NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMNT PLAN

DRAFT SPATIAL DEVELOPMENT PLAN

LIST OF ACRONYMS

APAP	AGRICULTURE POLICY ACTION PLAN
BEE	BLACK ECONOMIC EMPOWERMENT
BNG	BREAKING NEW GROUND
BSP	BIODIVERSITY SECTOR PLAN
CBA	CRITICAL BIODIVERSITY AREAS
CBO	COMMUNITY BASED ORGANISATION
CCRS	CLIMATE CHANGE RESPONSE STRATEGY
CHC	COMMUNITY HEALTH CENTRE
CRU	COMMUNITY RESIDENTIAL UNIT
CSC	COMMUNITY SERVICES CENTRE
CSIR	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH
DDMC	DISTRICT DISASTER MANAGEMENT CENTRE
DHS	DEPARTMENT OF HUMAN SETTLEMENTS
DSEDS	DISTRICT SPATIAL ECONOMIC DEVELOPMENT STRATEGY
ECD	EARLY CHILDHOOD DEVELOPMENT
EMF	ENVIRONMENTAL MANAGEMENT FRAMEWORK
EMP	ENVIRONMENTAL MANAGEMENT PLAN
ESA	ECOLOGICAL SUPPORT AREAS
GDP	GROSS DOMESTIC PRODUCT
HSP	HOUSING SECTOR PLAN
ICT	INFORMATION AND COMMUNICATION TECHNOLOGY
IDM	ILEMBE DISTRICT MUNICIPALITY
IDP	INTEGRATED DEVELOPMENT PLAN
IGR	INTER-GOVERNMENTAL RELATIONS
IPAP	INDUSTRIAL POLICY ACTION PLAN
ISDS	INTEGRATED SUSTAINABLE DEVELOPMENT STRATEGY
ITB	INGONYAMA TRUST BOARD
IUDF	INTEGRATED URBAN DEVELOPMENT FRAMEWORK
KZN	KWAZULU NATAL

LED	LOCAL ECONOMIC DEVELOPMENT
MSA	MUNICIPAL SYSTEMS ACT
MSP	MASTER SPATIAL PLAN
MTSF	MEDIUM TERM STRATEGIC FRAMEWORK
NATMAP	NATIONAL TRANSPORT MASTER PLAN
NDP	NATIONAL DEVELOPMENT PLAN
NEMA	NATIONAL ENVIRONMENTAL MANAGEMENT ACT
NEMPA	NATIONAL ENVIRONMENTAL MANAGEMENT PROTECTED AREAS ACT
NGO	NON-GOVERNMENTAL ORANISATIONS
NIP	NATIONAL INFRASTRUCTURE PLAN
NLM	NDWEDWE LOCAL MUNICIPALITY
NSSD	NATIONAL STRATEGY FOR SUSTAINABLE DEVELOPMENT
NSTETR	NATIONAL SPATIAL TRANSFORMATION AND ECONOMIC TRANSITION REGIONS
PGDP	PROVINCIAL GROWTH AND DEVELOPMENT PLAN
PGDS	PROVINCIAL GROWTH AND DEVELOPMENT STRATEGY
PICC	PRESIDENTIAL INFRASTRUCTURE COORDINATING COMMISSION
PSEDS	PROVINCAL SPATIAL ECONOMIC DEVELOPMENT STRATEGY
SALA	SUBDIVISION OF AGRICULTURAL LAND ACT
SDF	SPATIAL DEVELOPMENT FRAMEWORK
SDP	SPATIAL DEVELOPMENT PLAN
SEA	STRATEGIC ENVIRONMENTAL ASSESSMENT
SGD	SUSTAINABLE DEVELOPMENT GOALS
SONA	STATE OF THE NATION ADDRESS
SPLUMA	SPATIAL PLANNING AND LAND USE MANAGEMENT ACT
WTP	WATER TREATMENT PLAN
WWTW	WASTEWATER TREATMENT WORKS

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1. INTRODUCTION

1.1. BACKGROUND TO THE PROJECT

The Municipal Systems Act, 2000 (Act 32 of 2000) (hereinafter referred to as the "MSA"), mandates that every Municipality must create an Integrated Development Plan (referred to as "IDP") and a Spatial Development Plan (referred to as "SDP") as a fundamental element of the IDP to achieve the Municipality's spatial vision. Section 26e of the MSA stipulates that the Municipality must formulate "a Spatial Development Plan that includes essential guidelines for a municipal land use management system."

The IDP is a five-year strategy aligned with the Municipal Council's term in office, and consequently, the SDP is designed to meet the MSA's requirements, ensuring that the Municipality possesses an SDP that serves as a central aspect of its economic, sectoral, spatial, social, institutional, and environmental vision. Essentially, the SDP functions as a tool to realize the desired spatial configuration of the Municipality.

The Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (hereinafter referred to as "SPLUMA") mandates municipalities to formulate and approve a Municipal Spatial Development Plan (SDP). Section 21 of the aforementioned Act outlines the components of the SDP as follows: The Ndwedwe Local Municipality (referred to as "NLM" or "the Municipality") SDP will operate as a strategic framework that steers the execution of the IDP and offers guidance on the overall spatial arrangement of existing and desirable land uses within the Municipality. This serves to bring the vision, objectives, and goals of the municipal IDP to fruition, while also adopting a forward-looking perspective in accordance with SPLUMA's requirements. The SDP constitutes a long-term plan (spanning over 20 years) and will be adjusted in harmony with the IDP's five-year cycles or more frequently, if necessary, as per the municipality's needs.

The Constitution of the Republic of South Africa, 1996 (Act 108 of 1996) (referred to as "the Constitution") entrusts municipalities with significant developmental duties aimed at enhancing the quality of life for individuals residing and/or working within a municipality's jurisdictional area. Consequently, an SDP is an integral component of the mechanisms and processes available to the municipality for fulfilling its developmental mandate and facilitating the eradication of spatial remnants stemming from the apartheid era. The principal aim of the SDP is to steer the structure and positioning of future spatial development within the Municipality. It stands as a legislatively required document with legal standing. In essence, the SDP offers the subsequent advantages:

It facilitates the process of making decisions regarding the placement of service delivery initiatives and directs investments from both the public and private sectors.

- It bolsters democratic practices and the transformation of spatial arrangements, enabling the efficient utilization of limited land resources.
- It fosters collaboration between different levels of government in addressing spatial matters and operates as a framework for devising comprehensive Land Use Schemes (LUS) and other subordinate plans.

- It provides guidance and insight into the spatial positioning of municipal infrastructure investments and spatial priorities.
- It offers a visual depiction of the envisioned urban structure of the municipality over the short, medium, and long terms. In essence, the SDP, alongside its associated set of plans, establishes and facilitates a gradual progression toward realizing an agreed-upon spatial configuration within the jurisdictional confines of the municipality.

1.2. PURPOSE OF THE REPORT

The objective of this report is to conduct a comprehensive evaluation of the spatial challenges and prospects within the Ndwedwe Local Municipality. Pinpointing these challenges and opportunities will establish the foundation for proposing spatial solutions in the subsequent stages of the project. The forthcoming report will encompass the identification of the following aspects:

- BIOPHYSICAL EVALUATION: Encompassing, among other things, the subsequent assessments:
  - Agriculture Evaluation
  - Land Transformation Evaluation
  - Evaluation of Climate Change Impacts
  - Geology and Topography Evaluation
  - Biodiversity and Ecosystems Evaluation
  - Evaluation of Landscapes and Sense of Place.
- SOCIO-ECONOMIC EVALUATION: Covering, among other things, the subsequent assessments:
  - Assessment of the Regional Economic Landscape
  - Examination of Demographics and Social Conditions
  - Cultural Heritage and Tourism Evaluation
  - Employment Review
  - Assessment of the Local Economy and Businesses
  - Evaluation of Key Economic Sectors
  - Assessment of Rural Development.
- BUILT ENVIRONMENT EVALUATION: Encompassing, among other things, the subsequent assessments:
  - Analysis of Settlement Patterns
  - Evaluation of Settlement Role, Hierarchy, and Function
  - Assessment of Spatial Structure and Form
  - Examination of Built Heritage
  - Evaluation of Land Use and Activity Patterns
  - Assessment of Infrastructure
  - Evaluation of Transport and Movement Networks
  - Housing Evaluation.

POLICY AND LEGISLATIVE FRAMEWORK

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

2. POLICY CONTEXT AND VISION DIRECTIVES

The Spatial Development Plan (herein referred to as "SDP") for the Ndwedwe Local Municipality (herein referred to as "NLM" or "the municipality") is conducted in compliance with a set of policies and laws originating from various levels of government, including national, provincial, and local, as well as international development policies. These policies and regulations will serve as the basis for the formulation of the SDP. The objective of reviewing policies and legislation is to ensure that the development of the SDP aligns with the goals and objectives of the aforementioned government levels and international policies. Therefore, this report is being submitted to the municipality to provide the policy and legislative framework for the development of the SDP.

1.1. BACKGROUND ON SPATIAL POLICY AND LEGISLATION IN SOUTH AFRICA

Development within South Africa is guided by a comprehensive set of legislations. Since the establishment of democracy in the country, spatial planning has gained momentum, resulting in the implementation of spatial development plans and targeting at all levels of government. This shift was prompted by the recognition by the national government of the need to focus on rural areas for development and proper management. The apartheid government's failure to provide suitable living conditions in rural regions and the enforcement of discriminatory laws like the Betterment Planning and Group Areas Act No 41 of 1950 necessitated this attention. The concept of spatial targeting was initially incorporated into the Integrated Sustainable Development Strategy (ISDS), which identified specific municipalities. Subsequently, the National Spatial Development Plan (NSDF) was introduced in the early 2000s, significantly influencing spatial planning on a national scale. The NSDF was later succeeded by the National Development Plan 'Vision 2030' (NDP), which has become a widely acclaimed blueprint for the country's development. In 2013, the Spatial Planning and Land Use Management Act (SPLUMA) replaced various previous laws, including the Development Facilitation Act No 67 of 1995, Removal of Restrictions Act No 84 of 1967, and the Physical Planning Act No 88 of 1967. SPLUMA established a unified and integrated regulatory framework for spatial planning and land use management, aiming to promote cooperative government and public interest. It sets out development principles, compulsory norms, and standards for land use management to encourage sustainable and efficient land use. SPLUMA's primary goal is to address the constitutional mandate of rectifying inequalities in unsustainable settlement patterns inherited from the past. It also recommends the preparation of norms and standards to enhance understanding and uniformity in land use practices throughout the country, particularly in rural areas. In KwaZulu-Natal, the local government strategies, such as the Spatial Development Plan, are developed within the broader framework of these policy objectives. Additionally, existing district and local strategic planning documents, like the Integrated Development Plan, also play a role in directing development in the district and local municipalities. This section of the report provides an overview of the relevant legislation, policies, and planning frameworks at global, national, provincial, district, and local government levels, which impact and guide the spatial development in Ndwedwe Local Municipality.

