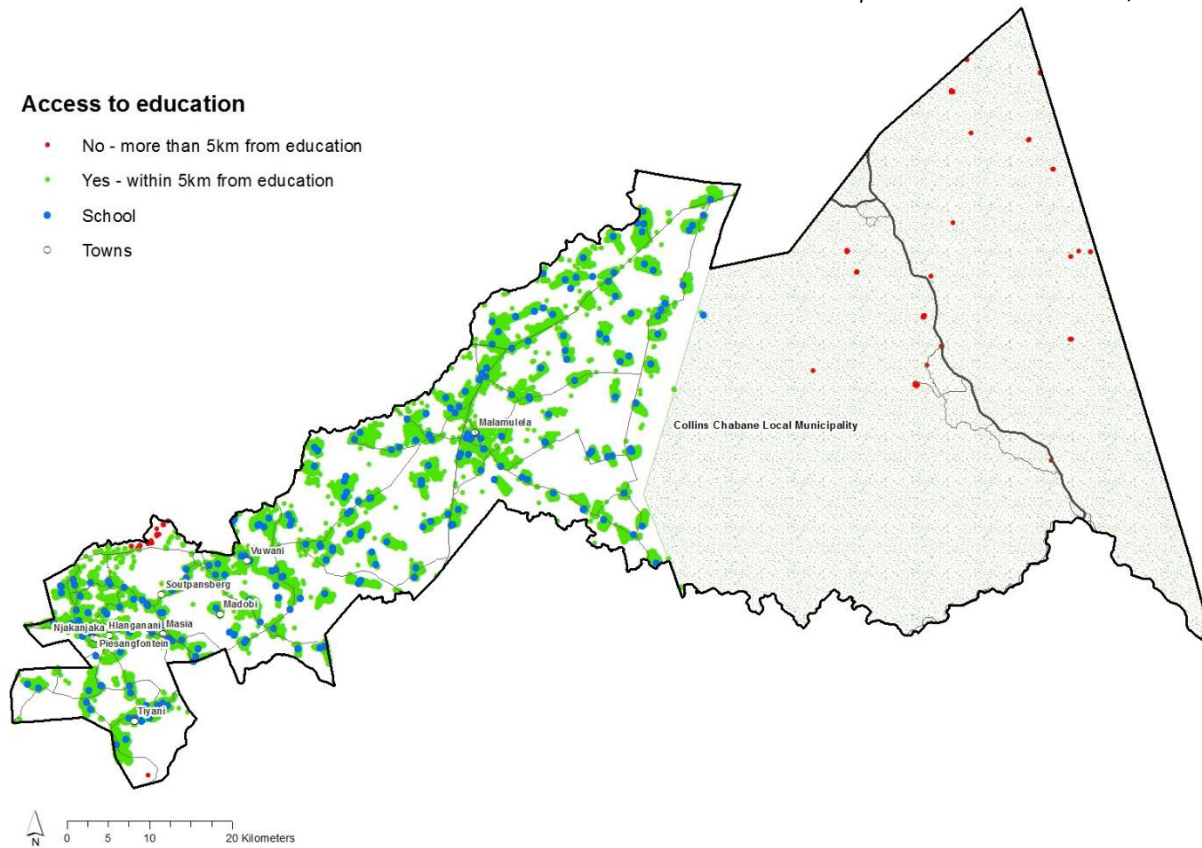
Sub Place	Households
Sereni	463
Malonga	414
Hanani SP	312
Ka-Muswane SP	542
Bulwini SP	550
Tambaulate SP	85
Ka-Xigamani SP	504
Ka-Mphambo SP	921
Ka-Mahonisi SP	1 233
Ka-Mapapila SP	363
Ka-Matsakali SP	305
Ka-Mabayeni SP	395
Phugwane SP	278
Gonani SP	91
TOTAL	6 456

Other areas of concern includes, Bungeni SP; Shitachi; KaBungeni SP1; Mahatlani; Madobi; Mabidi; Ka-Xihosana SP; Ka-Maveke SP; Makovha SP; Mulezhe SP; Roadhouse SP; Gijamhandzeni SP; Green Farm SP; Mashobye SP; Nghomunghom SP; Nsimbhi SP; Mabaligwe SP; and the Kruger National Park SP.

4.2.5.2. Access to educational facilities

The CSIR guidelines requires for schools to be located within a 5 km radius. This threshold is also adopted by the National Department of Education. According to the spatial data, there are educational facilities within the municipality. Almost all households are within the desired 5 km reach. However, the municipality does not have a single instruction of higher education.

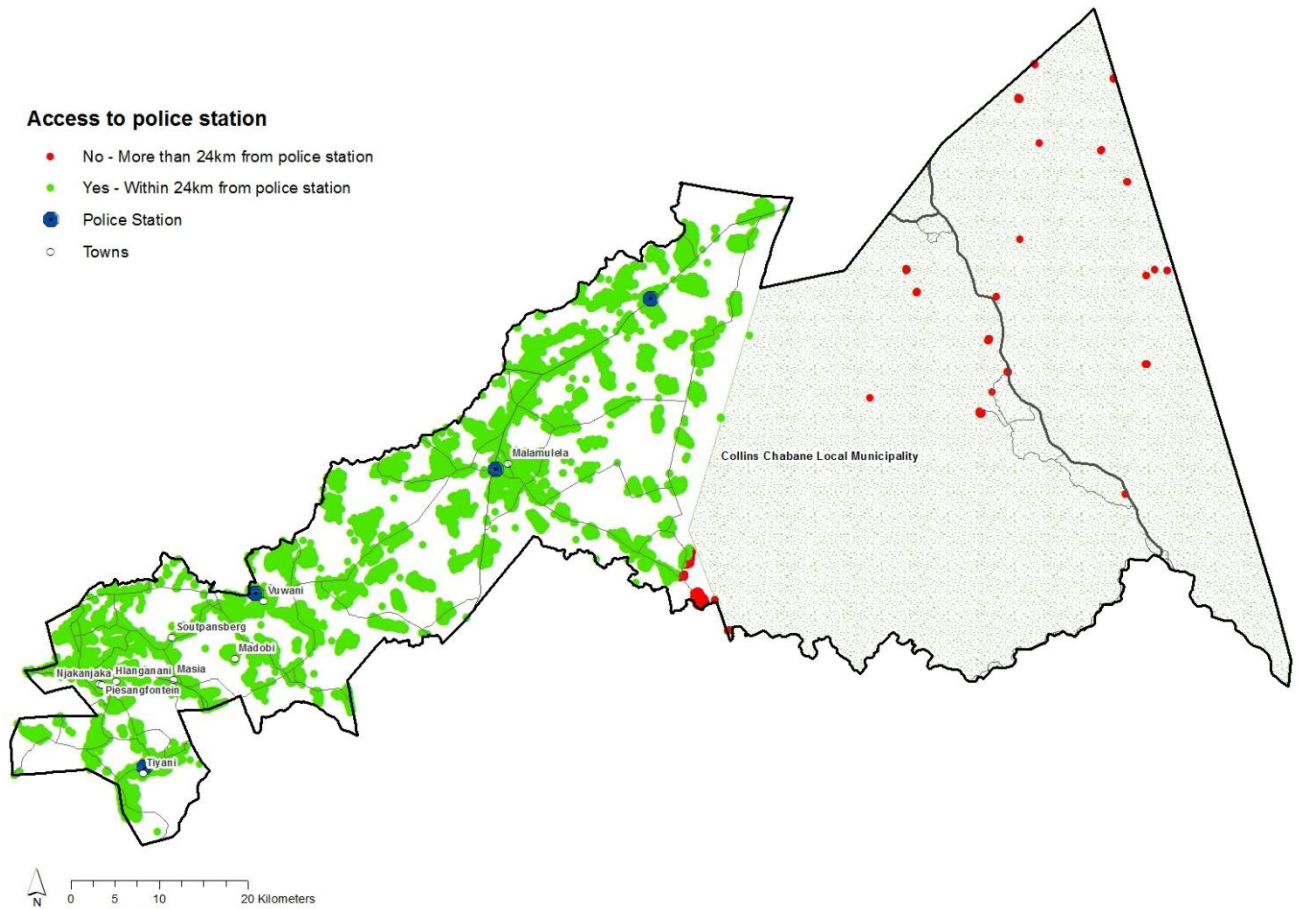
Map 16: Access to education facilities



4.2.5.3. Access to police services

According to the Municipal IDP 2017/2018, CCLM has two police stations. However the spatial data indicate that the municipality has four police stations which covers the majority of households within CCLM.

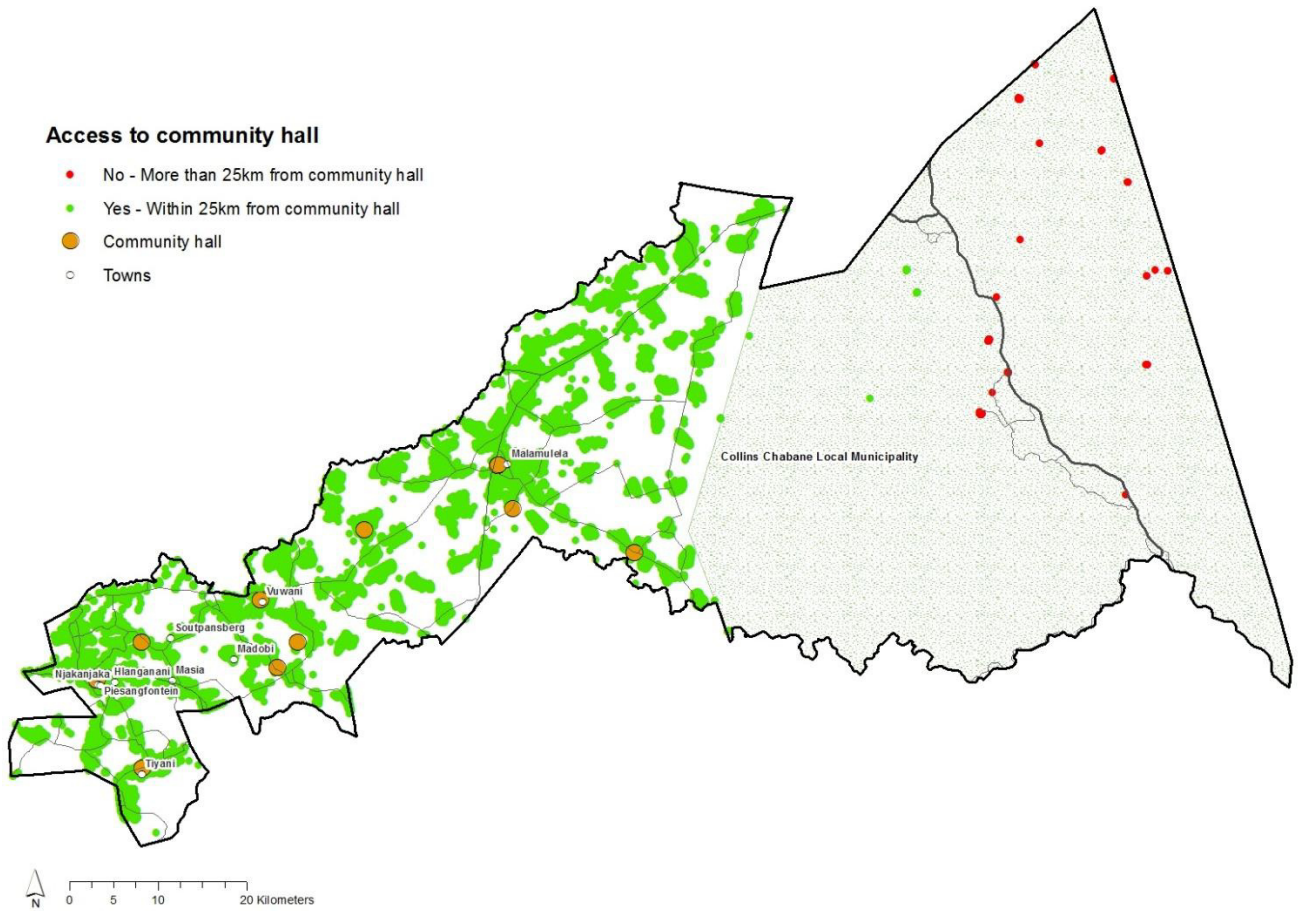
Map 17: Access to police services



4.2.5.4. Access to community halls

According to the spatial data, CCLM has nine community halls. Within a 25 km radius, the majority of households do have access within the desired threshold to these facilities.

Map 18: Access to community hall



4.3. ECONOMIC CONSIDERATIONS

This section of the report will use economic information from both Makhado LM and Thulamela LM as the information is not yet available for CCLM.

4.3.1. Key Economic Sectors

Gross Value Added (GVA) is a productivity metric that measures the contribution to an economy or region. Gross value added provides a rand value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.

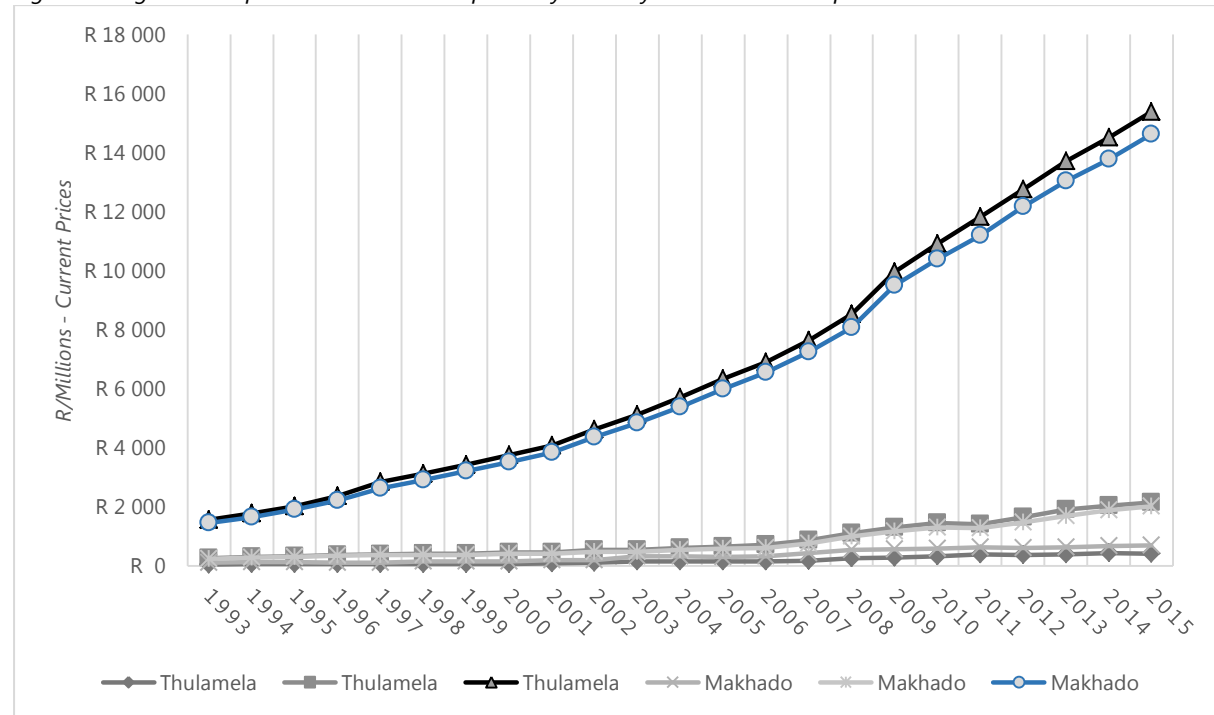
The majority of economic activities in both Makhado and Thulamela LM takes place within the tertiary sector, followed by the secondary sector, and then the primary sector.

The graph highlights the value of the tertiary sector reaching almost R 15 billion in Makhado and close to R 16 billion in Thulamela. Within the tertiary sector, general government is by far the strongest sector contributing R 5.8 billion in Makhado and R 7.3 billion in Thulamela. In Makhado, wholesale and retail trade (R 4.0 billion) and catering and

accommodation (R 3.5 billion) is second and third largest contributors.

In Thulamela, finance, insurance, real estate and business services (R 3.3 billion) is second followed by wholesales and trade (R 3.2 billion).

Figure 8: Regional Output and GVA at basic prices by industry and 2011 municipal level 1995-2015



In 2015, Agriculture contributed R 614 million in Makhado and R 168 million in Thulamela. Mining in Makhado is the smallest GVA contributor, generating only 203 million in 2015. In Thulamela, it is slightly higher at R 355 million. Figure 9 and Figure 10 provides GVA statistics per economic sub-sector between 2005 and 2015 and Figure 11 and Figure 12 provides the % contribution for both employment and GVA per economic subsector.