3. INTERNATIONAL DEVELOPMENT FRAMEWORK

The concept of a developmental state, applicable to both the country and the province, originates from the adoption of the Sustainable Development Goals (herein referred to as “SDGs”) by the United Nations and the African Union Agenda 2063, which the African Union embraced in 2013. The vision of this agenda is to have "An integrated, prosperous, and peaceful Africa driven by its own citizens and representing a dynamic force in the global arena." This approach emphasizes learning from the past, building on progress, and strategically utilizing opportunities in the short, medium, and long term to achieve positive socio-economic transformation. The vision is built upon 10 priority actions, including eradicating poverty, promoting skills revolution and innovation, achieving economic transformation and industrialization, ensuring connectivity through world-class infrastructure, establishing a Free Trade Area, empowering young people as drivers of African Renaissance, working towards peace and disarmament, striving for gender parity, introducing an African Passport, and strengthening Africa's voice in global negotiations.

Since the concept of progress and advancement is not limited to national policies alone but also includes global programs like the SDGs and AU Agenda, the spatial policy for Ndwedwe Local Municipality should align with the New Africa Urban Agenda. This agenda aims to raise the profile of urbanization as a force for transforming Africa structurally. The program envisions a prosperous Africa by 2063, with the means and resources to drive its own development, providing a high standard of living, good health, well-being, quality education, and technological innovation for its citizens. It envisions modernized infrastructure in cities and settlements, ensuring access to basic necessities like shelter, water, sanitation, energy, public transport, and Information and Communication Technology (herein referred to as “ICT”). The goal is to create shared economic growth, decent jobs, and opportunities for all.

The strategies and interventions of the South African national and provincial governments should be viewed in the context of and measured against these international development goals, which apply to all countries across the globe. The provincial government has developed its own Growth and Development Strategy, the PGDS, which aligns closely with the Sustainable Development Goals, the successor to the MDGs. The SDGs comprise 17 goals and 169 targets that embody global aspirations for sustainable development.

The Spatial Development Plan (SDP) for Ndwedwe Local Municipality should recommend goals set by the Integrated Development Plan (IDP) and consider the goals of the district IDP as well. Below is a comprehensive list of the 17 goals of the SDGs:

1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and adequate nutrition, and promote sustainable agriculture.
3. Ensure healthy lives and promote well-being for all at all ages.
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. Achieve gender equality and empower all women and girls.
6. Ensure availability and sustainable management of water and sanitation for all.

7. Ensure access to affordable, reliable, sustainable, and modern energy for all.
8. Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.
9. Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
10. Reduce inequality within and among countries.
11. Make cities and human settlements inclusive, safe, resilient, and sustainable.
12. Ensure sustainable consumption and production patterns.
13. Take urgent action to combat climate change and its impacts.
14. Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.
15. Protect, restore, and promote sustainable use of terrestrial ecosystems, manage forests sustainably, combat desertification, halt and reverse land degradation, and halt biodiversity loss.
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.
17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.







Figure 1: Sustainable Development Goals

Figure 2: SPLUMA PrinciplesFigure 3: Sustainable Development Goals

aiming to make responsible choices that will enhance the quality of life for current and future generations in a sustainable manner. These goals offer clear guidelines and targets for all countries to adopt, considering their unique priorities and environmental challenges.

The SDGs are designed to be inclusive, addressing the underlying causes of poverty and fostering collaboration to create positive change for both people and the planet. In South Africa, progress towards achieving the MDGs is measured, in part, by the effective and equitable delivery of public services.

3.1. UN-HABITAT INTERNATIONAL GUIDELINES ON URBAN AND TERRITORIAL PLANNING

The United Nations Human Settlements Programme (UN-Habitat) acknowledges that urban and territorial planning plays a crucial role in reshaping cities and regions, fostering economic growth, prosperity, and employment opportunities, while also addressing the needs of vulnerable, marginalized, or underserved groups. According to UN-Habitat, urban and territorial planning is a decision-making process aimed at achieving economic, social, cultural, and environmental objectives through the development of spatial visions, strategies, and plans. This process involves applying a range of policy principles, tools, institutional and participatory mechanisms, and regulatory procedures.

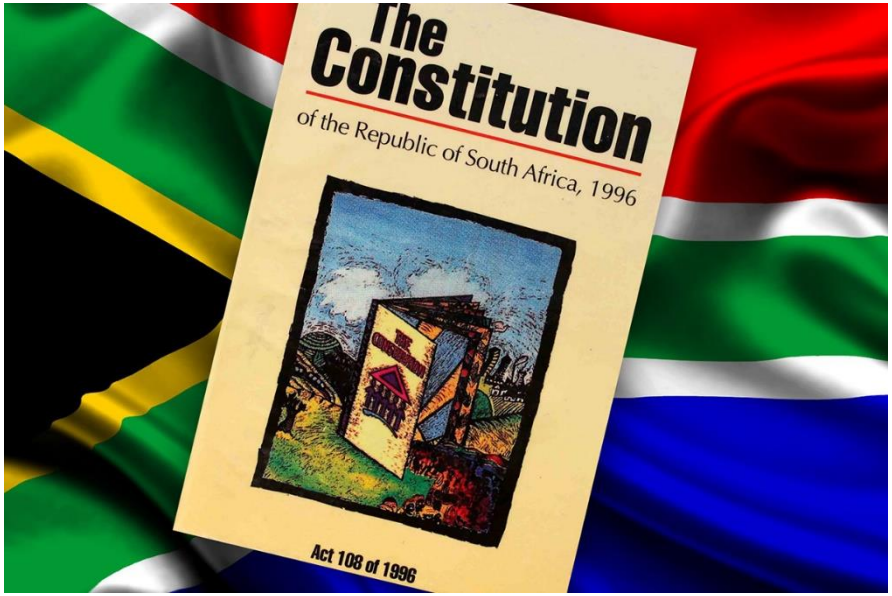
Recognizing the importance and potential of urban and territorial planning, UN-Habitat published the International Guidelines on Urban and Territorial Planning in 2015. These guidelines propose four fundamental planning principles that should be inherent in any spatial planning exercise:

- Advocate physical compactness.
- Promote social inclusiveness.
- Enable integrated and connected cities and territories.
- Facilitate resilience to climate change.

UN-HABITAT

4. NATIONAL POLICIES AND LEGISLATION

4.1. CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, 1996 (ACT NO. 108 OF 1996)



The Constitution serves as the highest law of the land, while the Bill of Rights ensures the protection of the rights of all individuals residing in the country, upholding democratic principles such as human dignity, freedom, and equality. To promote and strengthen these values, technical assistance and capital grant financing are provided for municipal projects that involve or aim to establish a connection with the private sector.

SPATIAL DIRECTIVES: Chapter 7 of the Constitution outlines the purpose of local government, which includes encouraging the involvement of communities and community organizations in matters of local governance. Local government is also tasked with promoting and upholding the Bill of Rights, which embodies the nation's values of human dignity, equality, and freedom. Section 24 of the Constitution establishes the right of every individual to an environment that is not harmful to their health and well-being, with protection measures against pollution, ecological degradation, and promotion of conservation and sustainable development.

Section 26 of the Constitution guarantees everyone's right to access adequate housing and a safe environment, protected for present and future generations through reasonable legislative and other measures. The state is obliged to take appropriate legislative and resource-related actions to progressively realize this right.

Additionally, section 153 of the Constitution mandates municipalities to fulfil developmental duties within their planning and development budgets. These duties include structuring and managing administration, budgeting, and planning processes to prioritize the basic needs of the community and promote social and economic development. Furthermore, municipalities are required to participate in national and provincial development programs.

The Constitution of the Republic of South Africa (Act 108 of 1996) envisions local government as *"the local sphere of government with the constitutional mandate to carry out a number of developmental duties."*

4.2. MUNICIPAL SYSTEMS, 2000 (ACT NO. 32 OF 2000)

The Municipal Systems Act (No. 32 of 2000) and its associated regulations play a crucial role in promoting integrated development planning in South Africa. During the formulation of the ULM SDP (Spatial Development Plan), this legislative framework serves as a guiding force, outlining specific requirements for SDPs as follows:

1. Setting objectives that reflect the desired spatial configuration of the municipality.
2. Incorporating strategies, policies, and plans that:
    a. Indicate the preferred patterns of land use within the municipality.
    b. Address the spatial reconstruction of development locations and nature within the municipality.
    c. Provide strategic guidance concerning the location and nature of development within the municipality.
3. Establishing fundamental guidelines for the municipality's land use management system.
4. Including a strategic assessment of the SDP's environmental impact.
5. Identifying programs and projects for land development within the municipality.
6. Ensuring alignment with the SDPs reflected in the integrated development plans of neighbouring municipalities.
7. Providing a visual representation of the municipality's desired spatial configuration, which must:
    a. Indicate the locations for public and private land development and infrastructure investment.
    b. Specify desired or undesired utilization of space in specific areas.
    c. Outline the urban edge.
    d. Identify areas requiring strategic intervention.
    e. Indicate areas where priority spending is needed.

SPATIAL DIRECTIVES: Chapter 5 of the Act pertains to the preparation of IDPs (Integrated Development Plans) and highlights the necessity for the SDP (Spatial Development Plan) to align with national, provincial, and neighbouring municipal planning. Section 23 (1) of the Act mandates that municipalities must engage in developmentally oriented planning. Additionally, Section 26 (e) specifies that the SDP must encompass the provision of fundamental guidelines for the municipality's land use management system. Furthermore, Section 26 (e) designates the SDP as a fundamental component of the IDP and emphasizes the requirement for the SDP to offer essential guidelines for municipal land use management.

4.3. SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, 2013 (ACT NO. 16 OF 2013)

This statute serves as a comprehensive framework for spatial planning and land use management in the Republic of South Africa, with various objectives and intentions, including:

1. Establishing inclusive, developmental, equitable, and efficient spatial planning across different levels of government.
2. Providing a framework for monitoring, coordination, and review of the spatial planning and land use management system.

3. Setting policies, principles, norms, and standards for spatial development planning and land use management.
4. Addressing historical spatial and regulatory imbalances.
5. Promoting consistency and uniformity in decision-making by authorities responsible for land use decisions and development applications.
6. Establishing and defining the functions of Municipal Planning Tribunals.
7. Facilitating and enforcing land use and development measures.
8. Addressing related matters.

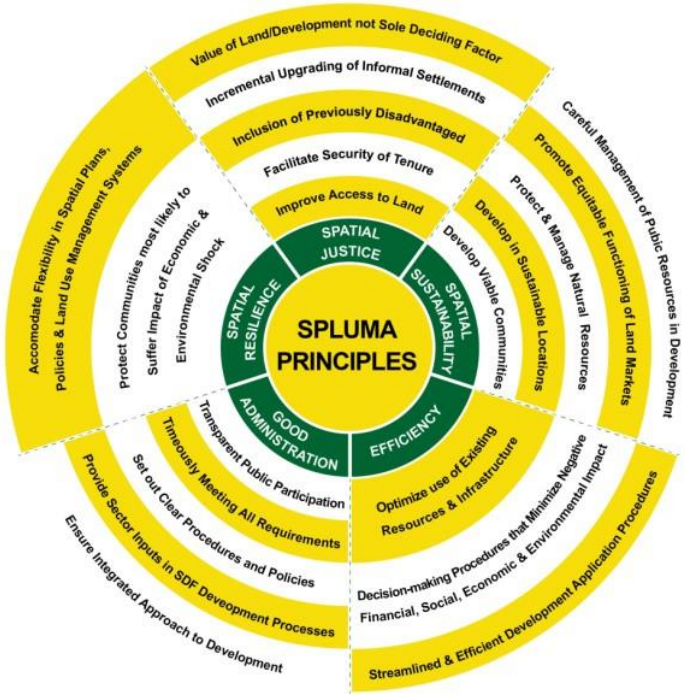


Figure 4: SPLUMA Principles

The introduction of the Spatial Planning and Land Use Management Act No. 16 of 2013 (SPLUMA) has revitalized the role of local government in spatial planning. This national legislation aims to establish norms and standards for spatial planning while clarifying the relationship between spatial planning and land use management. The ultimate goal is to achieve uniformity and consistency in the practice of spatial planning and land use management throughout the country.

SPATIAL DIRECTIVES: Chapter 4 of the Act outlines the requirement for municipalities to prepare Spatial Development Plans, including Ndwedwe. According to Section 12, all levels of government and each municipality must develop such frameworks. Section 21 further specifies the contents that should be included in the SDP.

The SPLUMA also sets out the guiding principles for the SDP, which are as follows:

- Spatial Justice
- Spatial Sustainability
- Efficiency
- Spatial Resilience
- Good Governance

Part E of the Act states that the Municipal Spatial Development Plan for Ndwedwe must address specific issues, which will be tackled in different phases according to the methodology in use.

4.4. NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) (NEMA)

The purpose of this statute is to facilitate cooperative and effective environmental governance. It achieves this by establishing principles for decision-making concerning environmental matters, creating institutions to promote cooperative governance, and implementing procedures for coordinating environmental functions among various government entities. Additionally, the statute addresses related matters in this context.

SPATIAL DIRECTIVES: Ndwedwe Local Municipality is known for its inherent environmental qualities that require preservation and enhancement. Therefore, adherence to the National Environmental Management Act No. 107 of 1998 (referred to as "NEMA") is essential. Within the municipal area, priority conservation areas have been identified, and their sustainability relies on the responsible implementation of NEMA to ensure sustainable usage.

The municipality is also home to critical biodiversity areas that necessitate conservation efforts. The SDP will include land use guidelines for these identified critical biodiverse areas to ensure their protection and responsible use.

4.5. NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT, 2003 (ACT 57 OF 2003) (NEMPA)

The National Environmental Management: Protected Areas Act (referred to as "NEM:PA") is a legislation in South Africa aimed at conserving and sustainably managing protected areas, including national parks, nature reserves, and ecologically significant regions. Enacted in 2003, the act has undergone amendments to strengthen the protection of the country's diverse biodiversity and heritage.

The NEM:PA Act establishes a legal framework for managing protected areas to safeguard the country's natural resources, ecosystems, and cultural heritage for present and future generations. It addresses the declaration, management, and administration of protected areas and regulates activities conducted within these regions. Key provisions of the NEM:PA Act include:

- PROTECTED AREA DECLARATION: The act empowers the Minister of Environment, Forestry, and Fisheries to declare protected areas, such as national parks, nature reserves, and marine protected areas. It outlines criteria and processes for their declaration, along with the responsibilities of management authorities.
- BIODIVERSITY CONSERVATION: The act places emphasis on conserving biodiversity within protected areas, encompassing ecosystems, species, and ecological processes. It mandates management authorities to develop plans for each protected area, incorporating measures to conserve biodiversity, control invasive species, and address climate change impacts.
- ACCESS AND USE OF PROTECTED AREAS: The act regulates access and use of protected areas, including recreational activities, research, tourism, and mining. It requires permits or agreements for certain activities, imposing conditions and standards for their operation, and mandates environmental impact assessments and consideration of cultural heritage.
- COMMUNITY INVOLVEMENT AND BENEFITS: The act encourages community engagement in protected area

management, recognizing the rights and interests of local communities, including traditional and indigenous peoples. It supports community-based conservation initiatives, partnerships, and benefit-sharing arrangements to promote social, economic, and cultural advantages for communities living in or near protected areas.

- COMPLIANCE AND ENFORCEMENT: The act establishes provisions for compliance monitoring, enforcement, and penalties for non-compliance, including fines, imprisonment, and asset forfeiture. It provides for protected area law enforcement units and coordination of enforcement efforts with other government agencies.
- INTERNATIONAL OBLIGATIONS: The act acknowledges South Africa's international commitments to protect biodiversity and cultural heritage, aligning with conventions like the Convention on Biological Diversity and the World Heritage Convention. It ensures the implementation of these obligations and coordination of international cooperation efforts.

The NEM:PA Act serves as a vital legal instrument for conserving and managing protected areas in South Africa, contributing to efforts to safeguard the nation's unique biodiversity, preserve cultural heritage, and promote sustainable development.

SPATIAL DIRECTIVES: Here are some of the key implications:

- Protection and Management of Protected Areas: The NEM:PA Act establishes a legal framework for the declaration, management, and administration of protected areas, such as national parks, nature reserves, and marine protected areas. Spatial planning must take into account the presence and significance of these protected areas, ensuring that their conservation and management are integrated into development plans.
- Biodiversity Conservation: The act emphasizes the conservation of biodiversity within protected areas, including ecosystems, species, and ecological processes. Spatial planning should consider the importance of maintaining ecological integrity and biological diversity within and around protected areas.
- Regulation of Activities within Protected Areas: The NEM:PA Act regulates the access and use of protected areas, including recreational activities, research, and commercial operations like tourism and mining. Spatial planners must ensure that activities conducted within or near protected areas align with their conservation objectives and minimize potential negative impacts.
- Community Involvement and Benefit-sharing: The act promotes community involvement in the management of protected areas and recognizes the rights and interests of local communities, including traditional communities and indigenous peoples. Spatial planning should consider the role of local communities in conservation efforts and explore benefit-sharing arrangements that promote social, economic, and cultural benefits.
- Compliance and Enforcement: The NEM:PA Act sets out provisions for compliance monitoring, enforcement, and penalties for non-compliance. Spatial planners should consider the legal obligations associated with protected areas and

ensure that development activities adhere to the relevant regulations and permits.

- **International Obligations:** The act recognizes South Africa's international commitments to protect biodiversity and cultural heritage under conventions like the Convention on Biological Diversity and the World Heritage Convention. Spatial planning must align with these international obligations and support international cooperation efforts in conservation.
- **Environmental Impact Assessments:** Development projects proposed within or near protected areas may require environmental impact assessments (EIAs) under NEM: PA. Spatial planners need to consider the potential environmental impacts of such projects and incorporate appropriate mitigation measures into development plans.
- **Connectivity and Landscape Linkages:** Spatial planning should take into account the connectivity between protected areas and the need for landscape linkages to enable wildlife movement and ecological processes, promoting overall biodiversity conservation and ecological resilience.

The NEM:PA Act influences spatial planning by emphasizing the importance of conserving and managing protected areas and their ecological significance within broader development plans. It ensures that conservation objectives are integrated into spatial planning decisions, promoting sustainable development while safeguarding South Africa's unique biodiversity and natural heritage.

4.6. INTERGOVERNMENTAL RELATIONS FRAMEWORK ACT, 2005 (ACT NO. 13 OF 2005) (IGR)

The Intergovernmental Relations Act (Act No. 13 of 2005) is a piece of legislation in South Africa that aims to provide a framework for cooperative governance and relations among different spheres of government. The act was enacted to facilitate collaboration, coordination, and cooperation between national, provincial, and local government entities in order to promote effective governance and service delivery. Key objectives of the Intergovernmental Relations Act include:

- Cooperative Governance: The act seeks to establish a system of cooperative governance, where all spheres of government work together to achieve common goals and objectives.
- Promotion of Intergovernmental Relations: It aims to promote constructive and cooperative relationships among government entities to enhance policy coordination and implementation.
- Dispute Resolution: The act provides mechanisms for resolving disputes and conflicts that may arise between different spheres of government.
- Integrated Planning and Service Delivery: It encourages integrated planning and coordination of service delivery efforts to address the needs of citizens efficiently and effectively.
- Joint Decision-Making: The act facilitates joint decision-making processes between national, provincial, and local governments on matters of common interest.
- Promotion of Public Participation: It emphasizes public participation in intergovernmental decision-making processes

to ensure that the concerns and needs of citizens are considered.

- Capacity Building: The act supports capacity building initiatives to enhance the effectiveness and efficiency of government entities in delivering services.
- Clarity of Roles and Responsibilities: It aims to clarify the roles and responsibilities of different spheres of government to avoid overlaps and duplication of efforts.

The Intergovernmental Relations Act is essential for promoting a collaborative and coordinated approach to governance in South Africa. It encourages meaningful engagement and partnership among government entities, fostering a more effective and responsive government system that works in harmony to address the needs and aspirations of the nation.

SPATIAL DIRECTIVES: The projects to be proposed and implemented as part of the SDP strategy will require the cooperation and coordination of all three government spheres. These are, inter alia, projects such as human settlements projects (NLM, HDA and the KZN Department of Human Settlements), local economic development projects as well as roads maintenance and upgrading projects. The coordination of all such as project will be undertaken using the framework provided for in this act.

4.7. WHITE PAPER OF LAND POLICY AND RELATED POLICIES

The White Paper on Land Policy is the outcome of a comprehensive process of policy development, consultation, and lessons learned from early implementation spanning two and a half years. The prevailing patterns of land ownership strongly reflect the political and economic conditions of the apartheid era. Policies that were based on racial distinctions resulted in insecurity, landlessness, and poverty among black communities, while also leading to inefficient land administration and use. The White Paper imposes the following imperatives on all land policies:

- Addressing the injustices arising from racially based land dispossession
- Tackling the inequitable distribution of land ownership
- Ensuring security of tenure for all
- Promoting sustainable land use
- Facilitating the speedy release of land for development
- Establishing comprehensive recording and registration of all property rights
- Enhancing effective administration of public land.