Figure 9: Makhado GVA per economic sub-sector 2005-2015

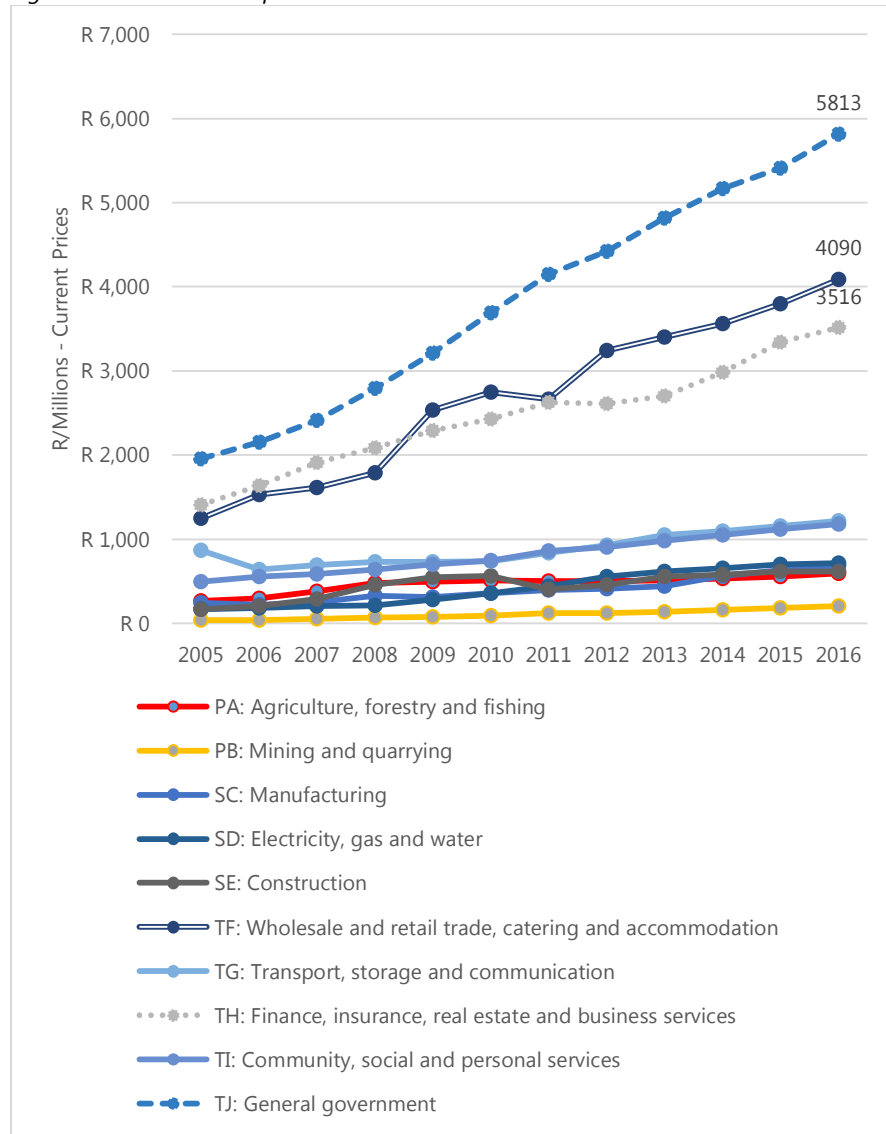


Figure 10: Thulamela GVA per economic sub-sector 2005-2015

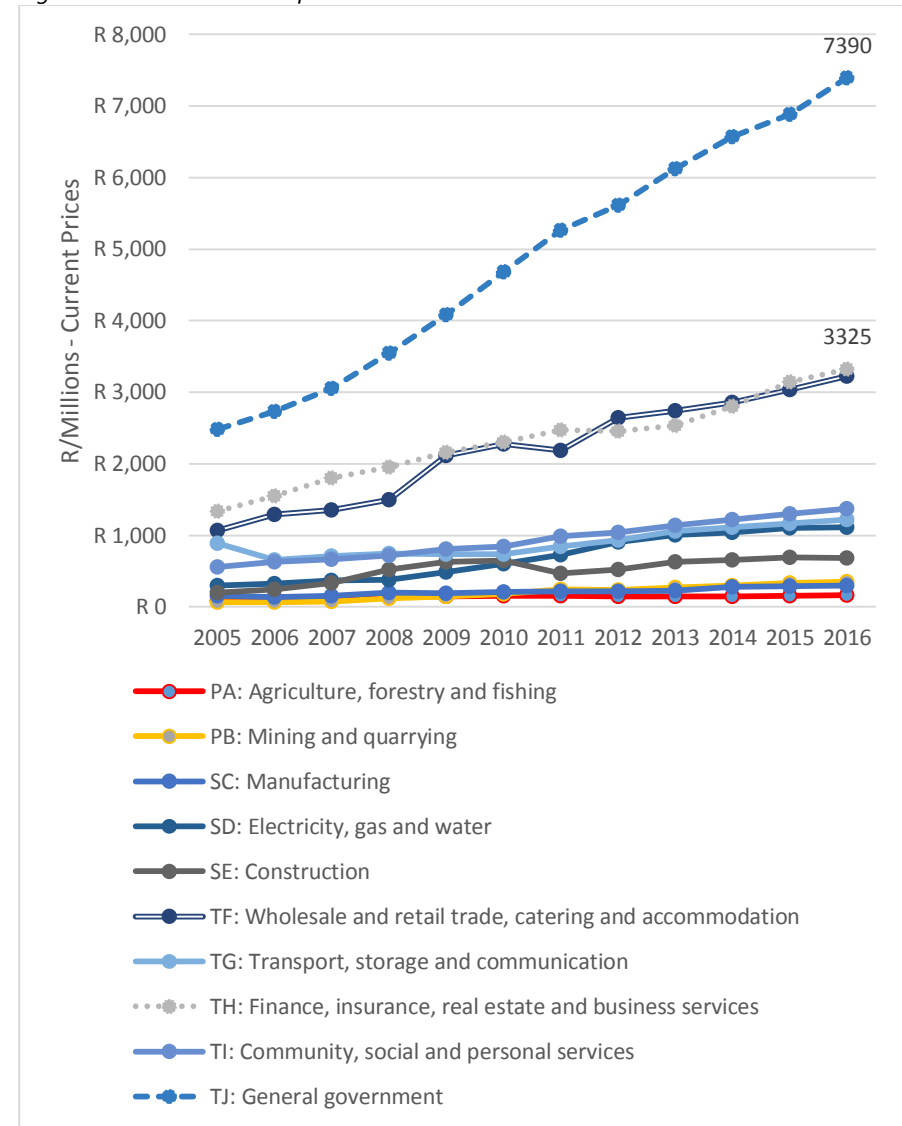
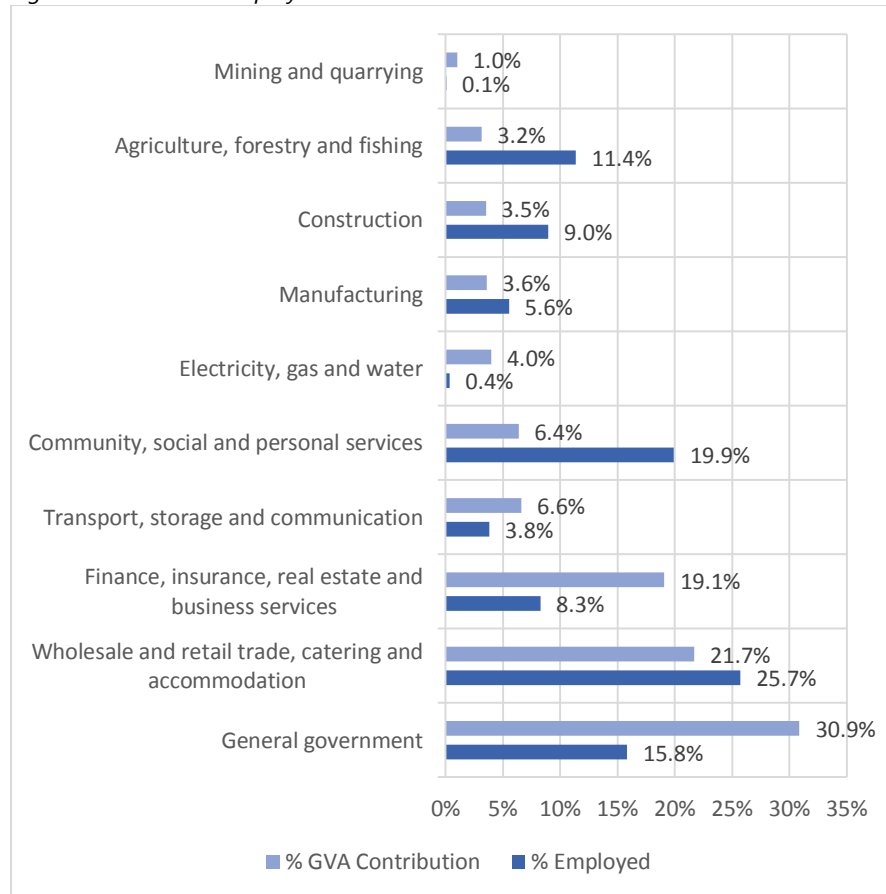
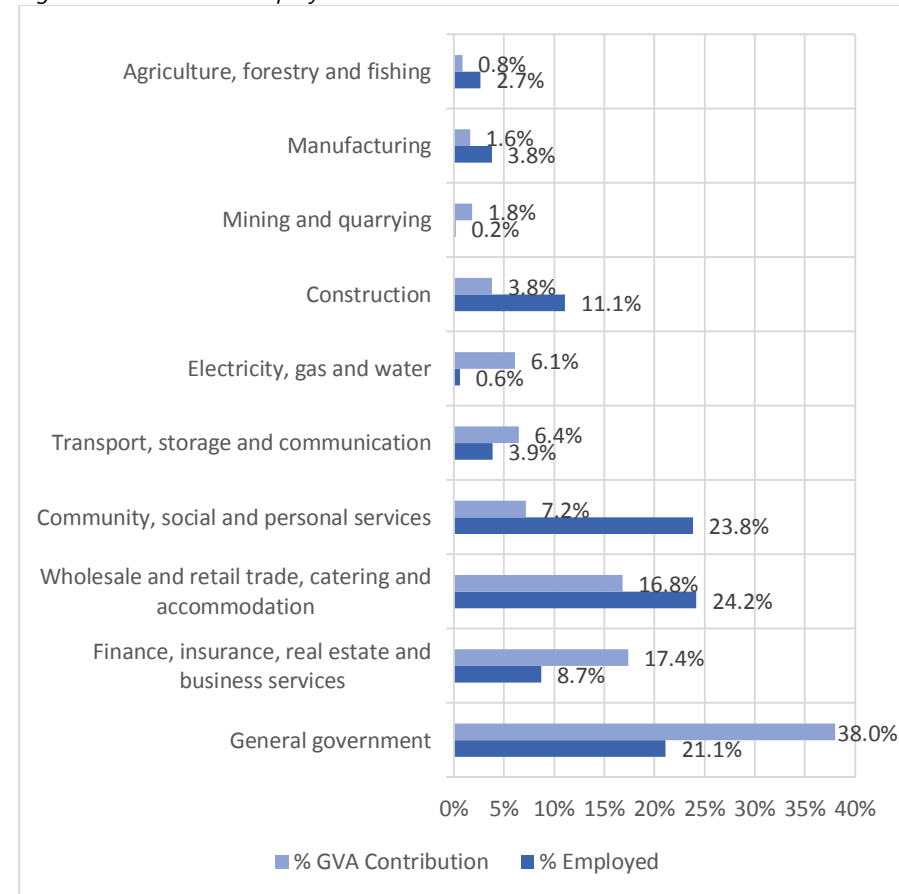


Figure 11: Makhado employment vs. GVA 2015



In Makhado, Wholesale and retail trade, catering and accommodation employs the largest percentage of people 25.7% and contributes 21% towards the total municipal GVA. General Government which has the highest GVA contribution of 30.9% only employs 15.8% of the municipal population.

Figure 12: Thulamela employment vs. GVA 2015



In Thulamela, Wholesale and retail trade, catering and accommodation employs the largest percentage of people 24.2% and contributes 16.8% towards the total municipal GVA. General Government which has the highest GVA contribution of 38.0% which also employs 21.1% of the municipal population.

5. SWOT ANALYSIS

The following table show the difficulties the municipality currently faces and the number of households that are affected by them.

Table 20: Difficulties faced by the municipality

Difficulties facing the municipality presently	People
Lack of safe and reliable water supply	157 788
Lack of/inadequate employment opportunities	59 764
Inadequate roads	39 415
Cost of water	23 051
Cost of electricity	12 201
Inadequate housing	11 150
Lack of reliable electricity supply	10 614
Violence and crime	4 658
Inadequate refuse/waste removal	4 258
Inadequate sanitation/sewerage/toilet services	4 013
Lack of/inadequate educational facilities	3 692
Corruption	3 170
Inadequate street lights	2 685
Lack of/inadequate healthcare services	1 996
Lack of/inadequate parks and recreational area	1 892
Lack of/inadequate public transport	867
Alcohol abuse	582
Gangsterism	217
Drug abuse	135
Total Population	342 148

Strengths - The municipality has a high youth population compared to that of the elderly and children. This population distribution indicates that there is a large labour force within the municipality.

Weaknesses - The dispersed settlement pattern within the municipality results in the majority of the population living in communities that are located far away from viable economic areas. In an effort to connect communities to vibrant economic areas, the issues of service provisions, such as infrastructure upgrades, becomes very costly for the municipality.

Threats - Land invasion is a major threat to the municipality as it often results in mushrooming of informal settlements creating major challenge for development and the provision of services to the community. State owned land under the custodianship of Traditional Authorities hinders development as there is a lack of clear understanding to whom the land belongs to, and whether or not subsidy and RDP housing can be built there or not. The shortage of water resources and outdated infrastructure within the municipality hinders economic development. The municipality also lacks in proper roads and does not have effective transport networks. The high illiteracy rate within the municipality means that there is a high shortage of skills in priority sectors. The municipality lacks strategically located land for economic development.

Opportunities - The Kruger National Park is located in very close proximity to the municipality. This holds opportunity for a growing retail and tourism sector within identified strategic locations.

6. GROWTH

Citizens are people who organise themselves in many different ways, whether naturally or through legal means. The most common grouping is the residential customer, or household.

- **Population.** The number of people within a defined geographic area.
- **Households.** A household consists of a person, or a group of persons, who occupy a common dwelling (or part of it) for at least four days a week and who provide themselves jointly with food and other essentials for living. In other words, they live together as a unit. People who occupy the same dwelling, but who do not share food or other essentials, are enumerated as separate households. For example, people who shared a dwelling, but who bought food and ate separately, were counted as separate households² (Statistics South Africa, 1998).

There are also many other ways for people to organise themselves. They create businesses to conduct trade or to provide specialised services (business customers), operate factories that provide the goods for businesses to sell (industrial customers), and form institutions that provide social support services (institutional customers). Each customer group has its own needs and preferences for infrastructure services, and varying levels of ability to pay for such services. Municipalities also have different tariff structures for different customer types.

² Statistics South Africa

The Spatial Planning and Land Use Management Act of 2013 requires the following for SDF's as it relates to growth:

- Include a five-year population growth estimate and indicate how this growth will translate into a need for housing across different socioeconomic groups (and where in space this will occur); and
- Include five-year estimates of economic activity and employment trends and locations in the municipal area.
- Identify, quantify and provide location requirements of engineering infrastructure and services provision for existing and future development needs for the next five years.

6.1. POPULATION GROWTH

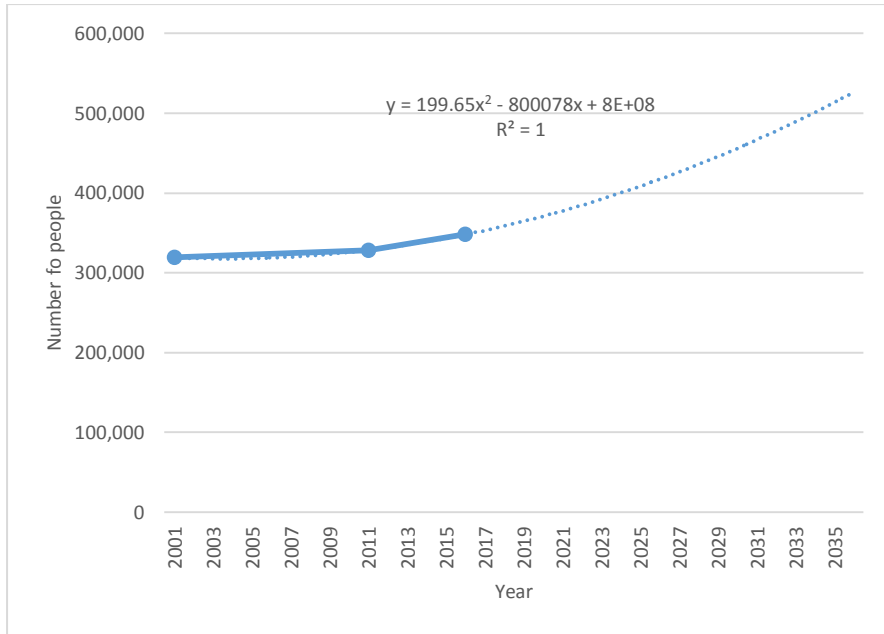
In predicting population growth, it is important to view historic information.

Table 21: Historic Population Trends

Census Indicator	2001	2011	2016
Population	319 121	330 297	347 974
Households	69 801	83 819	91 936
Household Size	4.6	3.9	3.8
Population Growth Rate	-	0.35%	1.07%

A polynomial trend line function was used to predict the population growth for CCLM municipality. A polynomial trendline is a curved line that is used when data fluctuates. Notice that the R-squared value is 1, which is a good fit of the line to the data.

Figure 13: Population growth trendline

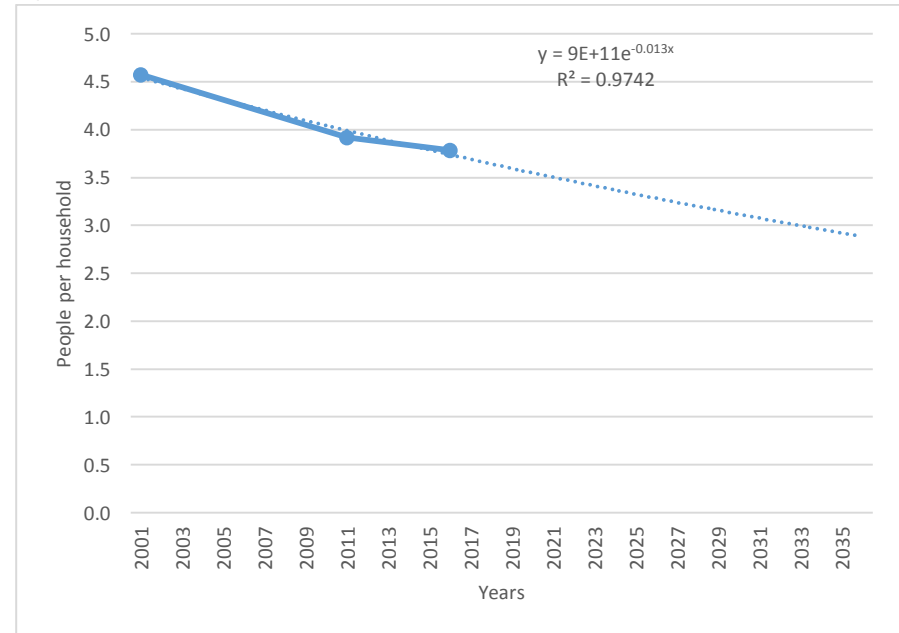


In terms of this population growth model, the population of CCLM will increase from 353 008 in 2017, to 384 587 in five years and ultimately to 539 220 in 20 years. More detailed intervals are provided later in this chapter.

6.2. HOUSEHOLD SIZE

Similar to the population growth, a trendline function was used to model household sizes of the 30-year planning horizon, using historic information. This time an exponential trendline yielded the best R-squared value of 0.97419. An exponential trendline is a curved line that is most useful when data values rise or fall at increasingly higher rates.

Figure 14: Predicted household sizes



Based on the above, households will get smaller in the future, declining from 3.7 people per household in 2017 to 2.9 people per household in 2037.

The modelled population growth scenario is provided in the table below:

Figure 15: Population and household growth

Variable	Year 0	Year 5	Year 10	Year 20
	2017	2022	2027	2037
Population	353 008	384 587	426 148	539 220
Households	95 014	110 008	129 544	185 129
Household size	3.7	3.5	3.3	2.9
Additional people	-	31 579	73 141	186 212
Additional households	-	14 994	34 530	90 116
Population growth rate	1.45%	1.88%	2.18%	2.49%

In the short term (5 years), CCLM will grow by about 31 579 people (or around 15 000 households). Over the long term (20 years) the municipality will grow by 186 212 people (approximately 90 000 households).

6.3. GROWTH IMPLICATIONS – HOUSING

Earlier mention was made of the fact that CCLM consists mostly of Traditional Authorities. The housing typology in traditional authorities differ vastly from municipalities with a similar income profile. It is therefore difficult to use the accepted norm of growth in the lower income brackets to predict a need for housing. In section 4.2., mention was made of the fact that 18.1 % of households reside in a RDP or government subsidised dwelling. Should this be applied to household growth, the demand for subsidised housing will be as follows:

By 2022, 2 713 RDP houses will be required;

By 2027, 6 250 RDP houses will be required; and

By 2037, a total of R 16 310 houses will be required (note that all the above are cumulative figures).

6.4. GROWTH IMPLICATIONS - COMMUNITY FACILITIES

Sustainable human settlements cannot be achieved without adequate social facilities that are differentiated according to varying development densities, community size, mobility levels and socio-economic variation. The CSIR revised guidelines for the provision of social facilities in 2012 – these were used to inform the number of new facilities that will be required based on the population growth estimates.

Note that some of the required facilities are quite small (e.g. Grade R Class at Primary School). The quantum of facilities as well as associated land requirements are provided in **Table 22:**

Table 22: Community facilities required

Cluster	Type	Site size (m ²)	Population threshold	Additional Facilities required in 5 years	Land required in 5 years (Ha)	Additional Facilities required in 10 years	Land required in 10 years (Ha)	Additional Facilities required in 20 years	Land required in 20 years (Ha)
Health and emergency services	Community Health Centre	15000	120000	0	0	0	0	1	1.5
	Primary Health Clinic	5000	47000	0	0	1	0.5	3	1.5
	Fire Station	12000	80000	0	0	0	0	2	2.4
	Police Station	5000	80000	0	0	0	0	2	1
Social and Cultural (Public Service Facilities)	Community Performing Arts Centre	5000	50000	0	0	1	0.5	3	1.5
	Local Library	3000	50000	0	0	1	0.3	3	0.9
Civic	Home Affairs - Medium Office	200	160000	0	0	0	0	1	0.02
	Home Affairs - Small Office	200	40000	0	0	1	0.02	4	0.08
Social Services	Community Hall – large	5000	60000	0	0	1	0.5	3	1.5
	Community Hall – Medium/Small	2000	12500	0	0	5	1	14	2.8
	ICT Access Point		10000	0	0	7	0	18	0
	Post Office/Agency with post boxes	300	15000	0	0	4	0.12	12	0.36
	Social Grant Pay Point	500	40000	0	0	1	0.05	4	0.2
	Local market	20000	5000	1	2	14	28	37	74
	Worship Centre	5000	4500	1	0.5	16	8	41	20.5
Education	Secondary School	48000	12500	0	0	5	24	14	67.2
	Primary school	28000	7000	0	0	10	28	26	72.8
	Grade R Class at Primary School		1000	5	0	73	0	186	0
	Small crèche/early childhood development centre	200	2400	2	0.04	30	0.6	77	1.54
	ECD Resource Hub and Care Centre	1000	20000	0	0	3	0.3	9	0.9
Recreation (Sports and Parks)	Grassed surface (2 football fields equivalent)	30000	15000	0	0	4	12	12	36
	Sports Complex (Grouping of fields and/or sports complexes)	30000	50000	0	0	1	3	3	9

Cluster	Type	Site size (m ²)	Population threshold	Additional Facilities required in 5 years	Land required in 5 years (Ha)	Additional Facilities required in 10 years	Land required in 10 years (Ha)	Additional Facilities required in 20 years	Land required in 20 years (Ha)
	Grassed field (2 football fields equivalent) with 500-seat stand	30000	30000	0	0	2	6	6	18
	Cricket Oval	30000	60000	0	0	1	3	3	9
	Athletics/Cricket Stadium (grassed field and athletics track and stand – 3 000+ seats)	30000	60000	0	0	1	3	3	9
	Combi-court surface (x2)	1300	15000	0	0	4	0.52	12	1.56
	Combi-court surface (x4)	2600	60000	0	0	1	0.26	3	0.78
	Multi-purpose Sports Hall (2 court)	1300	100000	0	0	0	0	1	0.13
	Multi-purpose Sports Hall (4 court)	2600	160000	0	0	0	0	1	0.26
	Swimming Pool Complex (25 m to 33 m pool)	2500	80000	0	0	0	0	2	0.5
	Community pool	2100	10000	0	0	7	1.47	18	3.78
	District Park	3000	80000	0	0	0	0	2	0.6
	Community park with play equipment	35000	60000	0	0	1	3.5	3	10.5
	Local/Neighbourhood Park	10000	5000	1	1	14	14	37	37
Total Requirements				10	3.54	209	138.64	566	386.81

7. VISION STATEMENT AND SPATIAL IMPLICATIONS

SPLUMA (section 12(1)(b)) requires the Municipality to develop a Spatial Development Framework which is informed by a long-term spatial development vision statement. In order to develop this vision, the vision and spatial vision from various other levels of government contained in strategic documents were analysed:

Figure 16: Vision statements informing Collins Chabane SDF

Level	Vision	Key elements
Province: Limpopo Provincial Spatial Development Framework (2016)	The Limpopo SDF (LSDF) envisions a provincial spatial structure where the natural environment and valuable agricultural land in the rural areas are protected for future generations, with a strong, diverse and growing economy focused around a range of nodal areas and that offers its residents high quality living environments and good job opportunities in a sustainable manner.	<ul style="list-style-type: none"> • Spatial structure • Environment • Range of nodes • High quality living environments • Growing the economy/job opportunities
District: Vhembe District Municipality Spatial Development Framework	"A spatially integrated district striving towards effective sustainable development, service delivery and improving accessibility to economic resources by:	<ul style="list-style-type: none"> • Spatial structure/integration • Resources (agriculture, mineral, heritage) • Economic potential

(2015)	<ul style="list-style-type: none"> • Creating a spatially just society through the equitable and sustainable spatial restructuring of Vhembe's urban and rural settlements; • Optimizing the rich and balanced mix of Vhembe's agriculture, tourism, heritage, natural and mineral resources, and eco system services within their scenic settings; • These are contained in the sacred sites and important bio-diverse landscapes of the Soutpansberg, Mapungubwe and Kruger National Parks and the fertile Luvuvhu river valley; • Economic potential arising from its relatively dense populations along the R523, R524 and R578 corridors and its strategic position straddling the international N1 • Great North Road transport corridor linking Gauteng to the SADC countries by road and rail; and, • Ensuring targeted 	<ul style="list-style-type: none"> • along corridors • Targeted investment
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	investment and maintenance of key infrastructure networks including transport, water resources and energy in order to achieve sustained economic growth and improved service delivery in the District.”	
District: Vhembe District Municipality Rural Development Plan (2016)	Limpopo Province should be characterised by sustainable, integrated, competitive and inclusive rural economies that fully benefit local communities. By 2050, Limpopo District Municipalities should have a thriving economy, driven by agriculture, mining, tourism and service sectors. People residing within all district municipalities should have access to basic services and health as basic amenities, including housing, water, education and food security.	<ul style="list-style-type: none"> • Rural economies • Thriving economy based on agriculture, mining, tourism and service sector • Access to services
Local Municipality: Collins Chabane Integrated Development	A sustainable, spatially integrated and inclusive municipality with a vibrant, job creating local economy.	<ul style="list-style-type: none"> • Spatial structure/integration • Inclusive • Sustainability • Job creation / economic growth

Plan (2016)		
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The spatial Vision guiding this Spatial Development Framework includes elements of all of the above:

“A spatially integrated, inclusive and well-planned municipality, striving to provide its residents with sustainable service delivery and economic opportunities based on its environmental, agricultural and tourism resources while leveraging its relative strength in the service industry sector.”

The development principles emanating from this vision are listed below. Each will be expanded on in the following section Spatial Development Framework.

- **Principle 1: Protect natural and other resources in Collins Chabane Municipality.** The spatial analysis highlighted the fact that there are a number of rivers, streams and watercourses in the Municipality. These are often polluted, specifically within the confines of traditional authorities. In addition a number of critical biodiversity areas and ecological support areas were identified and should be incorporated into the SDF.
- **Principle 2: Establish a hierarchy of nodes – emphasis on spatial differentiation and spatial targeting.** Establish a nodal hierarchy in line with the proposals included in the Limpopo Spatial Development Framework 2016. Note that at the time the Provincial SDF was done, Malamulele was in the same Municipality as Thohoyandou, which led to Malamulele classified as a lower order node than Thohoyandou. With the demarcation of the Collins Chabane Municipality, Malamulele is the only dominant node in the Municipality. The principal of Spatial Targeting is

highlighted in the National Development Plan. The proposed national schema for spatial targeting includes Rural restructuring zones:

“Some rural areas have large populations that are experiencing change, for example, new settlement formation. Such areas need management, institutional development, land and tenure reform, infrastructure provision and economic stimulus. They include the more densely populated parts of the previous homelands, where there is population dynamism and sufficient numbers to provide the basis for viable markets. There may also be areas with agricultural, tourism or mining potential.”

The NDP furthermore provides the following key elements of rural vision:

- stronger spatial coordination and greater clustering of services in all rural areas, including health, education, transport, welfare and security.
 - Prioritised attention to agriculture and rural enterprise development in areas of high market access, especially within peri-urban zones and along major mobility corridors.
 - Prioritised attention to connective infrastructure that strengthens the links between the urban and the rural.
- **Principle 3: Improve access to nodes as well as higher order services through an efficient network of corridors.** Corridors link nodes and population concentration points to each other and promotes the efficient movement of people and goods through the municipality.

- **Principle 4: Exploit economic opportunities offered by the region.**

The analysis highlighted the following key economic opportunities:

- The proximity of the Kruger National Park inclusive of the Punda Maria Gate (in the north) and the proposed Shangoni gate in the South **(exact position to be confirmed)**.
- The proposals around the Agri-park concept emanating from the Vhembe District Municipality Rural Development Plan.
- Limited mining opportunities in the region.
- Energy generation opportunities.

- **Principle 5: Spatial Integration & inclusivity**

Spatial integration expresses the opportunities for and level of interaction within and between areas. It also indicates levels of connectivity between transport systems of different geographical scales.

Key elements influencing the SDF include:

- Compact towns and geographic areas – exploit spare bulk capacity, increase density.
- Spatial integration by growing villages toward each other

8. COLLINS CHABANE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK 2017

8.1. INTRODUCTION

CCLM is a newly established municipality made up by areas which previously formed part of Makhado and Thulamela local municipality. Both municipalities had approved SDF's in place during the time that CCLM was still part of the individual municipalities. This chapter reviewed all documents which could possibly have had spatial proposals and/or development initiatives applicable to CCLM, which includes:

Limpopo Province

- Limpopo Provincial SDF
 - SDF Development Principles
 - Limpopo Spatial Rational
- Limpopo Development Plan 2015-2019
 - Builds on the foundations of the Limpopo Economic Growth and Development Plan (LEGDP) 2009 – 2014 and the Limpopo Provincial Growth and Development Strategy (PGDS) 2004 – 2008 available on file:///C:/Users/Hildegard/Downloads/limpopo%20development%20plan%20(3).pdf_
- Limpopo Biodiversity Sector Plan
 - CBA & ESA

Vhembe District

- Vhembe District IDP
 - Section 6: Spatial economy and development rationale

- Section 7.1: Service delivery and infrastructure development priority area
- Section 8: Strategic Objectives, Indicators And Targets Per KPA
- Section 9: Sector Plans
 - Comprehensive Infrastructure Investment Plan (CIIP) to deal with district infrastructure development.
 - Water Services Development Plan (WSDP) to deal with water and sanitation infrastructure as water services authority and provider.
 - Eskom has District Energy Master Plan to deal with electricity infrastructure.
 - Integrated Transport Plan (ITP) of the district deals with transport services.
 - Integrated Waste Management Plan and Environmental management plan
- Section 10: Development strategies, programmes and projects
- Section 11: Programmes and projects of other sphere
- Vhembe District SDF 2015
 - Chapter 2: Spatial Vision
 - Chapter 3: ESER Synthesis
 - Chapter 4: Conceptual SDF
 - Chapter 5: Guidelines to interventions proposed in the SDF
 - Chapter 6: Local Municipal Proposals
 - Chapter 7: Implementation Framework
- Vhembe District Rural Development Plan

Local Municipal

- Makhado Local Municipality IDP 2015/2016
- 2011 Makhado Local Municipality SDF
- Thulamela Local Municipality IDP
- Thulamela Local Municipality SDF 2010
- 2011 Thulamela Local Municipality Urban Development and revitalisation framework

The following projects have been completed and will therefore be included as part of the 2017 CCLM SDF:

- The following Precinct Plans were developed for Mhinga/ Lambani, Gumbani/Phaphazela and Gidjana/Madonsi Nodal Points. **NOTE THAT TO DATE THIS INFORMATION HAS NOT BEEN MADE AVAILABLE.**

8.2. COLLINS CHABANE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK

The Vhembe District SDF (2015) development synthesis is based on the ESER³ framework which states that “economic efficiency is wholly dependent on the quality of human resources and their ability to deliver productive into the economic system, and that; economic activities and social development are in turn wholly labour dependent on the availability of eco-systems service (land, water, arable land, and building materials)” in essence, economic activities and social development cannot demand more from eco-systems services than their capacity to deliver on a long term sustainable basis.

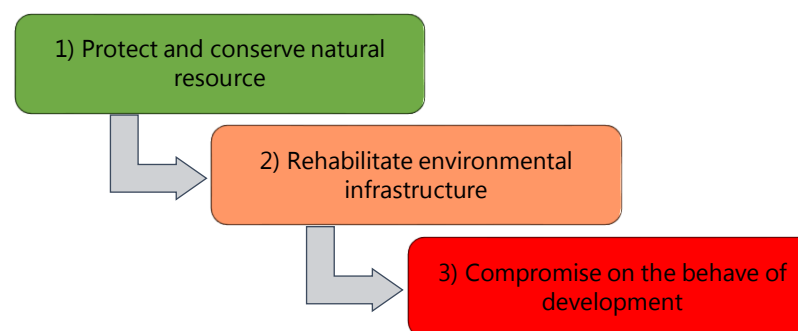
³ Ecological Social Economic Relationship

The ESER framework will be applied to CCLM spatial development proposals.