SPATIAL DIRECTIVES: The Ingonyama Trust Board (herein referred to as “ITB”) is the largest landowner in the municipality Additionally, significant portions of land in the municipality are under private ownership, limiting the municipality's ability to utilize it for public purposes, such as constructing affordable housing for low to middle-income individuals. As a result, this policy aims to establish a framework for land reform within the municipality. The proposed Spatial Development Plan (SDP) endeavours to identify interventions that will accelerate land reform programs and foster a more equitable distribution of land ownership in the municipality.

4.8. NATIONAL DEVELOPMENT PLAN: VISION 2035



Figure 5: National Development Plan Imperatives

The National Development Plan (NDP) serves as South Africa's principal national plan with the objective of eradicating poverty and reducing inequality by 2030. It aims to achieve these goals through inclusive economic growth, capacity building, state enhancement, and fostering leadership and partnerships across society. The NDP 2030 outlines a long-term vision for the country and addresses the government's commitment to combat poverty and deprivation, with a focus on nation-building.

The plan encompasses strategies across various key areas such as employment, infrastructure, foreign trade, education, health, housing, social protection, and safety. It proposes the creation of 11 million jobs by 2030, which is intended to reduce the unemployment rate to 14% by 2020 and 6% by 2030. The plan's strategies include increasing exports in sectors where South Africa already has advantages, supporting small businesses, improving infrastructure, enhancing education and skills, providing policy certainty for investors, reforming the labour market, and addressing various social challenges.

The NDP also emphasizes environmental sustainability and resilience through a transition to a low-carbon economy, which influences the approach to spatial planning and development in the country.

Chapter 6 of the NDP focuses on integrating rural areas into development plans, particularly through investment in agricultural technologies and research.

Chapter 8 of the NDP emphasizes the importance of spatial planning and calls for municipal and provincial Spatial Development Plans (SDPs) to be binding across national, provincial, and local levels of government. The planning system is encouraged to support cross-boundary plans, especially for biodiversity protection, climate change adaptation, tourism, and transportation. Additionally, every municipality is urged to have an explicit spatial restructuring strategy, including identifying priority precincts for spatial restructuring.

These principles and goals are central to human development and have implications for the approach to spatial planning and development in South Africa as they promote inclusive growth, rural development, environmental sustainability, and spatial restructuring.

SPATIAL DIRECTIVES: Although the NDP does not specifically mention Ndwedwe Municipality, it aligns with the general principles of the National Development Plan (NDP) in South Africa, which primarily focuses on national-level goals and strategies without providing detailed information on individual municipalities.

The NDP emphasizes the principles of good governance, transparency, and accountability at all levels of government, including local government. It underscores the importance of effective service delivery, infrastructure development, and social development to enhance the well-being of all South Africans, irrespective of their location. The plan also promotes community participation and partnerships in local governance, encouraging participatory decision-making and collaboration between government, civil society, businesses, and communities.

Regarding Ndwedwe Municipality, implementing the NDP would likely involve aligning local government policies, plans, and strategies with the broader goals and priorities outlined in the NDP. This alignment could encompass efforts to foster economic growth and development, improve service delivery, enhance infrastructure, address social challenges like poverty and inequality, and promote good governance and accountability at the local level.

It is essential to recognize that specific plans and initiatives related to Ndwedwe Municipality would be determined by the local government and relevant stakeholders. These plans may evolve over time based on local needs, available resources, and changing priorities. Local government officials and stakeholders would be responsible for implementing and monitoring progress toward achieving the goals of the NDP within their jurisdiction, including Ndwedwe Municipality. For the most current and accurate information on Ndwedwe Municipality's development plans and initiatives, consulting official local government documents and engaging with relevant local authorities and stakeholders is advisable.

4.9. NATIONAL SPATIAL DEVELOPMENT FRAMEWORK

The National Spatial Development Plan (NSDF) in South Africa is a strategic planning document that outlines a framework for spatial development on a national scale. It serves as a policy instrument, guiding spatial planning and development throughout the country with the goal of promoting equitable and sustainable growth, addressing spatial disparities, and fostering integrated and coordinated spatial planning and development.

The NSDF is based on the principles enshrined in the South African Constitution, which include social justice, spatial equity, and sustainable development. It is also aligned with other national policies, strategies, and legislation, such as the National Development Plan (NDP), the Integrated Urban Development Framework (IUDF), and the Spatial Planning and Land Use Management Act (SPLUMA).

Within the NSDF, there is a vision for spatial development in South Africa, along with strategic objectives and principles that guide decisions related to spatial planning and development. Key elements of the NSDF encompass the following:

- Spatial Transformation: The NSDF aims to address spatial disparities and promote transformation by guiding the location and distribution of economic, social, and environmental development opportunities in an inclusive, equitable, and sustainable manner. This includes promoting compact and connected urban areas, revitalizing declining regions, and supporting rural development.

- Integrated Planning: The NSDF advocates for integrated and coordinated spatial planning and development, considering various sectoral plans, strategies, and initiatives. It stresses the importance of collaboration and coordination among different levels of government and stakeholders to ensure cohesive spatial planning decisions.
- Environmental Sustainability: Environmental sustainability is a priority in the NSDF, emphasizing the protection and management of natural resources, ecosystems, and heritage sites. It calls for environmentally responsible development, climate resilience, and sustainable land use practices.
- Infrastructure Development: The NSDF recognizes the significance of infrastructure development to support spatial development objectives, encompassing transportation, energy, water, and ICT infrastructure. It promotes infrastructure investment aligned with spatial priorities, fostering economic development and improved accessibility and connectivity.
- Social Inclusion: The NSDF emphasizes the need for social inclusion in spatial development, addressing social and economic inequalities, facilitating access to basic services, enhancing housing and human settlements, and fostering social cohesion. It focuses on development that tackles historical spatial inequality legacies and encourages inclusive urban and rural environments.
- Governance and Implementation: Effective governance, coordination, and implementation of spatial development policies and strategies are emphasized in the NSDF. It promotes the involvement of government, civil society, business, and communities in spatial planning and development, encouraging participatory decision-making, stakeholder engagement, and monitoring and evaluation of spatial development outcomes.

The NSDF thus, plays a critical role as a guiding document for spatial planning and development decisions at the national level in South Africa. It provides a policy framework to foster integrated and coordinated spatial development, supporting the achievement of national development goals, promoting social equity, economic growth, environmental sustainability, and addressing spatial disparities across the country.

SPATIIAL DIRECTIVES: According to the NSDF, Ndwedwe Local Municipality is earmarked for “Agri-Enterprise”, as shown in the map below, the investment and spatial guidelines of which being:

- Utilization of high-value agricultural land for bolstering national food security.
- Restoration of degraded land and implementation of efficient land-use management.
- Enhancement of rural connectivity, market access, and vital agricultural production facilities.
- Strengthening connectivity by strategic infrastructure investment and consolidation of settlements in well-linked regional development hubs.

Furthermore, Ndwedwe Local Municipality falls under the National Spatial Action Area (NSAA) One region which is characterised by the following:

- Large, youthful populations

- Histories marked by profound deprivation and neglect as former Apartheid Bantustans
- High levels of poverty and unemployment
- Extensive and dense rural settlement patterns

Moreover, they hold significant ecological value for the country:

- The Coastal National Spatial Transformation and Economic Transition Region (Coastal NSTETR) and the Eastern Escarpment Spatial Transformation and Economic Transition Region (Eastern Escarpment NSTETR) serve as vital surface water producers.
- The Northwestern Spatial Transformation and Economic Transition Region (Northwestern NSTETR) is a crucial source of groundwater.

Additionally, the Coastal and Eastern Escarpment NSTETRs encompass substantial portions of the nation's scarce high-value agricultural land, making them pivotal for the country's long-term food security. Similarly, the Northwestern NSTETR is essential for livestock and irrigation agriculture, as well as related agro-processing activities.

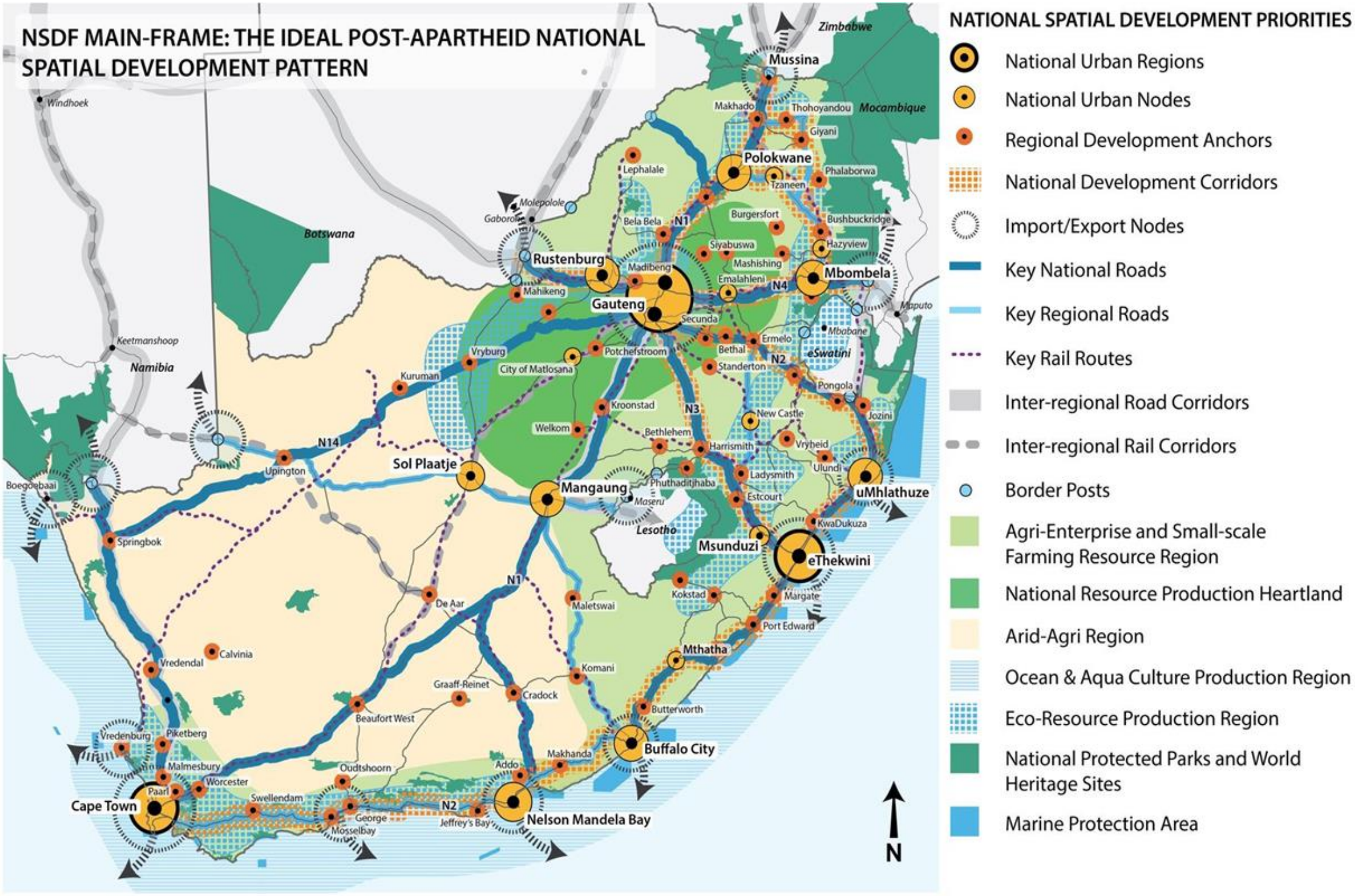
The following actions are planned for these areas:

- Expand and enhance transportation networks, ensuring regular maintenance and upgrades of existing infrastructure, particularly roads. Increase investments in high-speed ICT infrastructure to improve connectivity between urban-rural and rural-rural areas.
- Consolidate settlement development and support the establishment of new cities in regions experiencing significant population growth and facing challenges with potential for spatial transformation.
- Develop a network of vibrant cities and large towns to serve as national urban nodes, viable regional development anchors, and well-capacitated rural service centres.
- Introduce and upgrade-built environment, transport, basic service, and communication infrastructure, with a focus on housing, basic service delivery, public transport, and rural-urban/rural-rural connections, promoting enterprise development and expansion.
- Implement innovative settlement planning, rural design, urban land reform, and effective land-use management to curtail urban sprawl and encourage strategic and dense urbanization in rural settlements and rapidly growing formal and traditional areas, centred around rural service centres and villages/hamlets.
- Ensure protection and management of ecological infrastructure, natural resources, and protected areas, including Strategic Water Source Areas (SWSAs) and high-value agricultural land, through regional and municipal resource management and eco-agri development strategies.
- Establish effective regional collaboration, partnerships, and cooperative governance models for mutually beneficial natural resource use, land development, and optimization of economic development benefits at national, regional, and local levels.
- Implement integrated human capital development to enable the youth to benefit from urbanization through skill development and opportunities in urban economies.

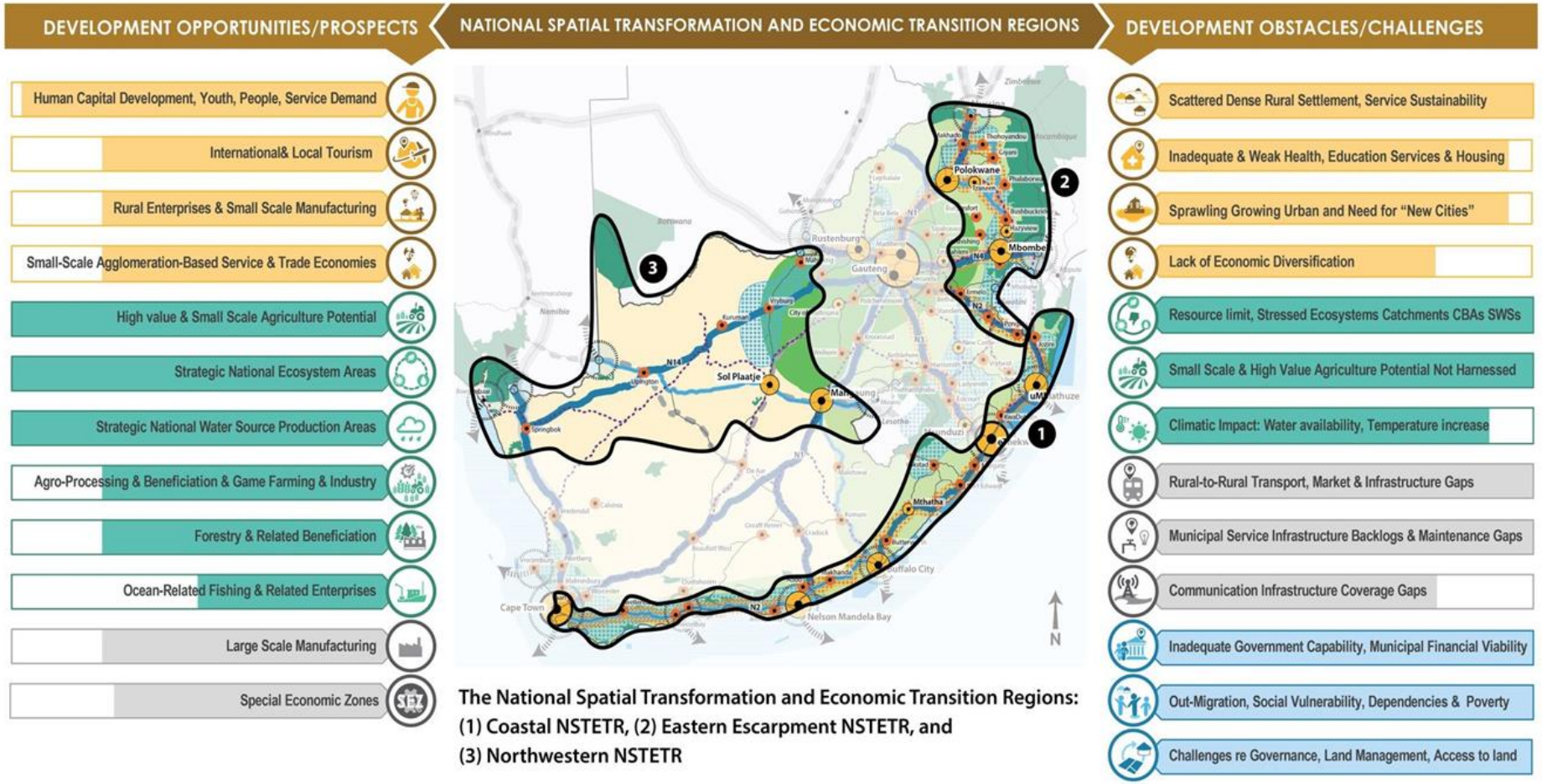
- Provide contextually suitable infrastructure and life-enhancing social and basic services to support enterprise development, well-being, and inclusive growth, with a focus on both ecological and human-centric approaches.
- Prioritize human capital and people-centred enterprise development, including arts and culture, tourism, knowledge creation, education, and innovation.
- Capitalize on opportunities offered by universities and research entities in National Spatial Transformation and Economic Transition Regions (NSTETRs) for regional development and transformation.
- Optimize agricultural opportunities and support the establishment of small-scale farming activities, agri-enterprises, and agri-led industrialization to foster productive regional-rural development, enhance national food security, and strengthen water security.
- Develop the tourism sector and creative industries in the regions, with an emphasis on small-and-medium-sized farming activities and agri-eco production.
- Accelerate small harbour development to support the fishing, tourism, and maritime economy in regional development anchors and rural service centres where applicable along the coast in the Coastal and Northwestern NSTETRs.
- Establish robust regional growth and development compacts involving all stakeholders, including all levels of government, traditional leaders/authorities, communities (particularly youth), the private sector, community-based organizations (CBOs), non-governmental organizations (NGOs), and organized labour. Ensure collaborative spatial development planning and governance across regional, provincial, and municipal boundaries.







Map 1: National Spatial Development Framework



Map 2: National Spatial Action Area One

4.10. MEDIUM TERM STRATEGIC FRAMEWORK OUTCOMES 9, 13, AND 16

The Medium-Term Strategic Framework (MTSF) serves as the Government's strategic plan for the 2014-2019 electoral term. It reflects the commitments outlined in the governing party's election manifesto, including the implementation of the National Development Plan (NDP). The MTSF lays out specific actions and targets that the Government aims to achieve during this period and provides a framework for national, provincial, and local government plans. The strategic focus areas for the next five years are as follows:

- Facilitating radical economic transformation, rapid economic growth, and job creation.
- Promoting rural development, land and agrarian reform, and ensuring food security.
- Ensuring access to adequate human settlements and improving the provision of quality basic services.
- Enhancing the quality of education and expanding access to training opportunities.
- Ensuring quality healthcare and social security for all citizens.
- Combating corruption and addressing crime.
- Contributing to the advancement of Africa and the global community.
- Fostering social cohesion and promoting nation-building.

These focus areas guide the Government's priorities and actions during the specified electoral term, with the ultimate goal of addressing critical national challenges and working towards a prosperous and united South Africa.

SPATIAL DIRECTIVES: One of the main issues in the ULM is the joblessness and economic development, as well as issues relative to human settlements/housing backlogs. The SDP aligns with this policy in that it has targeted areas if highest need as well as areas of focus in for intervention implementation.

4.11. NEW GROWTH PATH



The "New Growth Path" is a strategic economic development framework implemented by the South African government in 2010. Its main objective is to address the country's economic challenges, such as unemployment, inequality, and poverty, while fostering sustainable and inclusive economic growth.

The key pillars of the New Growth Path in South Africa are as follows:

- **Job creation:** The framework places a strong emphasis on generating decent and sustainable jobs, especially for the youth and historically disadvantaged groups. Labor-intensive sectors like manufacturing, agriculture, tourism, and infrastructure development are identified as crucial drivers of employment.
- **Economic transformation:** The New Growth Path seeks to promote economic transformation by encouraging greater participation and ownership of historically marginalized groups, particularly black South Africans, in the economy. Inclusive policies such as black economic empowerment (BEE) and affirmative action are emphasized to reduce inequality and support equitable growth.
- **Sustainable development:** The framework prioritizes sustainable and environmentally responsible economic growth. It calls for investments in renewable energy, green technologies, and eco-friendly industries to address environmental challenges and promote sustainable development.
- **Skills development:** The New Growth Path underscores the importance of investing in skills development and education to create a competitive and capable workforce. Targeted investments in education and skills training are deemed essential to enhance the country's human capital and drive economic progress.
- **Infrastructure development:** Recognizing the significance of infrastructure, the framework advocates for robust investments in transportation, energy, water, and telecommunications. These infrastructure projects are seen as critical enablers of economic growth and overall development.

Through the implementation of the New Growth Path, the South African government aims to pave the way for a more prosperous and equitable future, addressing socio-economic challenges and promoting sustainable and inclusive economic development.