8.3. PRINCIPLE 1: PROTECT NATURAL AND OTHER RESOURCES IN COLLINS CHABANE MUNICIPALITY

In an ideal world, all natural resources would have been protected and in natural state, no rehabilitation would have been required the need to compromise valuable land for development would have been non-existing. However, COLLINS CHABANE LOCAL MUNICIPALITY development footprint is characterised by low density unplanned sprawl, placing intense pressure on the natural environment such as deforestation, erosion, invasion of alien species, rodents, insects and pests plague, drought, pollution, destabilisation of wetlands, veldfires, poaching and floods. For this reason, the SDF proposes a hierarchy of intervention applicable to CCLM. This hierarchy is illustrated in Figure 17:

Figure 17: Hierarchy of environmental interventions



With the above hierarchy of intervention in mind, the SDF makes provision for the following environmental considerations (see: Map 19):

- The majority of the municipality is not constrained by **slope** except for the areas indicated in dark blue around **Vuwani** and **Tshimbupfe** in the western regions of the municipality as well as in the upper north region around **Xikhundu**. The spatial data is available in GIS format and should be used to direct development away from these steep slopes.
- The Kruger National Park (KNP) is a **declared conservation area** which is located in very close proximity to the municipality. Map 19 illustrates a buffer zone which was demarcated by through a consultative process. This buffer strip has very specific management requirements, which will be discussed in section 8.3.1.
- **Critical biodiversity areas (CBA)** are areas of the landscape that need to be maintained in a natural or near-natural state in order to ensure the continued existence and functioning of species and ecosystems. In other words, if these areas are not maintained in a natural or near-natural state then biodiversity targets cannot be met. CBA's in CCLM are indicated in "moss green" in Map 19. Maintaining an area in a natural or near-natural state can include a variety of biodiversity-compatible land uses and resource uses. The following strategies apply to CBA's
 - Further loss of natural habitat should be avoided in these areas;
 - Consider protection in terms of the land use scheme for these areas;
 - Degraded or disturbed CBA 1s and CBA 2s should be prioritized for rehabilitation through programmes such as Working for Water and Working for Wetlands;
 - Control of illegal activities, such as hunting and dumping, which impact on biodiversity, should be prioritized in these areas;
 - The introduction and breeding of invasive alien species should not be permitted in CBAs and ESAs; and
 - The restriction of animal movement (e.g. cheetah, African wild dog) due to impenetrable fences should be discouraged.
- **Ecological support areas (ESA)** are areas that are not essential for meeting biodiversity representation targets/thresholds but which nevertheless play an important role in supporting the ecological functioning of CBAs or protected Areas, or in delivering ecosystem services that support socio-economic development, such as water provision, flood mitigation or carbon sequestration. The degree of restriction on land use and resource use in these areas may be lower than that recommended for CBAs. The following strategies should be considered for these areas:
 - Maintain in a functional state, avoid intensification of land uses, and rehabilitate to a natural or near-natural state where possible;
 - Overall maintain landscape connectivity by avoiding loss/degradation of CBAs and ESAs, especially in corridor pinch-points; and
 - See strategies applicable to CBA's above.
- **Freshwater ecosystems** refers to all inland water bodies whether fresh or saline, including rivers, lakes, wetlands, sub-surface water and estuaries. **Freshwater Ecosystems Priority Areas (FEPA)** are critical for protection, and rehabilitation as they key areas for sustaining freshwater biodiversity and ecosystems services. FEPA or

more specifically wetland clusters has been identified near Nngwekhulu and Musanda.

- Limit growth of Village toward FEPA (LUM)
- The development of **blue-green corridors** provides for a continues biodiversity conservation corridor network. Blue-corridors should act as connectors between exciting and proposed protected areas, CBA, ESA and FEPA.
 - Gradually assemble blue-green corridors by promoting private nature conservation areas
 - No ploughing or building within 32 metres of river banks (LUM)
 - Agricultural land of national and provincial importance (DAFF).
- The **Protection of agricultural resources** can be enforced by limiting sprawl of villages towards land currently used for agriculture.
- This is further discussed as part of **section 8.7.1** Growth Management Strategy.

8.3.1. Kruger National Park Buffer Strip

The Greater KNP Land Use Buffer contains three designated layers, each having particular land use guidelines, as well as guidelines/requirements for inclusion into the Greater KNP. The Buffer Strip that applies to this SDF is the Defensive Land Use Buffer. Defensive Areas are highly impacted landscapes where the approach of the buffer is almost entirely aimed at mitigating further environmental impacts.

- The defensive Buffer is areas of concern because high levels of development not contributing to the ecological integrity or associated socio-economic benefits occurring in close proximity to the fence of the Kruger National Park.
- Within this buffer the prime focus is to minimise development, or if it does occur, to make sure it does not threaten the ecological integrity of the Kruger National Park.
- This area is prioritised in this SDF for limited development. The Municipal Land Use Scheme should zone these areas in line with Land Use Management Scheme categories that minimise developments, such as Open Space
- If any zonation or rezonation of these areas are to take place, Kruger National Park needs to be consulted.
- If any Environmental Authorisation is triggered in these areas, Kruger National Park and the Lowveld Protected Areas Group needs to be registered as Interested and Affected Parties immediately.









The following table summarises land use guidelines applicable to the KNP Defensive Buffer strip. Cells in green (1) indicate permissible land uses, which is unlikely to compromise the ecological integrity of the Greater Kruger National Park; yellow cells (2) highlight land uses that may compromise the ecological integrity and care should be taken to allow these land uses only under strict conditions. Red cells (3) indicate land uses, which are not permissible.

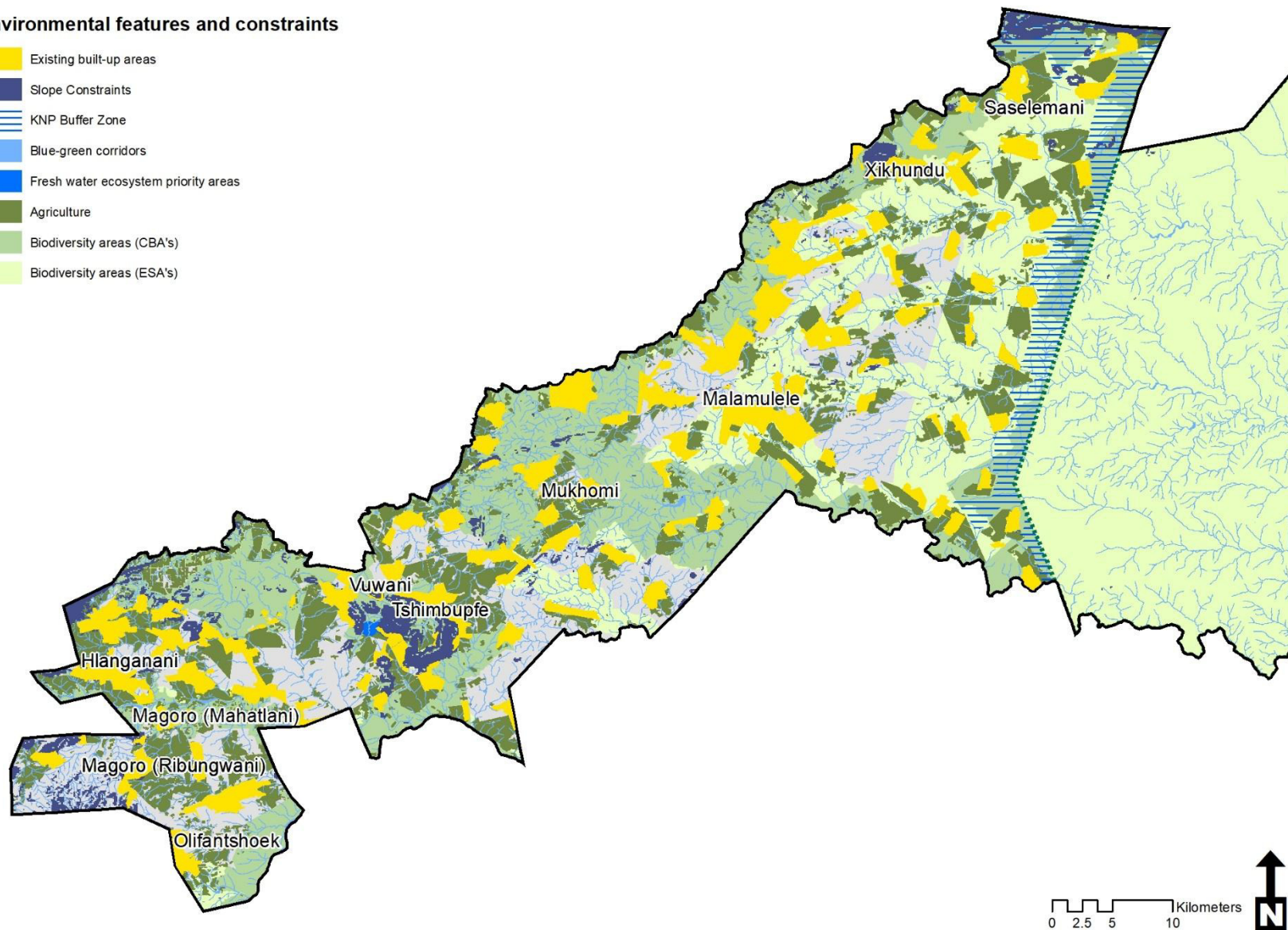
Table 23: KNP Buffer land use guidelines

Broad Land Use Categories	Defensive (narrow buffer)
Arable lands (Crops)	2
Agricultural Infrastructure	2
Livestock & Game Ranching	1
Forestry	2
Municipal Commonage	2
Conservation and Stewardship	1
Open Space	1
Low Impact Tourism	1
High Impact Tourism	2
Rural Residential	3
Eco-estates	2
Residential	3
Urban Influence	3
Industry	3
Quarrying/Opencast Mining	3
Prospecting/Underground Mining	3
Transport Services	2
Large Roads & Rail	2
Waterworks & Sewerage Works	2
Linear Structures, Pipelines, Canals, Powerlines	2
Cellphone and Other Masts	2
Other Utilities	2
Responsible nature based tourism facilities which overall secures surrounding natural areas	1
Introduction: Alien Invasive Species	3
4x4 Trails	1
Linear or Rural Residential Estates on Park Boundaries	2

Map 19: Environmental considerations

Environmental features and constraints

-  Existing built-up areas
-  Slope Constraints
-  KNP Buffer Zone
-  Blue-green corridors
-  Fresh water ecosystem priority areas
-  Agriculture
-  Biodiversity areas (CBA's)
-  Biodiversity areas (ESA's)



8.4. PRINCIPLE 2: ESTABLISH A HIERARCHY OF NODES – EMPHASIS ON SPATIAL DIFFERENTIATION AND SPATIAL TARGETING

The 2015 -2019 Limpopo Development plan has 10 strategic objectives, allied with the Medium Term Strategic Framework. The strategic objective relevant to CCLM SDF includes ensuring more inclusive economic growth, decent work and sustainable livelihoods; investment in economic and social infrastructure (improve access to quality education and healthcare); rural development, food security and land reform; cohesive and sustainable communities; and sustainable resource management and use. Within these strategic objective the LDP 205-2019 designed 4 key pillars of intervention which includes:

1. Economic development and transformation
2. Infrastructure development
3. Building developmental state
4. Social Cohesion and Transformation

Equal financial investment within the 4 key pillars and across the entire province will not be financial viable nor sustainable. For this reason investment should be informed by the spatial rational which sets out a nodal hierarchy as developed by Limpopo Provincial Government. The spatial rational for CCLM is as follow:

1st Order Settlements (Growth Points)

- Provincial growth point: n/a
- District Growth Point: Malamulele
 - o The District Growth Points comprise nodes that are very well positioned along the national and provincial movement network and have a strong resource base (including mineral potential and agricultural activities).

They function as high order service centres, have relatively large local populations, and have relatively well established institutional cores and relatively strong economies. However, while some of them have a well-established CBD and active industrial area, others lack economic- and engineering infrastructure due to years of under-investment. All District Growth Points have potential for economic growth, which should be supported by public investment in infrastructure, but especially high levels of public investment is needed to unlock the potential of historically under-invested nodes.

- Municipal Growth Points: Saselemani, Vuwani, Hlanganani
 - o Municipal Growth Points represent large rural settlement clusters (between 75 000 and 100 000 people), but with very small economic and institutional bases, and very limited local resources on which to build. However, they are accessible via the provincial road network, and thus well located to serve the respective population clusters. It is proposed that these areas be prioritised for the provision of engineering infrastructure, higher order community facilities, as well as economic infrastructure where relevant.

2nd Order Settlements

- Population Concentration Points: Magoro (including Mahatlani, Majosini, Ribungwani and Bungeni)
 - o Consist of towns/villages or a group of villages located close to each other, which have virtually no economic base, but a substantial number of people located at these villages. Invest in social facilities and services on strategic

localities by identifying focal points or nodes adjacent to dominant regional routes or intersection of regional routes in order to increase accessibility to social facilities effective public transport system within the rural areas

3rd Order Settlements

- Local Service Points: Xikhundu, Mukhomi, Thsimbupfe,& Olifansthoek
 - o Rural Nodes/ Service Nodes are villages situated in the midst of a high number of small scattered villages that are isolated/ removed from the provincial road network. The isolated location of these villages is deterring efficient service delivery, hence the identification of a nodal point among these villages where services will be clustered to the benefit of the broader area. Limited economic and institutional bases at present. Social services are to be consolidated at these nodes to efficiently serve the extensive surrounding rural communities. Although small local economies might emerge over time as a result of the proposed agglomeration of public services, it is acknowledged that the economic potential of these nodes is less than the three types of Growth Points described above. The focus should thus be on community infrastructure and not necessarily economic infrastructure.

4th Order Settlements

- Village Service Areas: All other villages

8.4.1. Differentiated service delivery

Spatial targeting should inform services delivery as a mean to motivate levels of investment. The proposed nodal hierarchy should thus inform not only the municipality's sector plans but also the Districts:

- Comprehensive Infrastructure Investment Plan (CIIP) which deals with district infrastructure development;
- The Water Services Development Plan (WSDP) which deals with water and sanitation infrastructure as the Vhembe District is a water services authority and provider;
- Eskom's District Energy Master Plan which deals with electricity infrastructure; as well as the
- District's Integrated Transport Plan (ITP) which deals with transport services.

Specific implication for the water and sanitation sector - Vhembe District is a Water Service Authority and Provider. The district has Basic Water and Sanitation Service Policy to manage the provision of basic water to the indigent people. The free basic water is 6kl per month per household. In addition the Strategic Framework For Water Service basic supply facilities are defined as infrastructure necessary to supply 25 litres of potable water per person per day supplied within 200 metres of a household and with a minimum flow of 10 litres per minute, available for at least 350 days per year and not interrupted more than 48 consecutive hours per incident. Vhembe District municipality strives to provide free basic water and sanitation to all indigent households. Indigents are defined as those households who are unable to make a monetary contribution towards basic services, no matter how small the amounts seem to be, due to a number of factors.

These households are also generally located within the nodes categorised as Local Service Points and/or Village Service Areas.