SPATIAL DIRECTIVES: The Spatial Development Plan (SDP) will prioritize the key focus areas outlined in the New Growth Path through its implementation plan and strategy. The municipality faces numerous challenges related to these areas. To address them effectively, the SDP will conduct a customized assessment of the current situation, identifying specific areas requiring development and measures to tackle them within the municipality.

4.12. BREAKING NEW GROUND POLICY 2004

The government adopted the Breaking New Ground Policy in 2004 as a comprehensive framework for developing human settlements, which includes the provision of social and economic infrastructure. The BNG Policy outlines the following objectives for housing delivery:

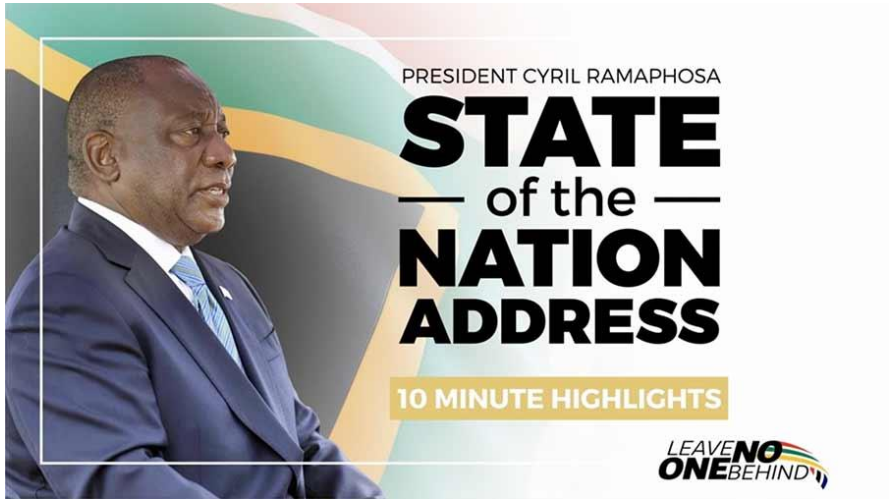
- Creating safe and secure environments.
- Ensuring access to economic opportunities.
- Offering a mix of secure housing and tenure types.
- Providing reliable and affordable basic services, education, entertainment, health, welfare, and police services through a multipurpose cluster concept.
- Promoting compact, mixed land use, diverse, pedestrian-friendly areas that enhance the quality of life.
- Building low-income housing near areas of opportunity.

- Establishing integrated, functional, and environmentally sustainable human settlements, towns, and cities.
- Encouraging Social (Medium-Density) Housing; and Alternative technology and design.



SPATIAL DIRECTIVES: The policy places a strong emphasis on the development of human settlements rather than just housing. Human settlements encompass not only the physical housing structures but also the provision of essential services like water, sanitation, and electricity. SPLUMA requires the Spatial Development Plan (SDP) to identify key areas for human settlement development. As a result, the SDP will incorporate plans for both rural and social housing within the municipality to address the existing housing backlog.

4.13. STATE OF THE NATION ADDRESS (SONA)



President Cyril Ramaphosa delivered the State of the Nation Address (herein referred to as "SONA") on Thursday, 9 February 2023. The address took place before a joint sitting of the two houses of Parliament. The address is an important milestone as it brings certainty to the country's political, social and economic landscape. It demonstrates that South Africa's democracy remains robust.

SPATIAL DIRECTIVES: Although the SONA does not specifically mention the Ndwedwe Local Municipality, it alludes to several ongoing projects, such as the development of a new facility by Sasol at Boegoebaai in the Northern Cape, the Prieska Power Reserve in the Free State, and the Hydrogen Valley initiative in Limpopo, Gauteng, and KwaZulu-Natal.

The President mentioned that the Department of Agriculture, Land Reform, and Rural Development, along with the Department of Health, will address conditions for cultivating hemp and cannabis. This move aims to permit outdoor cultivation and harvesting from traditional farmers, which is expected to unlock significant economic potential in rural areas, particularly in the Eastern Cape, KwaZulu-Natal, and Mpumalanga. This has positive implications for Ndwedwe as the municipality possesses large tracts of land identified with high agricultural potential.

4.14. NATIONAL INFRASTRUCTURE PLAN

The New Growth Path aimed to create 5 million new jobs by 2020, addressing structural challenges in the economy and identifying opportunities in specific sectors known as "jobs drivers." Infrastructure was recognized as the primary jobs' driver, but its impact was limited by weak capacity, poor coordination, and integration.

To address these limitations, the Presidential Infrastructure Coordinating Commission (PICC) was established by Cabinet with the following objectives:

- Coordinating, integrating, and accelerating implementation.
- Developing a single common National Infrastructure Plan, monitored and centrally driven.
- Identifying responsible parties and holding them accountable.
- Creating a 20-year planning framework to ensure continuity beyond one administration.

The National Infrastructure Plan (NIP) aims to achieve:

- Re-industrialization through local manufacturing of inputs, components, and machinery.
- Skills development focused on critical areas.
- Promoting a greener economy.
- Empowerment initiatives.

The NIP consists of 18 Strategic Integrated Projects (SIPs) that bring together over 150 municipal infrastructure plans into a coherent package. These SIPs encompass both social and economic infrastructure across all nine provinces, with a focus on underdeveloped regions. These catalytic projects are intended to accelerate development and foster growth.

SPATIAL DIRECTIVES: While the Ndwedwe municipality is not explicitly named in the National Infrastructure Plan (NIP), it includes Strategic Infrastructure Projects (SIP) in the KwaZulu-Natal province that can be advantageous for Ndwedwe. These projects encompass road upgrades and maintenance on the N1, N2, and N3 in the Free State, Limpopo, and KwaZulu-Natal.

4.15. INDUSTRIAL POLICY ACTION PLAN (IPAP)

The main weakness identified in South Africa's long-term industrialization efforts is the failure to adequately replace the decline in employment share in traditional tradable sectors like mining and agriculture with a substantial increase in labour-intensive employment in non-traditional tradable goods and services, specially manufacturing. As a result, the objectives of IPAP are as follows:

- Facilitate a transition from relying on traditional commodities and non-tradable services to promoting value-added goods and

services that can compete in export markets and compete effectively against imports.

- Intensify the industrialization process and move towards a knowledge-rich economy.
- Promote a more labour-absorbing industrialization path, with a particular focus on tradable labour-absorbing goods and services, as well as economic linkages that foster employment creation.
- Encourage a broader-based industrialization path that includes increased participation of historically disadvantaged individuals and marginalized regions in the mainstream of the industrial economy.

SPATIAL DIRECTIVES: The NLM is not as industrialised as the municipalities surrounding it, and therefore opportunities can present themselves in agriculture-linked industrialisation. The SDP will need to look at opportunities in agri-processing as this industry has the potential to provide skills development and absorb the local labour force.

4.16. AGRICULTURAL POLICY ACTION PLAN

The Agriculture Policy Action Plan (APAP) aims to support the achievement of specific outcomes outlined in the Medium-Term Strategic Framework (MTSF) for the years 2014 to 2019. These outcomes include Decent Employment through Inclusive Growth (Outcome 4), Comprehensive Rural Development and Food Security (Outcome 7), and environmental asset protection (Outcome 10). APAP is in alignment with the New Growth Path (NGP) and the National Development Plan (NDP). It focuses on selected strategic value chains that play a crucial role in meeting the objectives of the NGP, NDP, and Industrial Policy Action Plan (IPAP). These value chains are identified based on their potential to contribute to food security, job creation, value of production, growth potential, and their role in improving the trade balance through export expansion and import substitution.

SPATIAL DIRECTIVES: The Agriculture Policy Action Plan (APAP) acknowledges that agriculture holds significant potential for job creation and is strategically linked to beneficiation opportunities. In the context of rural development, global evidence consistently highlights agriculture as a promising avenue to advance rural development goals. Agriculture plays a crucial role in ensuring food security, promoting agrarian transformation, and fostering rural development.

To enhance the impact of APAP, it is recommended to explore opportunities beyond rural development and land reform. For instance, in Ndwedwe, the province could take initiatives to increase the number of schools offering Agriculture as an assessed subject and provide support to these schools. Furthermore, the province could offer tertiary education bursaries to learners interested in pursuing Agricultural Studies. Such actions would represent a social capital investment to further the objectives of APAP and contribute to the overall development of Ndwedwe.

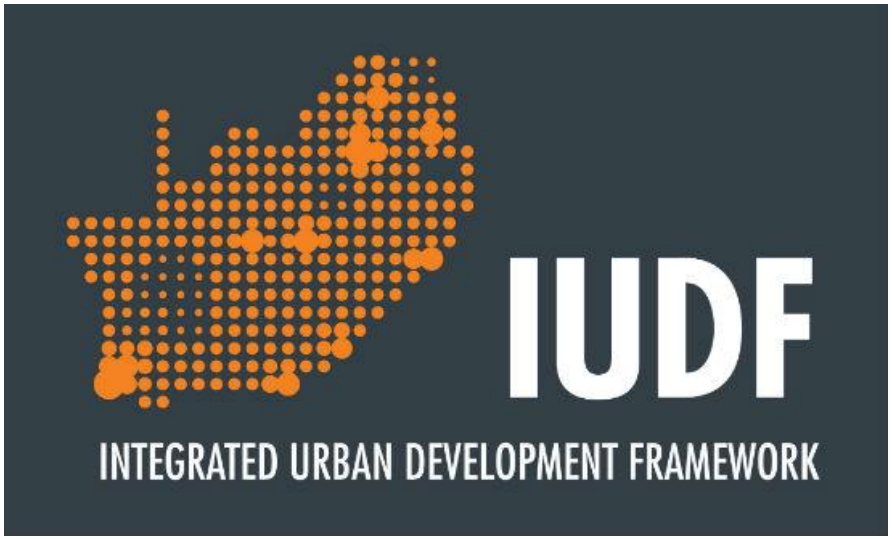
4.17. NATIONAL TRANSPORT MASTER PLAN (NATMAP), 2050

The primary objective of the National Transportation Master Plan 2005-2050 is to present a prioritized program for improving South Africa's transportation system. The ultimate aim is to establish a dynamic, sustainable, and long-term land use/multi-modal transportation system

that encompasses networks, infrastructure facilities, interchanges, termini facilities, and service delivery strategies throughout the country. The Master Plan identifies core directives or paradigm shifts, which include:

- Giving higher priority to the development of rail as a major transportation mode.
- Ensuring better integration between land use development and transportation planning.
- Placing increased emphasis on enhancing the development of several key national transport corridors.

4.18. INTEGRATED URBAN DEVELOPMENT FRAMEWORK



The Integrated Urban Development Framework (IUDF) addresses the challenges posed by urbanization trends and aligns with the National Development Plan (NDP) by establishing an urban development policy. This policy aims to accommodate the growing urban population through proper planning and the provision of essential infrastructure. In essence, the IUDF represents the government's vision for guiding the future growth and management of urban areas.