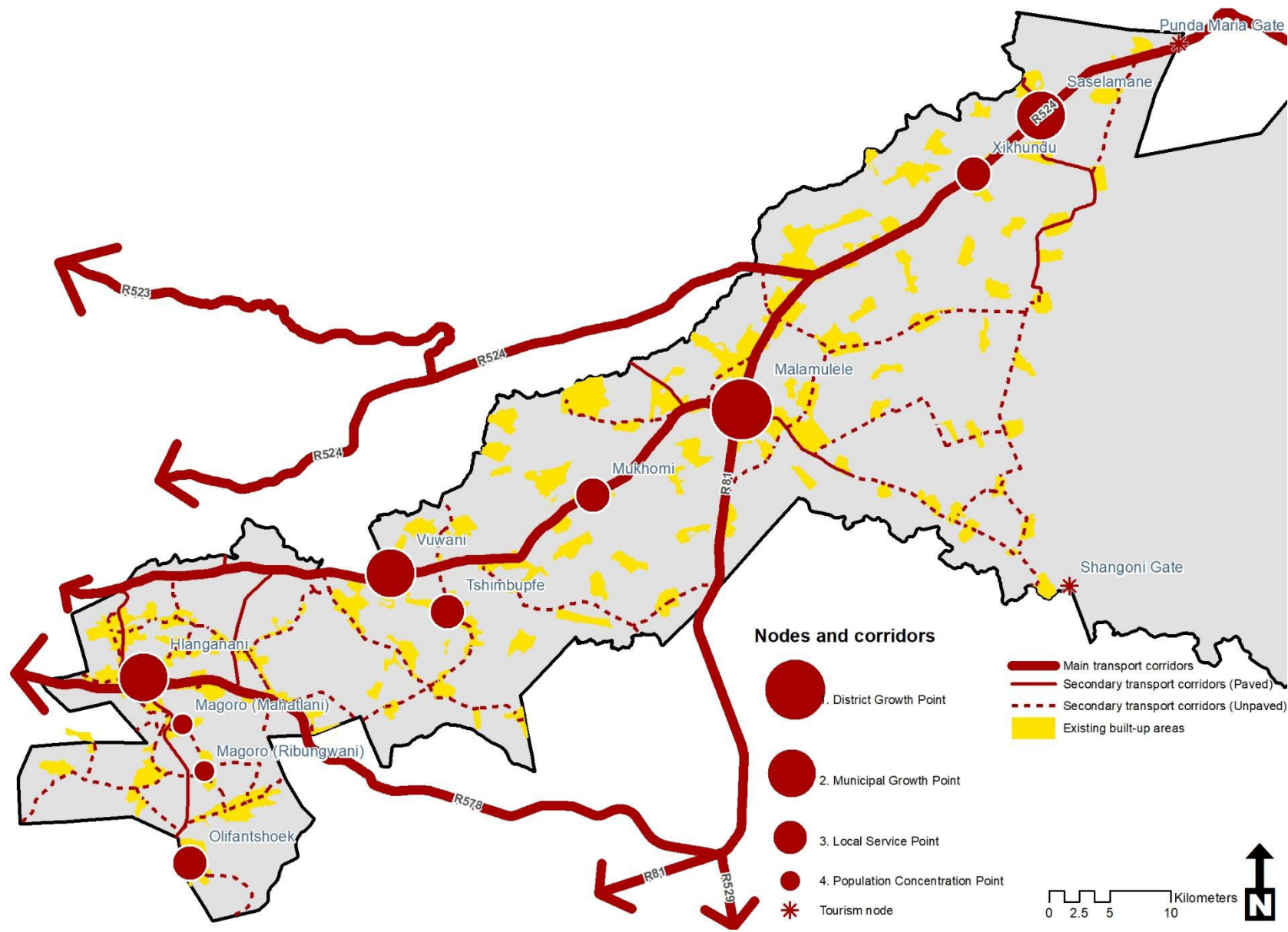
8.5. PRINCIPLE 3: IMPROVE ACCESS TO NODES AS WELL AS HIGHER ORDER SERVICES THROUGH AN EFFICIENT NETWORK OF CORRIDORS

In line with the 2015 District SDF, CCLM SDF identified several priority networks which are of critical importance for the movements of goods and service throughout the municipality to local nodes as well as province wide. These corridors include:

- The R578 (between Louis Trichard & Giyani), R81 (Giyani to Malamulele), R524 (Mhinga to Thohoyandou) provides access to the different major areas in the Municipality – prioritise for maintenance (RAL).
- Secondary roads provide links between Nodes and villages. Mostly District Roads, should be prioritised for tarring (if gravel) as well as maintenance to facilitate public transport and the flow of passengers through the municipality.
- The link from Malamulele to Altein could become a very important tourism corridor with the Establishment of the Shangoni Gate and Tourism Node.

Highest level of service ↑ ↓ Lowest level of service	Description	District Growth Point	Municipal Growth point	Rural Nodes/ Local Service Points	Population Concentration Point	Other Villages
	Natural resources (no infrastructure)					
	Water point more than 200 m distance					
	Communal standpipe less than 200 m distance					
	Yard tap connection (single tap)					
	15 – 25 mm connection to building (multiple taps)					
	40 – 100 mm consumer connection					
	150 mm or larger consumer					

Map 20: Nodes and Corridors

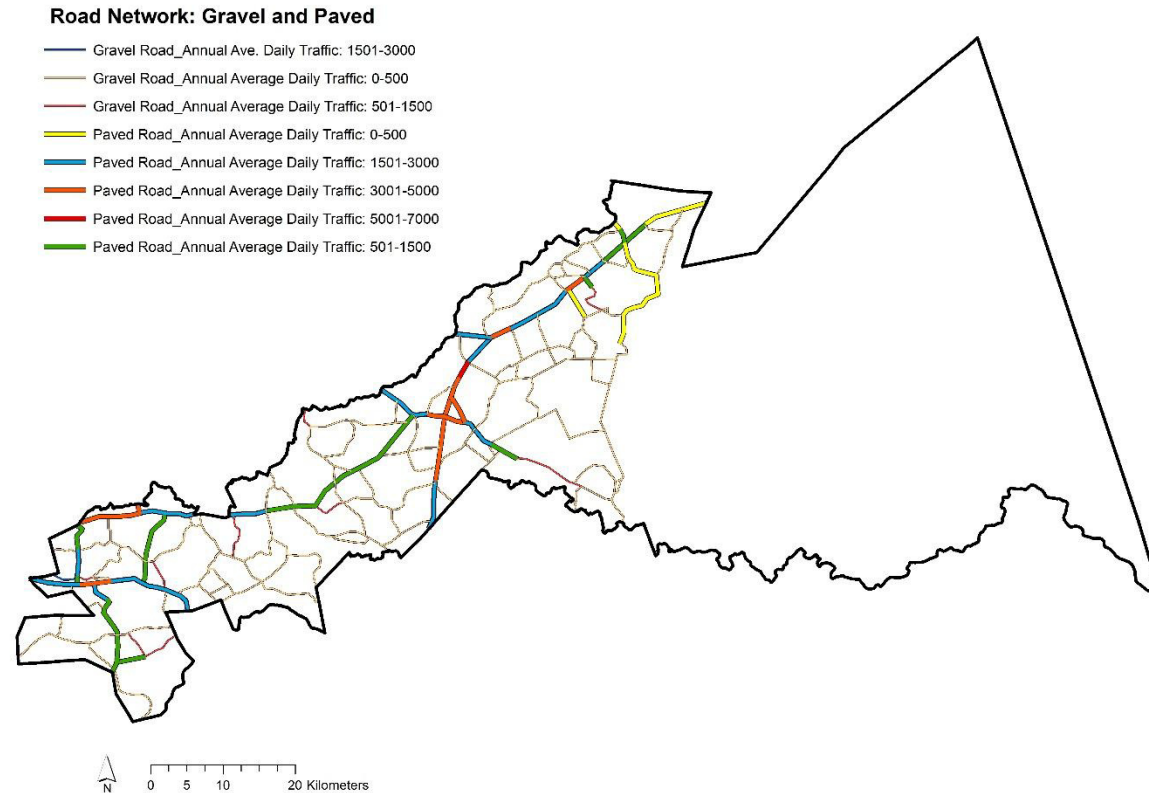


8.5.1. Road networks prioritised for upgrading

Majority of the roads within CCLM are gravel roads with an Annual Average Daily Traffic (AADT) of between 0-500 vehicles/day. The highest AADT on gravel road is on the far western part of the municipality, a road leading to Makhado around the Shitachi areas with an AADT of 1501-3000 vehicles/day.

Paved roads within the municipality are the National and Regional roads that pass through the municipal area. These roads are the R81, R524 and the R578. Along these roads the highest AADT volume is found on a portion of the R81 of which the AADT is between 5001-7000 vehicles/day, between the areas of Shigalo and Roadhouse areas. The lowest AADT on paved roads are along the north-eastern part of the municipality on the roads leading to and out of the Kruger National Park of which the AADT is 0-500 vehicles/day. The current upgrading projects by Roads Agency of Limpopo (RAL), which involves the upgrading of gravel roads to paved roads does not include any of the roads within CCLM boundary (RAL, 2017).

Map 21: RAL Projects



8.6. PRINCIPLE 4: EXPLOIT ECONOMIC OPPORTUNITIES OFFERED BY THE REGION

The SDF exploits economic opportunities, which are offered by the region. These includes:

- **Agri-park initiatives** - Vhembe District Rural Development Plan

Different areas within functional regions have different specialisations. In any given functional region, there exist areas with a) knowledge-intensive business services, b) land-intensive as well as c) transport-accessibility-dependent economic activities. Thus, while the centre/surrounding areas relations are important within functional regions, there has been a growing observation in regional economics and rural development discourse that functional regions are dependent on the existence of a range of centres or regions with varying specialisations.

1. Proposed functional regions within the CCLM are as follows:
 - **Functional Region 2:** Tshikumba and Sereni Area, North east of municipal boundary.
 - **Functional Region 4:** Central parts of the Municipality, directly neighbouring the Kruger National Park.
2. Proposed Intervention Areas, Small-holder irrigation, and in loco sites in CCLM are as follows:
 - **Intervention Area 2:** Majority of the North Eastern part of the municipality.
 - **Intervention Area 3:** A portion of the Northern parts of the municipality
 - **Intervention Area 6:** North Western Area surrounding Vuwani

- **Smallholder Irrigation Scheme:** South West Madobi, South West Sundani, Makumeke, North of Tshikonela, North east Makuleke, West of Ka-Mhinga, North DeHoop, South West Mashawana, North East Makumeke, North West Tshikonelo
 - **In-Loco sites:** In between Roudhouse and Shigalo
3. **Agri-Parks and FPSU's** - The proposed FPSU's, Comprehensive Rural Support Programmes (CASP) and Comprehensive Rural Development Programme (CRDP) in CCLM includes:
 - **FPSU's:** North Manvunyu, Malamulele, Hlaganani, Sinthumule, Levubu⁴.
 - **CASP Projects:** Ka-Maveke, Bulwini, Ka-Mahonisi, North of Tshikonelo.
 - **CRDP Sites:** Sub Places surrounding Nzhakanzhaka

• Tourism Opportunities

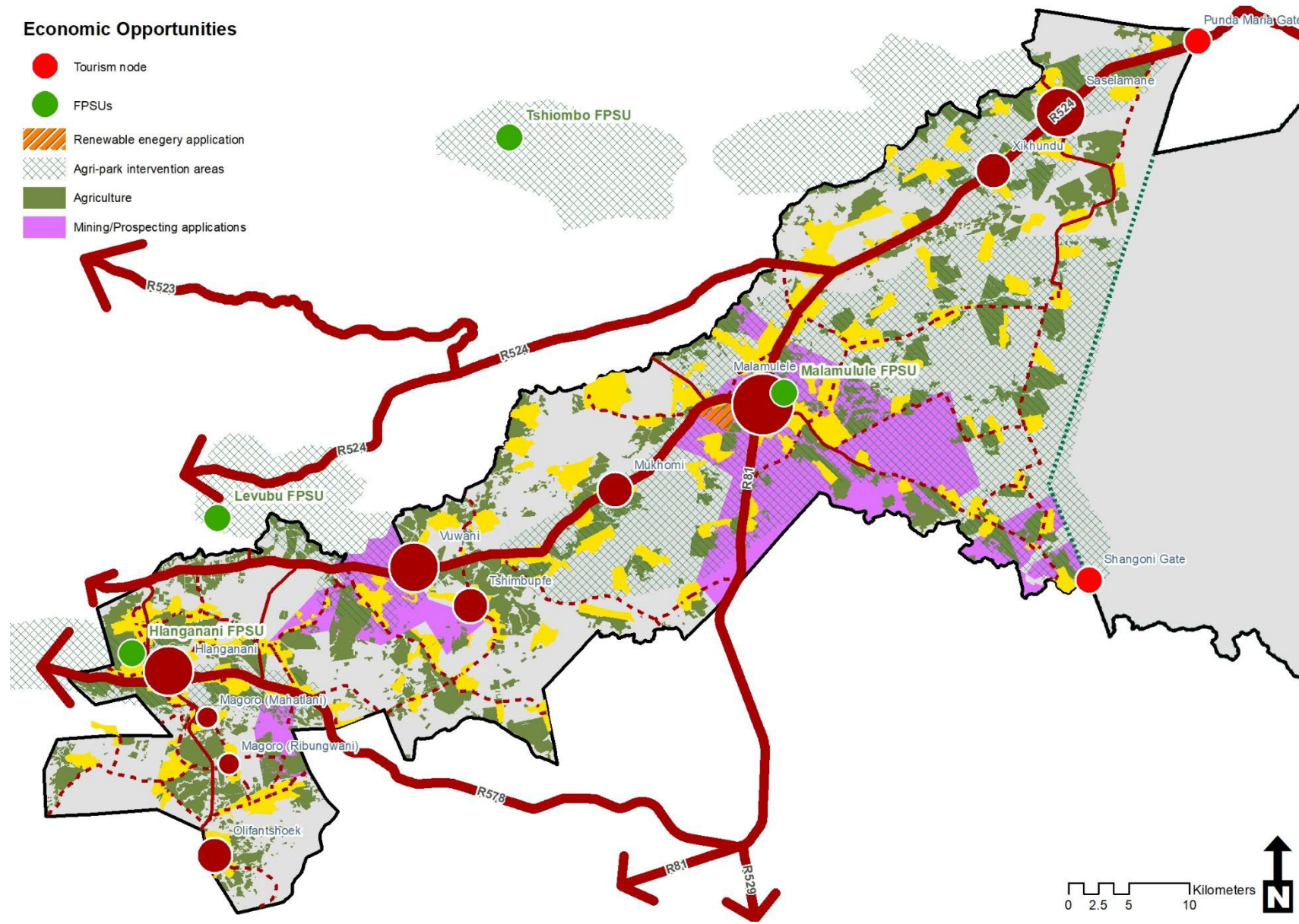
- Punda Maria Gate which provides access to the Kruger National Park.
- Shangani Gate: currently management gate (allows staff to cross into the KNP, not Tourists)
- Plans to convert this gate to a tourism gate.
- Tender out for "Construction of a tourism hub for the Shangani Gate Development in the Kruger National Park (KNP)"
- This supports current business initiatives:
 - Madzahisi Lodge and Malati Lodge
 - Planned Phatsameri Lodge

• Mining Opportunities

⁴ Vhembe District Rural Development Plan 2016: Pg 97

- Very little active mining, though a number of applications to DME for either prospecting or for Mining Licenses.
- **Energy generation**
 - Proposed construction of 100MW solar plant on a farm Malamulele 234 LT at Mavhambe Village Thulamela Municipality of Vhembe District, Limpopo

Map 22: Vhembe Rural Development Plan, Agri-park



8.7. PRINCIPLE 5: SPATIAL INTEGRATION AND INCLUSIVITY

Spatial integration expresses the opportunities for and level of interaction within and between areas. It also indicates levels of connectivity between transport systems of different geographical scales. Spatial integration is positively influenced by the presence of efficient administrative bodies, physical and functional complementarity between areas and the absence of cultural and political controversies. It seeks to enhance the efficiency of the city by placing residential development closer to job opportunities, and reduce the costs of development by exploiting surplus bulk infrastructural capacity. Spatial integration also has a social dimension and can increase the access of low-income residents to facilities and opportunities in the city. Key elements influencing the SDF include:

- Compact towns and geographic areas – exploit spare bulk capacity, increase density.
- Spatial integration by growing villages toward each other.

8.7.1. Growth Management Strategy

Rural spaces (specifically villages) are notorious for sprawling. This is mostly due to these villages never having been exposed to the benefits of spatial planning and land use management. The growth management strategy developed for Collins Chabane Local Municipality relies on the following principles:

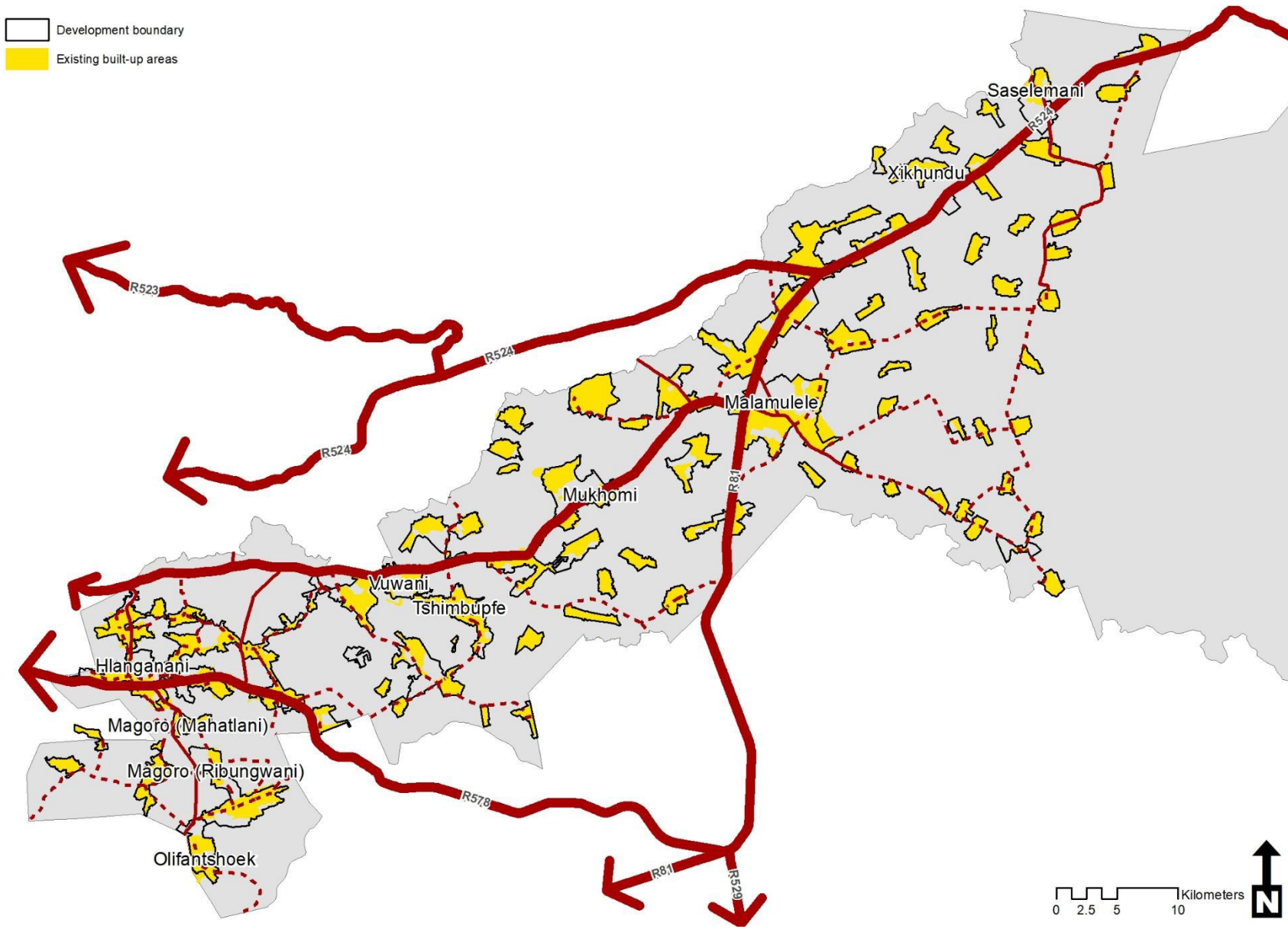
1. Use existing vacant demarcated stands for infill development. The land use survey conducted as part of the analysis phase pointed out that a number of demarcated, surveyed stands are still vacant. These should be prioritised for development BEFORE new stands are demarcated.