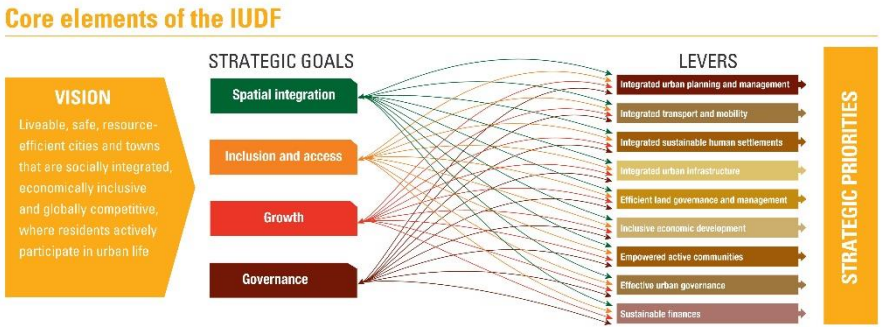


Figure 6: Core Elements of IUDF

The IUDF envisions creating liveable, safe, and resource-efficient cities and towns that foster social integration, inclusive economic opportunities, and global competitiveness. The framework revolves around four strategic goals, each interconnected with nine policy levers to address key priorities, including:

- Integrated urban planning and management.
- Integrated transport and mobility.
- Integrated sustainable human settlements.
- Integrated urban infrastructure.
- Efficient land governance and management.
- Inclusive economic development.
- Empowered active communities.
- Effective urban governance.
- Sustainable finances.

Through the IUDF, the government aims to ensure that urban areas are well-planned, sustainable, and conducive to active citizen participation in urban life.

SPATIAL DIRECTIVES: Ndwedwe Town is the only urban area in the municipality with the rest of the municipal area being rural in nature. The IUDF provides the following directives for spatial planning in urban areas:

- Coordinated and Integrated Planning: The IUDF emphasizes the importance of coordinated and integrated planning at various levels of government, including national, provincial, and local. It encourages the alignment of spatial plans to ensure cohesive and sustainable urban development.
- Inclusive Urban Development: The IUDF aims to promote inclusive urban development, ensuring that all citizens have access to basic services, infrastructure, and economic opportunities. This approach requires spatial planning that considers the needs of vulnerable and historically marginalized communities.
- Spatial Transformation: The IUDF advocates for spatial transformation to address the historical legacies of apartheid-era planning, which resulted in spatial inequalities. It seeks to create well-connected and integrated urban areas that facilitate social and economic interaction.
- Mixed-Use Development: The framework promotes mixed-use development, encouraging a blend of residential, commercial, and recreational spaces within urban areas. This approach aims to reduce travel distances and promote a compact urban form.
- Transit-Oriented Development (TOD): The IUDF supports the development of transportation systems that integrate with urban development, promoting TOD principles. TOD seeks to create vibrant and walkable neighbourhoods around public transport nodes.
- Sustainable Infrastructure: The IUDF emphasizes the need for sustainable urban infrastructure that considers environmental impacts and resource efficiency. Spatial planning plays a crucial role in identifying suitable locations for such infrastructure.
- Urban-Rural Linkages: The IUDF recognizes the importance of strong linkages between urban and rural areas. Spatial planning should address connectivity between urban centres and surrounding rural communities to promote balanced development.
- Empowered Communities: The IUDF encourages participatory planning processes that involve communities in decision-making regarding urban development. Spatial planning should reflect the needs and aspirations of local residents.
- Promoting Economic Opportunities: The IUDF aims to create cities and towns that offer economic opportunities to all residents. Spatial planning should identify areas for economic growth, job creation, and investment.
- Resilience and Climate Adaptation: The IUDF considers climate change and resilience in urban planning. It calls for spatial planning that addresses climate risks and fosters environmentally sustainable practices.

The Integrated Urban Development Framework has far-reaching implications on spatial planning in South Africa, emphasizing

sustainable, inclusive, and well-coordinated urban development that addresses historical imbalances and promotes economic growth and social cohesion.

4.19. NATIONAL STRATEGY FOR SUSTAINABLE DEVELOPMENT

The National Strategy for Sustainable Development and Action Plan (2011-2014) presents South Africa's vision for sustainable development as follows: "South Africa aims to become a self-reliant, economically prosperous, and sustainable nation that upholds its democratic principles. This involves meeting the essential human needs of its population, responsibly managing its limited ecological resources for both present and future generations and fostering efficient and effective integrated planning and governance through collaboration at national, regional, and global levels."

SPATIAL DIRECTIVES: The NSSD has the priorities that find alignment with the municipal SDP:

- Priority 1: Enhancing systems for integrated planning and implementation.
- Priority 2: Sustaining our ecosystems and using natural resources efficiently.
- Priority 2: Sustaining our ecosystems and using natural resources efficiently.
- Priority 3: Economic development through investing in sustainable infrastructure
- Priority 3: Towards a green economy
- Priority 4: Creating sustainable human settlements.
- Priority 4: Building sustainable communities.
- Priority 5: Responding appropriately to emerging human development, economic and environmental challenges. (Including climate change, rising oil prices, globalisation and trade)
- Priority 5: Responding effectively to climate change.



Figure 7: NSSD Priorities

5. PROVINCIAL POLICIES AND LEGISLATION

5.1. KZN PROVINCIAL GROWTH AND DEVELOPMENT STRATEGY



The KwaZulu Natal Provincial Growth and Development Strategy (PGDS) is a comprehensive long-term plan formulated by the government of KwaZulu-Natal, a province in South Africa, to guide its economic and social progress over a 25-year duration. Its primary aim is to foster sustainable economic growth, generate employment opportunities, and alleviate poverty in the province. The development of KZN PGDS involved a consultative process that engaged various stakeholders, including government departments, civil society organizations, and the private sector. The strategy envisions KwaZulu-Natal as a thriving and inclusive province, providing all citizens with access to opportunities and quality services. It outlines a wide range of goals, objectives, and initiatives encompassing economic development, infrastructure development, social welfare, environmental sustainability, and effective governance.

SPATIAL DIRECTIVES: The KwaZulu-Natal Provincial Growth and Development Strategy (PGDS) outlines a comprehensive plan for the economic and social advancement of the entire province, including all municipalities within it, such as Ndwedwe Municipality.

The PGDS identifies several key priority areas for development, which encompass fostering economic growth and job creation, ensuring access to essential services like water, sanitation, and electricity, and enhancing infrastructure such as roads, public transport, and ICT. It also places significant emphasis on addressing the challenges of poverty, inequality, and social exclusion through targeted interventions and programs.

Concerning Ndwedwe Municipality, the PGDS acknowledges the municipality's potential contribution to the overall economic growth of the province, particularly in sectors like agriculture, tourism, and manufacturing. The strategy also emphasizes the importance of improving access to basic services such as water and sanitation within the municipality and enhancing the quality of life for its residents by providing social amenities like healthcare and education.

In essence, the KZN PGDS serves as a comprehensive framework for the development of all municipalities in the province, including Ndwedwe, with the overarching goal of promoting inclusive and sustainable economic growth and social progress across the entire region.

5.2. KZN PROVINCIAL GROWTH AND DEVELOPMENT PLAN

The KZN Provincial Growth and Development Plan (PGDP) is a strategic blueprint crafted by the government of KwaZulu-Natal province in South Africa. It aims to foster economic growth and development within the region. The plan outlines a vision for the province and delineates essential priorities, objectives, and strategies to realize this vision. Encompassing various sectors like agriculture, tourism, manufacturing, and infrastructure development, the KZN PGDP's overarching aim is to establish a sustainable and inclusive economy that benefits all residents of KwaZulu-Natal.



Figure 8: PGDP strategic goals and objectives

SPATIAL DIRECTIVES: As per the plan, Ndwedwe Municipality is situated in the southern region of the province and primarily exhibits a rural landscape. It has an approximate population of 135,000 individuals and is marked by notable levels of poverty and unemployment.

The KZN PGDP identifies various significant challenges encountered by Ndwedwe Municipality, encompassing inadequate essential infrastructure like roads, water, sanitation, and electricity. The plan also acknowledges limited economic opportunities, with many residents relying on subsistence agriculture for their livelihoods. Additionally, the municipality faces substantial hurdles related to education and healthcare.

To tackle these issues, the KZN PGDP presents several proposed actions for Ndwedwe Municipality. These include investing in infrastructure to enhance access to fundamental services, promoting agribusiness for job creation and economic advancement, and implementing initiatives to improve access to education and healthcare services. The plan emphasizes the need for collaborations between the public and private sectors to drive development within the municipality.

5.3. KZN PROVINCIAL SPATIAL ECONOMIC DEVELOPMENT STRATEGY

The development of the Provincial Spatial Economic Development Strategy (PSEDS) aims to achieve the objectives of ASGISA (Accelerated and Shared Growth Initiative for South Africa) within the framework of the NSDF (National Spatial Development Perspective). The key goals of the PSEDS are as follows:

- Focus on strategic investment and development initiatives to maximize sustainable impact (Massification).
- Utilize complementarities and facilitate consistent decision-making processes.
- Establish processes and mechanisms to achieve strategic coordination, interaction, and alignment, moving beyond mere integration and coordination procedures.

It is recognized that social and economic development is not uniformly distributed, and spatial disparities exist due to factors like the distribution of natural resources, historical imperatives, and cultural influences. These disparities have been exacerbated by apartheid-era spatial planning. The PSEDS emphasizes that all areas in the province will receive investments in development and basic services.

The sectors identified as key drivers of the provincial economy, which can address unemployment and poverty, are as follows:

- Agriculture, including agri-industry, holds potential to reduce poverty, especially in rural areas.
- Industry, including heavy and light industry and manufacturing, centres around nodes like eThekwini and UMhlathuze, with corridors connecting them to Howick and other secondary nodes.
- Tourism, with primary potential in beach tourism, cultural tourism, and ecotourism markets, focused on areas like Southern Zululand and Dolphin Coast, Elephant Coast, Pietermaritzburg and Durban region, and the Drakensberg region.

To fully tap into the potential of these sectors, the PSEDS emphasizes the need to unlock latent potential in Ingonyama Trust lands, support land reform initiatives, align the Agricultural Revolution and Land Reform Programme, and develop and transform subsistence agriculture into small-scale commercial agriculture. The PSEDS also identifies specific tourism products of provincial importance, such as arts & crafts routes in Midlands Meander and Albert Falls Amble, beach tourism linked to cultural tourism, Drakensberg region, St. Lucia & surrounding big five reserves, and Zulu Heritage & Cultural Trail.