2. Vacant land can also be found inside villages (not surveyed). Allocation of land by traditional leadership should focus on infill development in order for villages to densify.
3. Growth should be directed away from agricultural land, which is a valuable resource for communities.
4. The following environmental considerations should be protected:
 - 4.1. Critical Biodiversity areas and Ecological Support Areas
 - 4.2. Blue-green corridors
5. Where possible, integrate villages by “growing” villages towards each other.
6. Promote integrated open space systems (including blue-green corridors and urban agriculture within village boundaries).

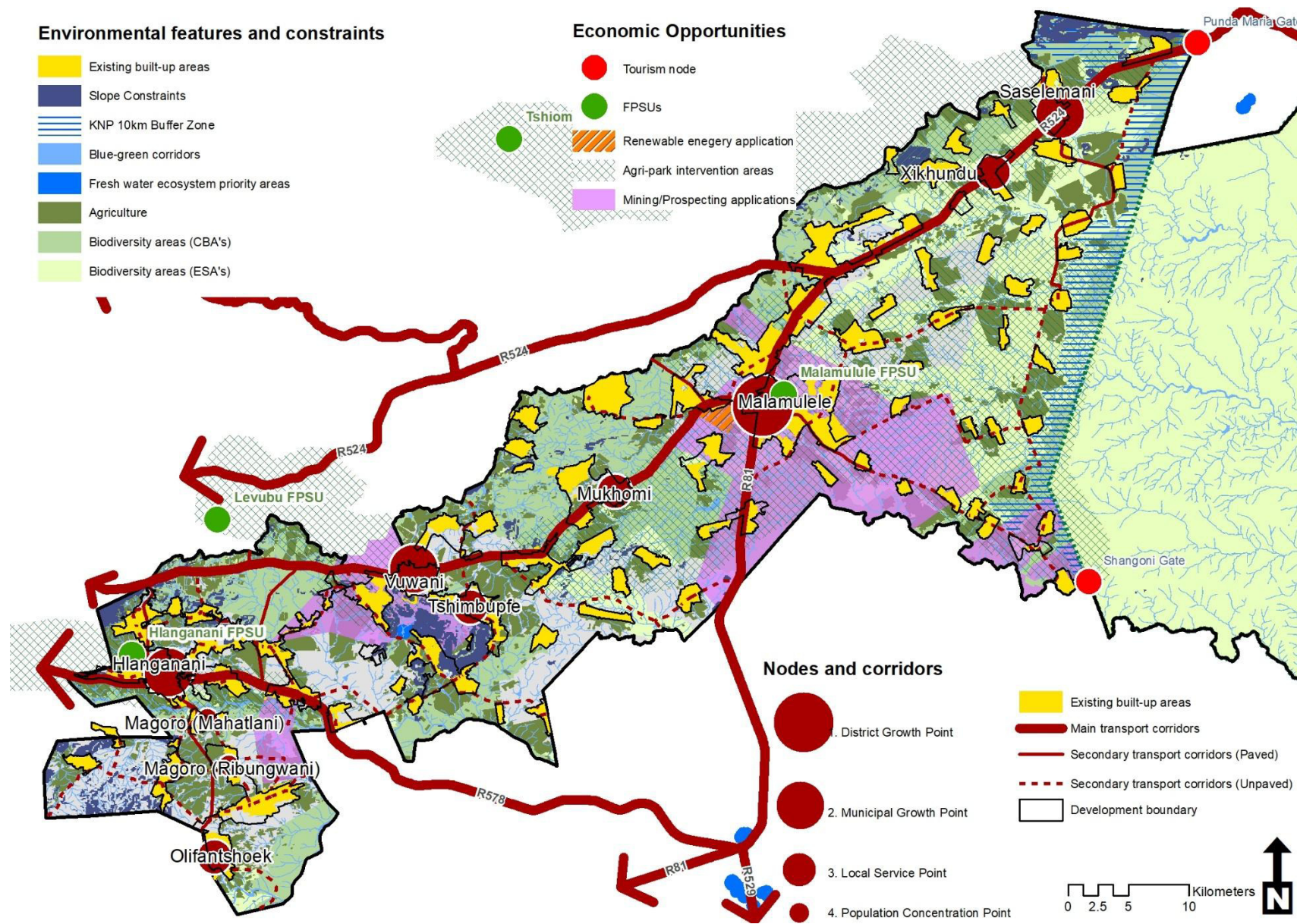
Using the above principles, growth boundaries was developed for each village, which is depicted in Map 21.

The composite Municipal Spatial Development Framework can be seen on Map 22.

Map 23: Growth management strategy



Map 24: Municipal Spatial Development Framework



NODAL PLANS

More detail spatial planning was done for the major nodal areas of Collins Chabane. Specific areas of intervention has been identified – for which detail local development proposals have been made.

2011 Urban Renewal Strategy

In 2011, Thulamela Local Municipality adopted an Urban Development and Revitalisation Framework with the objective to upgrade the living conditions of people within the Thulamela area. The strategy identified four major nodal points which included Malamulele CBD and surrounds (at the time of writing). The following 17 points summarises the revitalisation framework:

- A **compact city** is a pre-condition for **small-scale economic growth**;
- The motivation for **compactness** is to create a more **efficient CBD** stimulating demand for e.g. public spaces, and to support the existing retail and commercial supply by discouraging the creation of competing centres;
- The key to regeneration is **preservation** and **re-use**;
- The **intensification of built form** includes development of previously undeveloped land, redevelopment of existing buildings or previously developed sites, subdivisions and conversions, and additions and extensions;
- The benefits of activity corridors are that they allow a wide range of different-sized enterprises and activities to **co-exist** with a high degree of **complementarity**;
- **Investment in the public realm** is one of the most powerful catalysts for private investment. A well-managed public realm increases investor confidence, as it creates a strong positive image;
- **Mixing different uses** creates connections, offers greater opportunity and vitality, makes more efficient use of land, adds to the safety of users, and intensifies the urban structure;
- The **public facility system** must be **exposed** by locating the majority of facilities along main public transport routes;
- To **concentrate pedestrian flow**, a CBD must be public transport orientated, have open road geometries together with a few dominant activity routes which enable stop-start traffic and pedestrian circulation;
- **Housing** is important to the city centre's vitality because local residents extend the level of activity, as well as provide a market for a variety of uses and a group to lobby for high-quality public services and infrastructure;
- The best kind of housing to use in the CBD are **4-storey walk-ups**;
- Use the public space as the 'front door' to housing in the CBD by fronting housing onto the public realm, and having footpaths along the boundaries of the open space;
- The pedestrian is the primary visitor/ consumer of and in the CBD, and should be the primary factor in design concerns;
- Streets and squares should be **safe, comfortable, and interesting** to the pedestrian;
- A priority concern is to create a **legible environment** – it should be clear to a pedestrian where they have priority and where not;
- A **hierarchy of routes**, which includes a hierarchy of pedestrian routes, simplifies 'reading' and using a city;
- Landmarks can take many forms, such as a building, an arcade, a public space, a fountain, a unique statue/ feature and even a clock. Landmarks increase the legibility of the CBD and enhance its identity.

Malamulele (DGP)

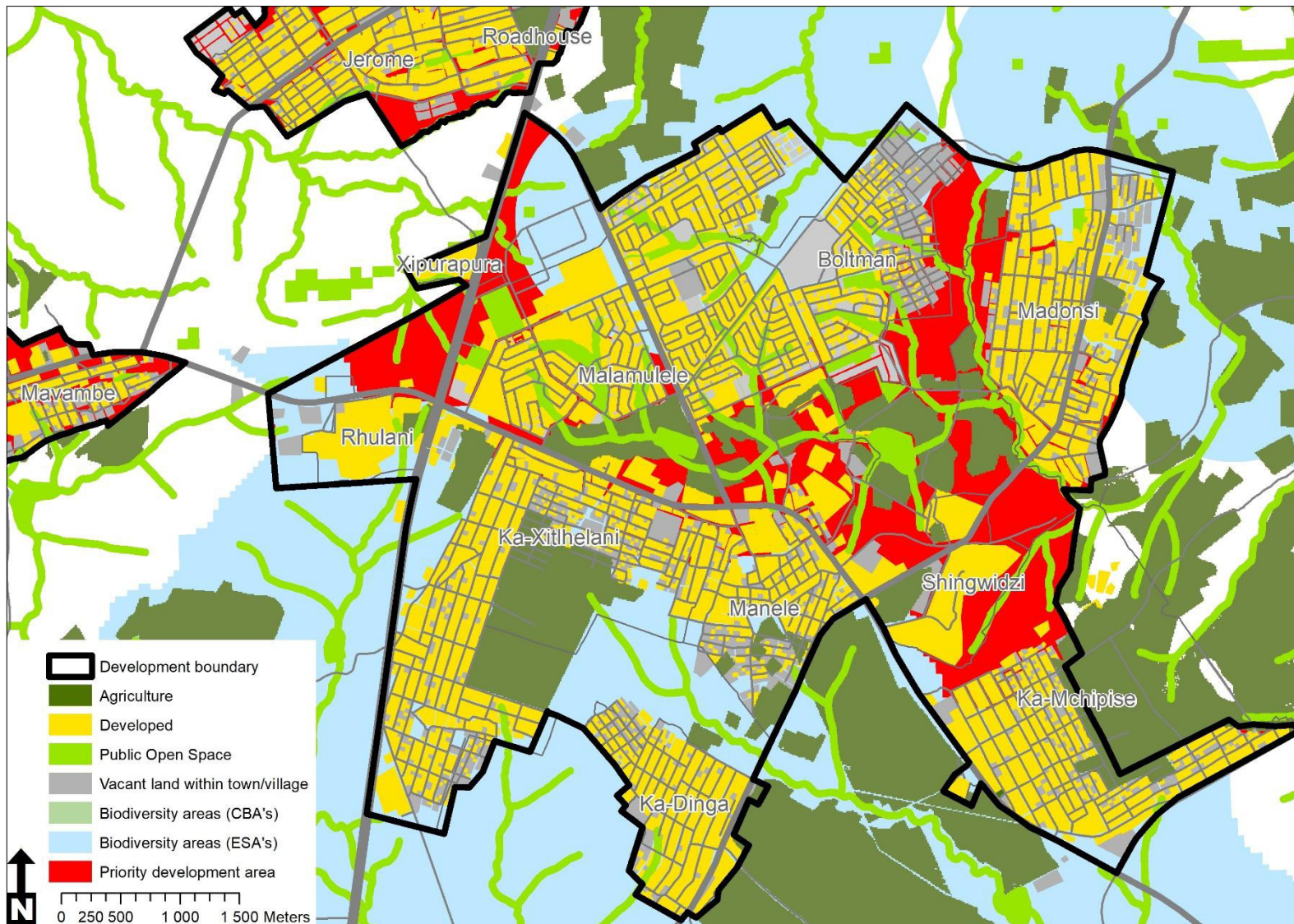
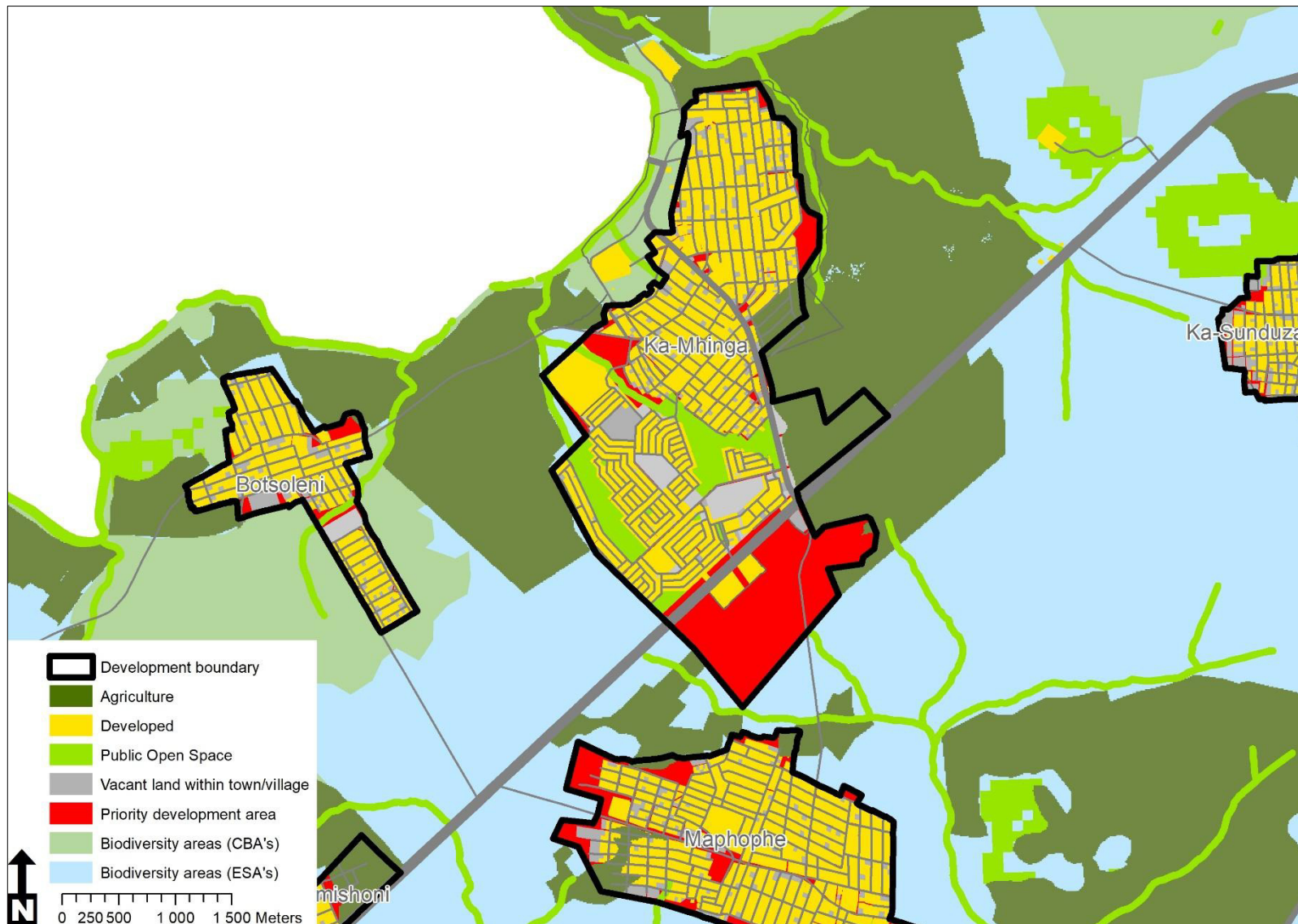


Table 24 summarises the urban renewal strategies development proposals which were compiled in 2011. The table gives an indication of which interventions were implemented and which ones are still outstanding.

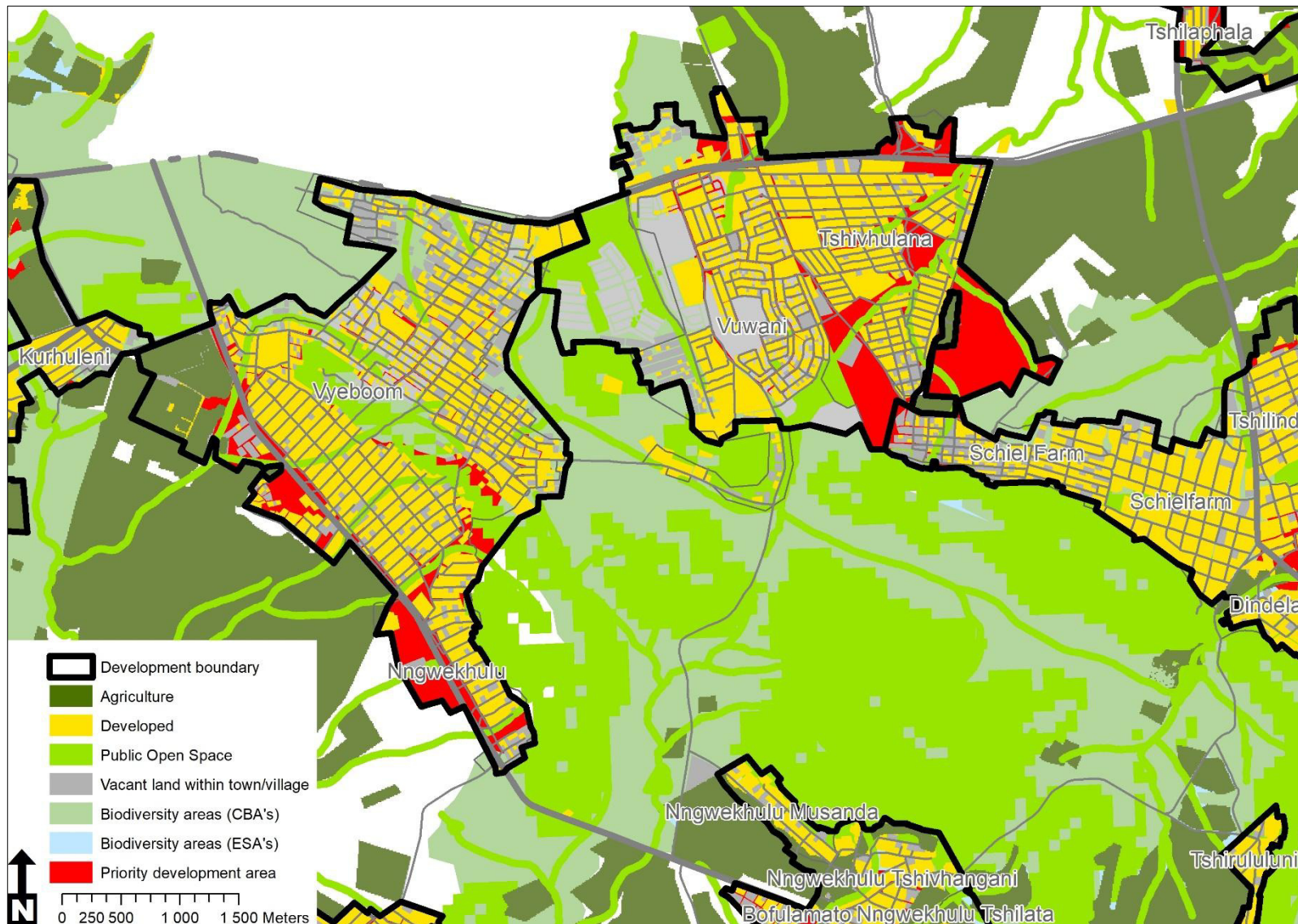
Table 24: 2011 Urban Renewal Strategy: Malamulele

Proposal	Implementation	
	yes	No
Objective 1: To consolidate business uses along the existing activity spine as a means to further enhance the viability of this feature.	1.1. Future retail development should be consolidated along the activity spine	
	1.2. A portion of the excising school site to the south of the activity spine be considered for future retail development	
	1.3. Retail be allowed to expand northwards around the proposed new northern link road.	
Objective 2: To establish a new bus and taxi facility one block to the north of the activity spine (directly adjacent to the new access road) in order to alleviate traffic congestion along the activity spine in the central part of the CBD.	2.1. Relocate existing taxi rank to the north of the Pick n Pay and Checkers Shoprite shopping centres which is highly accessible from route R81 due to the new access road to be provided here.	
	2.2. Commercial uses be consolidated in the area to the west of the new access road and up to road R81.	
Objective 3: To consolidate informal trade in Malamulele at a few strategic locations, and to convert the existing taxi rank into a fully-fledged informal market area.	3.1. An Informal Trade Square/ Market should be established on the existing taxi rank site which can accommodate the bulk of informal trade in Malamulele CBD.	
	3.2. Erect a small number of informal trade stalls on the sidewalk at the eastern and western ends of the Malamulele activity spine.	
Objective 4: To upgrade the public environment on both sides of the activity spine through the introduction of Urban Design elements specifically focused on enhancing pedestrian movement.	4.1. Facilitate pedestrian movement in both directions along the entire length of the Malamulele activity spine. The pedestrian experience can be enhanced by means of the following measures:	
	4.1.1 proper paved walkways,	
	4.1.2 tree planting and landscaping	
	4.1.3 lighting,	
	4.1.4 street furniture like benches	
Objective 5: To allow for a mixed use development in the NDPG precinct to the north of the activity spine focusing on a combination of commercial, retail, institutional and residential uses.	5.1. Fill the northern part (furthest from the CBD) of this NDPG precinct with residential uses, preferably of medium density. This will not only enhance the economic viability of the Malamulele activity spine, but also the proposed commercial area as well as future institutional uses which may be established in the area around the proposed new taxi/ bus rank for Malamulele.	

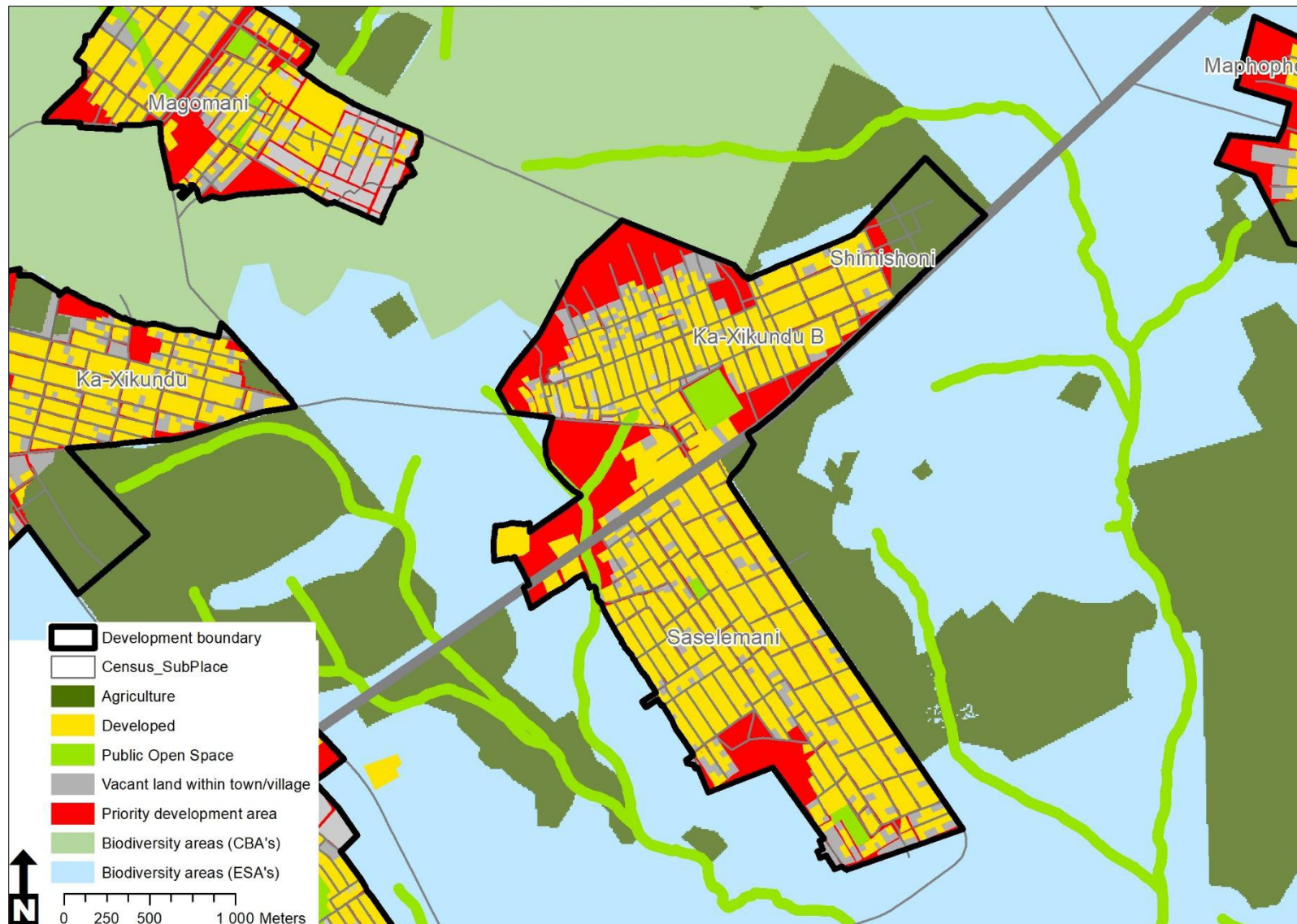
Mhinga



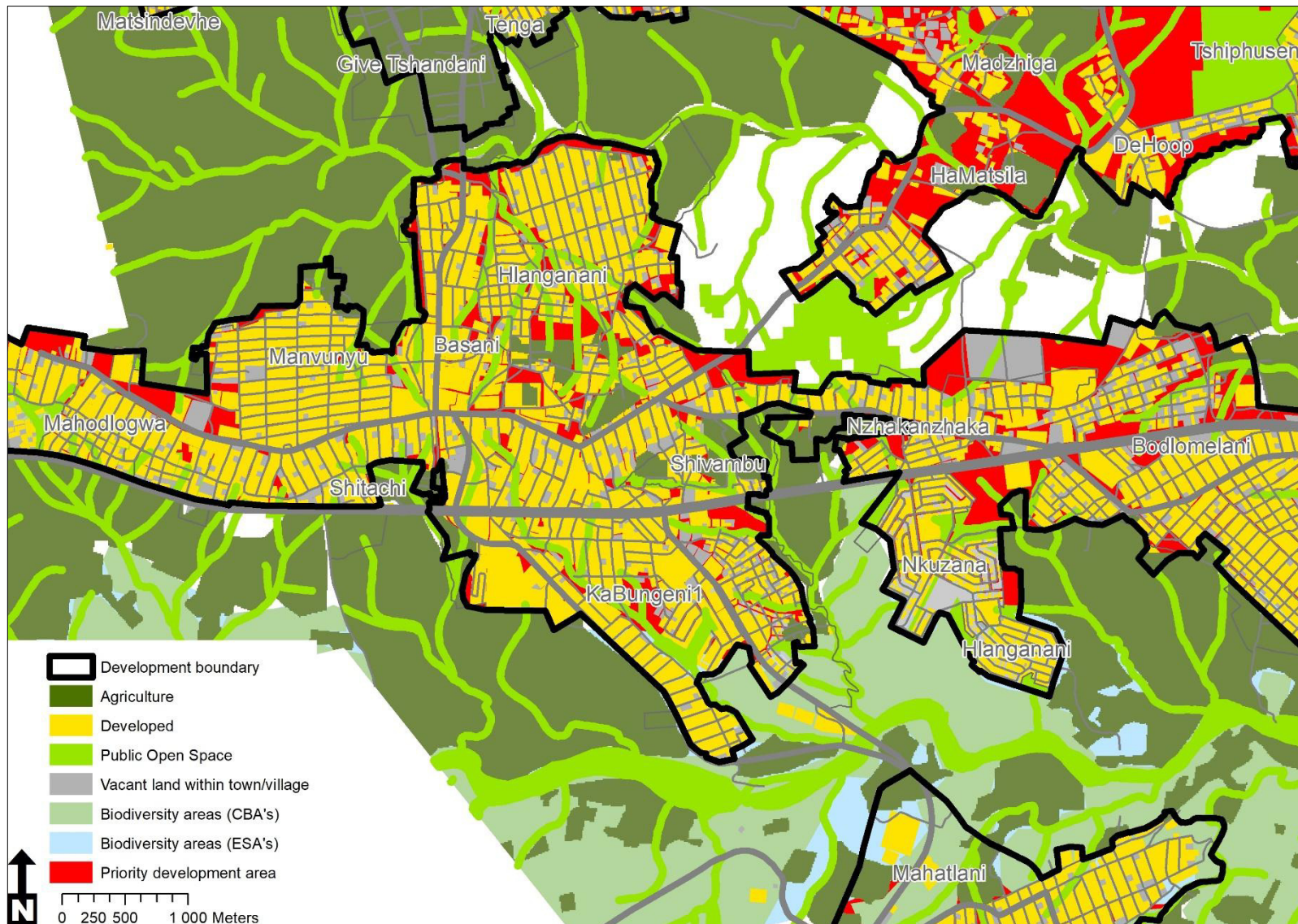
Vuwani (MGP)



Saselamani (MGP)



Hlanganani (MGP)



ALIGNMENT BETWEEN 2018 CCLM SDF AND THE 2015 DISTRICT DEVELOPMENT POLICIES

Table 25: Alignment between 2018 CCLM SDF and the 2015 District Development Policies

Code	SDF Policy Initiative	Sub-code	Description	Alignment	
				YES	NO
4.2.1	Blue-green corridors	BGC1	Gradually assemble river corridors by promoting private nature conservation areas.		
		BGC2	Prohibit ploughing and buildings within 32 metres of river banks.		
4.2.2	Potential Mining, Land Reform and Bio-diversity Conservation Conflicts	PC1	To deal with mining: formulate and comply with mine after-use plans including careful storage of top soil seed banks for future rehabilitation works.		
		PC2	To protect the CBA within suburban settlements: Implement carefully detailed land use management similar to that proposed to address the challenge of suburbanising settlement in the south – east quadrant of the district municipality.		
4.2.3	Settlement Pattern	SP1	Promote the use of vacant well-located, often publicly owned land for infill development.		
		SP2	Promote the consolidation of an urban structure in these agglomerations that identifies the major routes as the key structuring elements onto which development should be encouraged. Encourages compaction of the settlement rather than lateral sprawl and protects important natural assets including river corridors and agricultural land within the settlement.		
		SP3	Promote the use of off-grid services whenever possible		
		SP4	Prepare detailed land use management schemes to carefully manage and ensure that more urban development is guided away from arable land and bio-diversity conservation areas along river banks		

			<i>and CBAs within extended residential food cropping complexes</i>		
		SP5	<i>Promote short supply chains between rural wholesalers and retailers and local agricultural production.</i>		
		SP6	<i>Improve viability thresholds by coordinating the delivery of infrastructure from sector departments and private sector development at strategic nodes such as intersections.</i>		
4.2.4	<i>Higher order socio-economic service delivery</i>	SESD1	<i>In the Isolated Rural Villages and where necessary in the Extended Residential Food Cropping Complexes where there is little in the way of higher order retail development, construct a network of periodic rural service centres at strategic locations, for instance, rural arterial intersections.</i>		
4.2.5	<i>Extensive and Intensive Agricultural Resource Base</i>	EIARI	<i>Officials from the Department of Agriculture should assist the municipal town planners and traditional authority officials with land use management in the Extended Residential Food Cropping areas and the commercial farming areas with regards to land use inspections and the adjudication of development applications.</i>		
4.2.6	<i>Land Use Management Institutions</i>	LUMI1	<i>LUMI1 SDFs should be prepared jointly by project committees comprising both local municipal and traditional authority officials in those parts of the municipalities under traditional authorities.</i>		
4.2.7	<i>Transport Corridors</i>	TC1	<i>Ensure that transport, tourism and retail development proposals are sufficiently flexible to accommodate significant and rapid increases in demand should the economies to the north improve, particularly Zimbabwe, but are primarily geared at expanding the local South African market</i>		
4.2.8	<i>Strengthen the District Settlement Hierarchy</i>	SH1	<i>Continue to promote the settlement hierarchy as proposed in the Limpopo PSDF (2007) and previous Vhembe DSDF (2009) as follows.</i>		
		SH2	<i>In general, economic investment (infrastructure and human settlement projects should be directed to settlements with the highest growth potential and social need, e.g. PGPs and DGPs)</i>		

		SH3	<i>Social investment, i.e. human development programs (health, education, etc.) should be directed at population concentrations throughout the district with minimal expenditure on permanent infrastructure. Rather, services should be dispensed from mobile or periodic platforms, see section 5.5.</i>		
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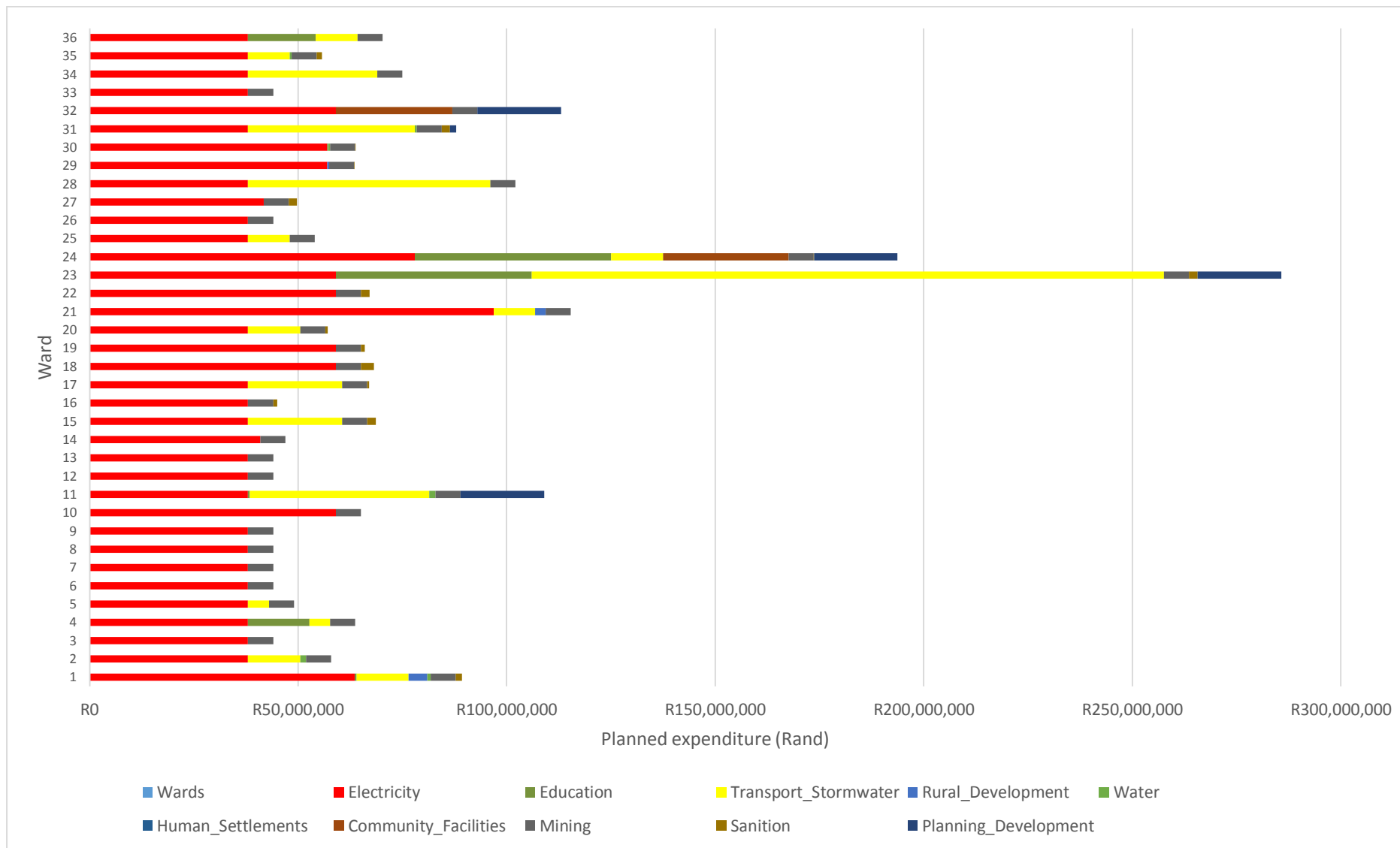
9. COLLINS CHABANE LOCAL MUNICIPALITY CAPITAL EXPENDITURE FRAMEWORK

The methodology followed include the steps below:

The objectives of the CEF are:

- contribute towards the **eradication of service delivery backlogs in targeted areas;**
 - prioritise key intervention projects and programmes while taking into account limited capital budget;
 - improve the operations and maintenance of the municipality's existing infrastructure;
 - identify areas in need of detailed precinct plans, which will assist in better infrastructure services delivery in future, and;
 - direct future public and private investment by aligning the capital budget requirements of departments to priority areas.
 - The current status of planned capital expenditure in the municipality
 - collection of project data from each sector department (water, sanitation, electricity, housing, etc.) listed in current key documents;
 - these projects were mapped per ward according to their spatial reference;
 - this allowed for the spatial identification of current areas where capital expenditure is targeted to; and
 - the identification of which sector and wards are receiving the most capital spending
- Identify key geographical priority areas for expenditure which will ensure the implementation of spatial proposals
 - Analyze spatial proposals regarding capital expenditure priority
 - Set up a hierarchy of priority spending areas within the municipality
 - Set out priority areas that will be key for future capital expenditure and the implementation of the SDF proposals.

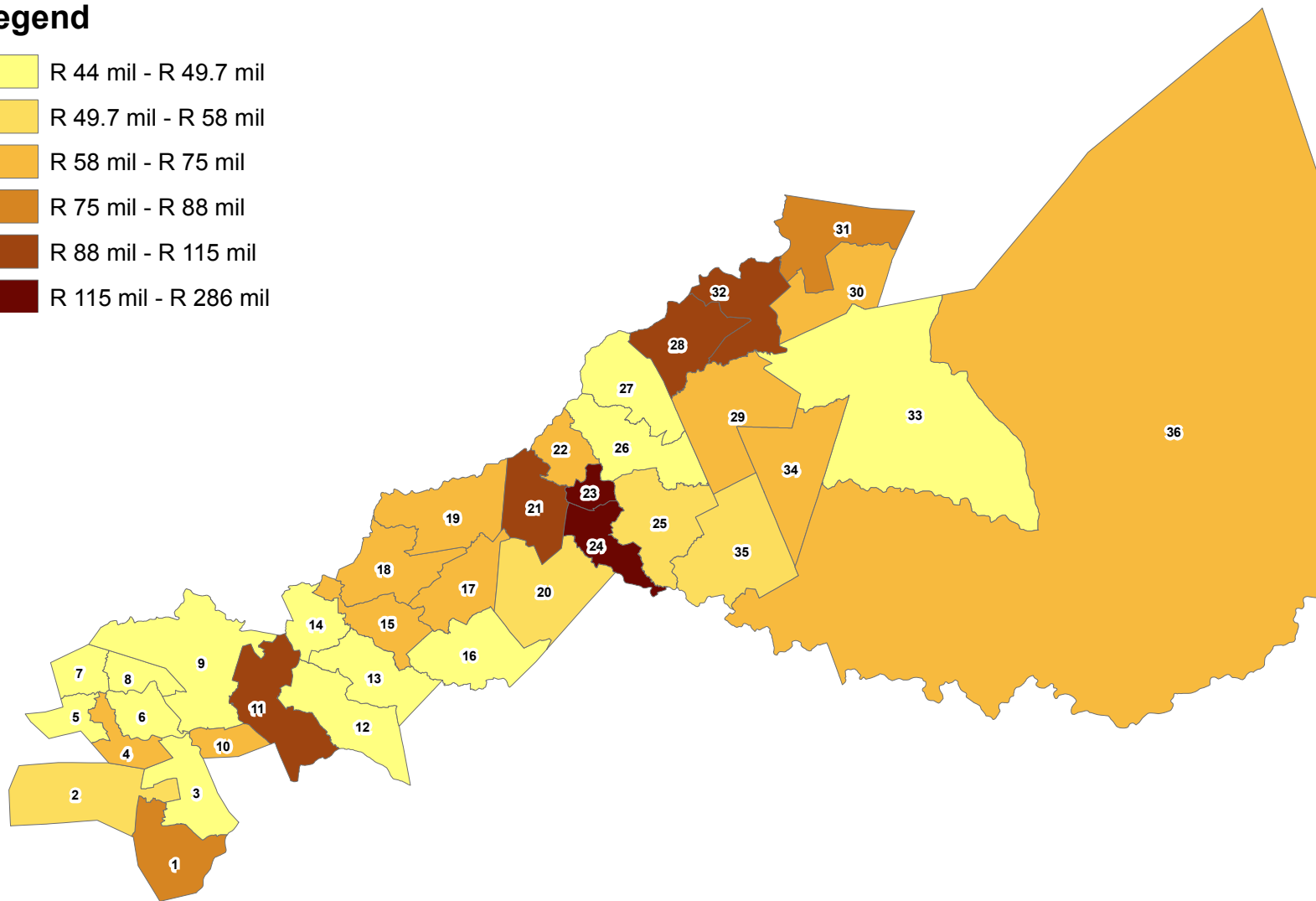
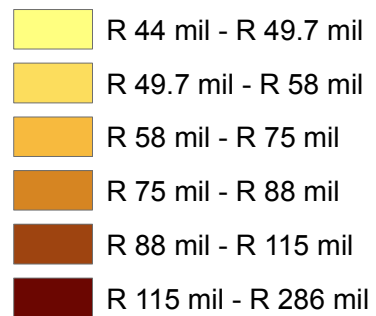
The current status of planned capital expenditure in the municipality



Sector	Amount	%
Electricity	R1 663 207 292	42.1%
Education	R126 093 000	3.2%
Transport_Stormwater	R468 664 502	11.9%
Rural_Development	R7 400 000	0.2%
Water	R1 303 503 000	33.0%
Human Settlements	R0	0.0%
Community Facilities	R58 146 856	1.5%
Mining	R216 000 000	5.5%
Sanition	R25 687 000	0.7%
Planning & Development	R81 500 000	2.1%
Total	R3 950 201 650	100.0%

The map below illustrates current spending by ward.

Legend

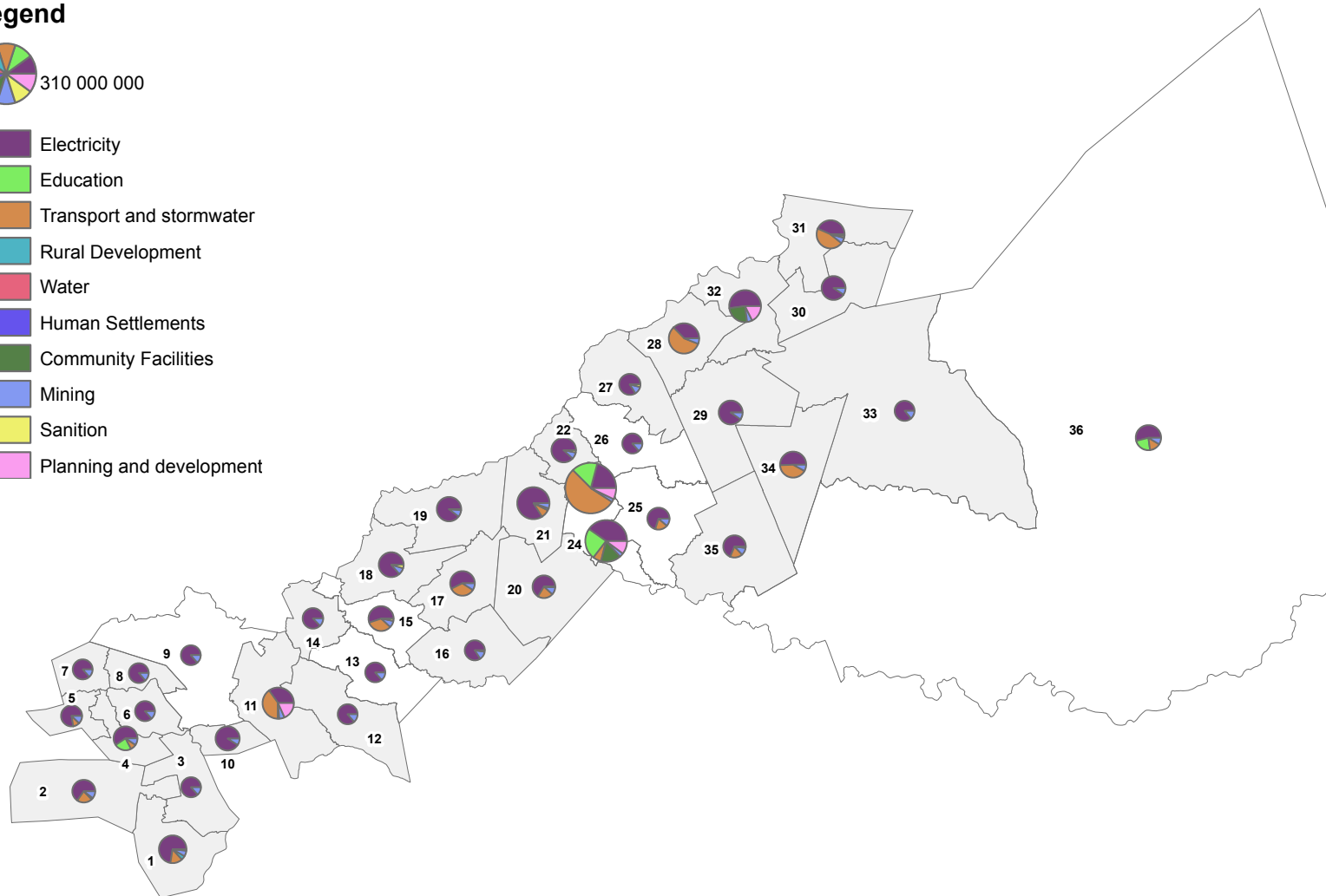


The map below illustrates spending by type of program per ward.

Legend



- Electricity
- Education
- Transport and stormwater
- Rural Development
- Water
- Human Settlements
- Community Facilities
- Mining
- Sanitation
- Planning and development



10. IMPLEMENTATION PLAN

	Spatial Planning	Indicative Budget
Strategic Intervention: 1.1	Fix the current urban form	
Action: 1.1.1	Develop and implement a Strict Urban Growth Management Strategy.	Done (part of SDF)
Action: 1.1.2	Conduct a land audit	R 750 000
Action: 1.1.3	From the land audit, develop a Municipal Land Assembly Strategy – this should identify key parcels of land that can give effect to THIS SDF, engage with landowners, identify funding sources and strategies and establish the process of acquiring the land parcels.	R 500 000
Strategic Intervention: 1.2	Compacting Rural Settlements	
Action: 1.2.1	Discuss with Traditional Authorities the implications and benefits of compact villages. Obtain buy-in in terms of the land use management process that: <ul style="list-style-type: none"> • Traditional authorities will allocate smaller stands. • Allocation of land will firstly happen within the current extents of the village BEFORE expanding the edges of the municipality. • If no more land is available within the settlement, the traditional authority should engage with the municipality to identify suitable land. 	Component of existing Land use Scheme process.
Action 1.2.2	Indicate settlement edges on approved Land Use Scheme Maps.	
Strategic Intervention: 1.3	Protect the Environment	
Action: 1.3.1	Establish a unit or division for environmental management	
Action: 1.3.2	Identify land to be included in the National Protected Areas Expansion Strategy. The Municipality must develop a Municipal Biodiversity Stewardship Strategy which can assist private and communally property owners to apply for biodiversity stewardship agreements. It should be noted that the biodiversity Stewardship agreements are based on a consensual (voluntary) agreement with landowners and the provincial conservation authority.	
Action: 1.3.3	Reduce loss of biodiversity and protect ecological areas as part of the municipal land use scheme	
Action: 1.3.4	The Municipality must get involved with DEA and the “Working for’s” programmes.	
Action: 1.3.5	Develop a Working For’ Municipal strategy in Collaboration with Department of Environmental Affairs. This strategy should aim to bring the Municipality; community members located close to Environmentally Sensitive Areas, Department of Environment Affairs as well as NGO’s together to create green jobs as well as to restore biodiversity. The municipality must seek funding from national and international funding institutions, and start its own “Working for’s” programmes focused on environmental rehabilitation and Payment for ecosystem services.	
Action: 1.3.6	Develop a municipal Invasive Alien Plant Control Management Plan which monitors the performance and change actions as necessary.	
Strategic	Protect Urban Ecology	

Intervention: 1.4		
Action: 1.4.1	Plan and protect public and private open spaces by means of the SDF and the Municipal Land Use Scheme.	
Action: 1.4.2	Develop and implement a Tree Planting and city landscaping policy which also looks at the implementation of green infrastructure	
Action: 1.4.3	Develop and implement a City Beatification Strategy which involves locals to take part in furniture design competition.	
	Social Service	Indicative Budget
Strategic Intervention: 2.1	Review community needs expressed in the IDP by commissioning a social facility backlog study employing the green cities approach to provision of social facilities highlighted in chapter 3 of this document	
Action: 2.1.1	Social facility backlog study, aligned with the Spatial Development Framework. Budget, tender and appoint service provider. Include in this study non-municipal facilities such as Schools and Health Facilities.	R 1 200 000
Action: 2.1.2	Review IDP projects related to social facilities in line with the results of backlog study. Re-prioritise.	
Action: 2.1.3	Discuss provision of health and educational facilities with provincial departments in order to ensure alignment between their capital expenditure and municipal priorities.	

Annexure 1

Groundwater Status Dashboard

Table 26: Groundwater Availability Status

Quaternary catchment	Reserve Study	Available (GRA2)(m3/a)	Recharge (GWR)(m3/a)	Reserve (GWR)(m3/a)	Abstracted (WARMS)(m3/a)	Surplus (GRA2)(m3/a)	Surplus (GWR)(m3/a)
A91C	TRUE	2 498 780	14 200 000	3 230 000	50 495 643	-47 996 863	-39 525 643
A91F	TRUE	6 393 730	16 290 000	2 930 000	2 166 426	4 227 304	11 193 574
A91H	TRUE	5 007 220	17 590 000	2 780 000	351 136	4 656 084	14 458 864
A91K	FALSE	909 087			0	909 087	
B82D	TRUE	288 858	13 510 000	1 840 000	858 958	-570 100	10 811 042
B82F	TRUE	3 350 920	22 050 000	4 170 000	1 067 842	2 283 078	16 812 158
B82G	TRUE	8 216 230	10 960 000	1 610 000	1 107 220	7 109 010	8 242 780
B82H	TRUE	5 562 820	16 400 000	1 340 000	565 544	4 997 276	14 494 456
B90A	FALSE	1 823 690			0	1 823 690	
B90B	TRUE	3 990 570	8 790 000	1 250 000	1 617 535	2 373 035	5 922 465
B90C	TRUE	2 508 410	6 300 000	1 040 000	18 415	2 489 995	5 241 585
B90D	FALSE	1 300 770			0	1 300 770	
B90E	FALSE	1 045 990			0	1 045 990	
B90F	TRUE	4 410 740	11 420 000	2 190 000	349 270	4 061 470	8 880 730
B90G	FALSE	3 650 820			0	3 650 820	
B90H	FALSE	4 355 340			0	4 355 340	