SPATIAL DIRECTIVES: Ndwedwe is identified as a poverty intervention node in the PSEDS. These are nodes with generally low-income levels and in need of strategies and interventions to bolster economic development.



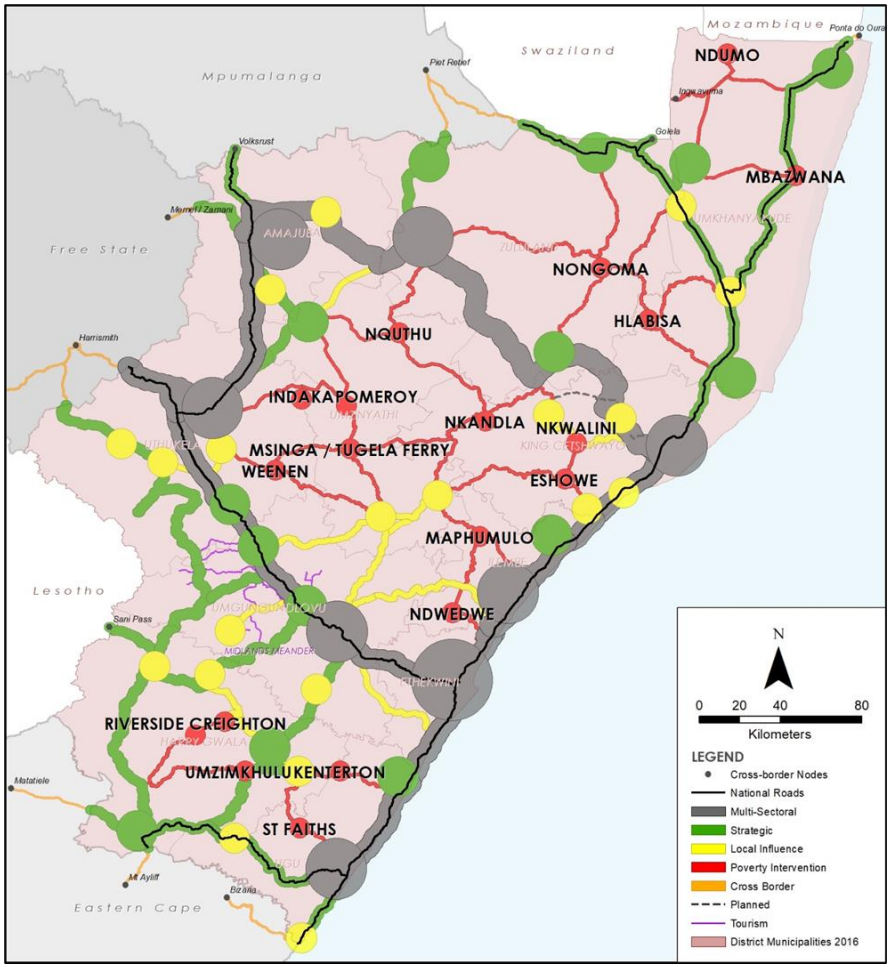


Figure 9: PSEDS Poverty Intervention Nodes

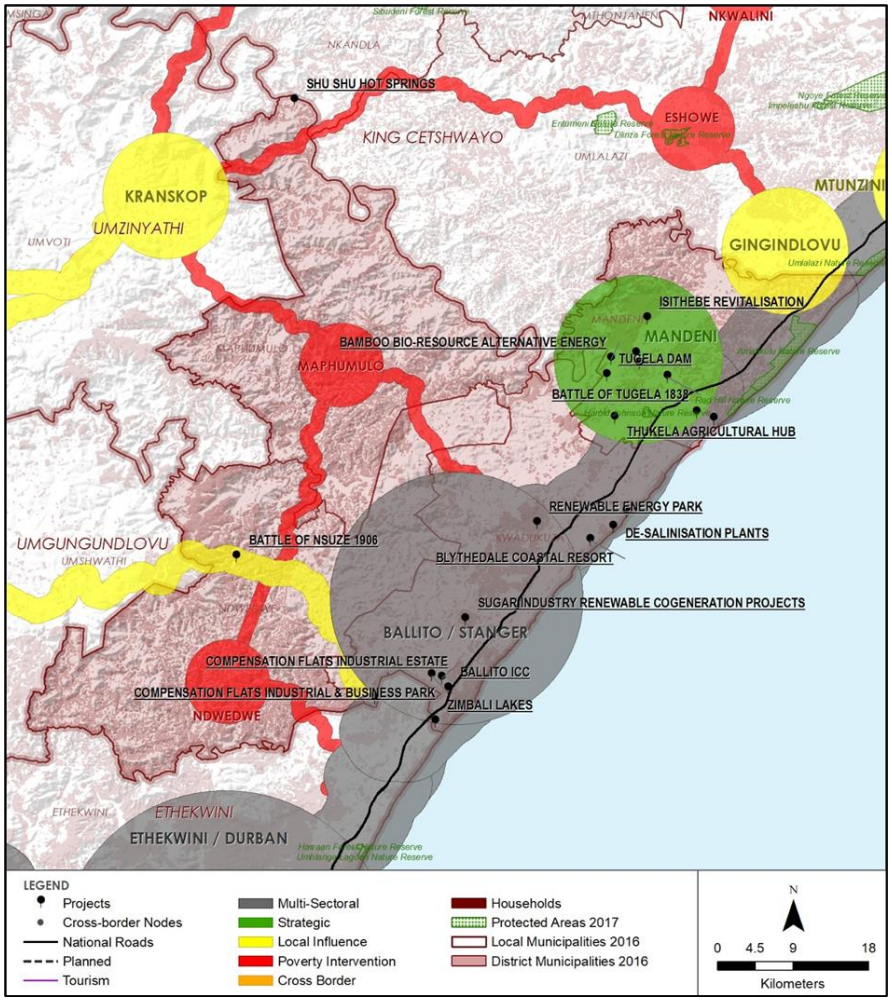


Figure 10: ILembe DM in PSEDS

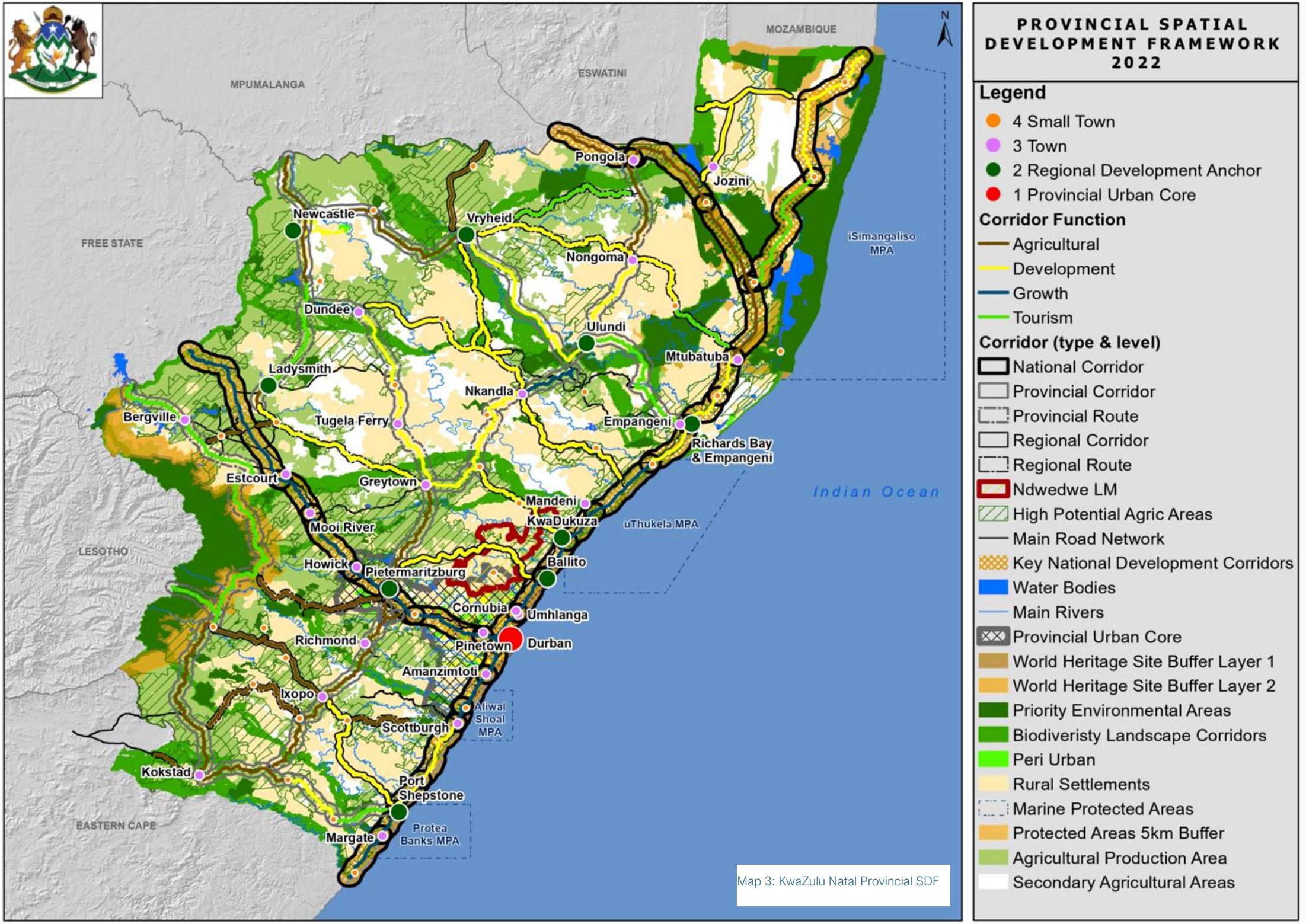
5.4. KZN PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK, 2021

The KZN Provincial Spatial Development Plan, known as the "PSDF," underwent a review in 2021, offering a long-term vision for the province's spatial development. It outlines various policies, strategies, and actions essential to realizing this vision. At its core, the PSDF concentrates on fostering sustainable and inclusive economic growth and development across the province. It tackles spatial imbalances, poverty, and inequality, aiming to achieve a more integrated and efficient spatial structure. The framework also addresses several spatial challenges confronting the region, such as inadequate infrastructure, disparities, and the need for better services in underserved areas. To tackle these challenges, the PSDF proposes specific interventions, including the development of sustainable human settlements with integrated spatial planning, promotion of economic growth and employment opportunities, and enhancement of transportation and communication networks. For KwaZulu-Natal Province, the PSDF serves as a crucial planning tool, providing a comprehensive and coordinated approach to spatial development. Its ultimate goals are to stimulate economic growth, foster social development, and ensure environmental sustainability.

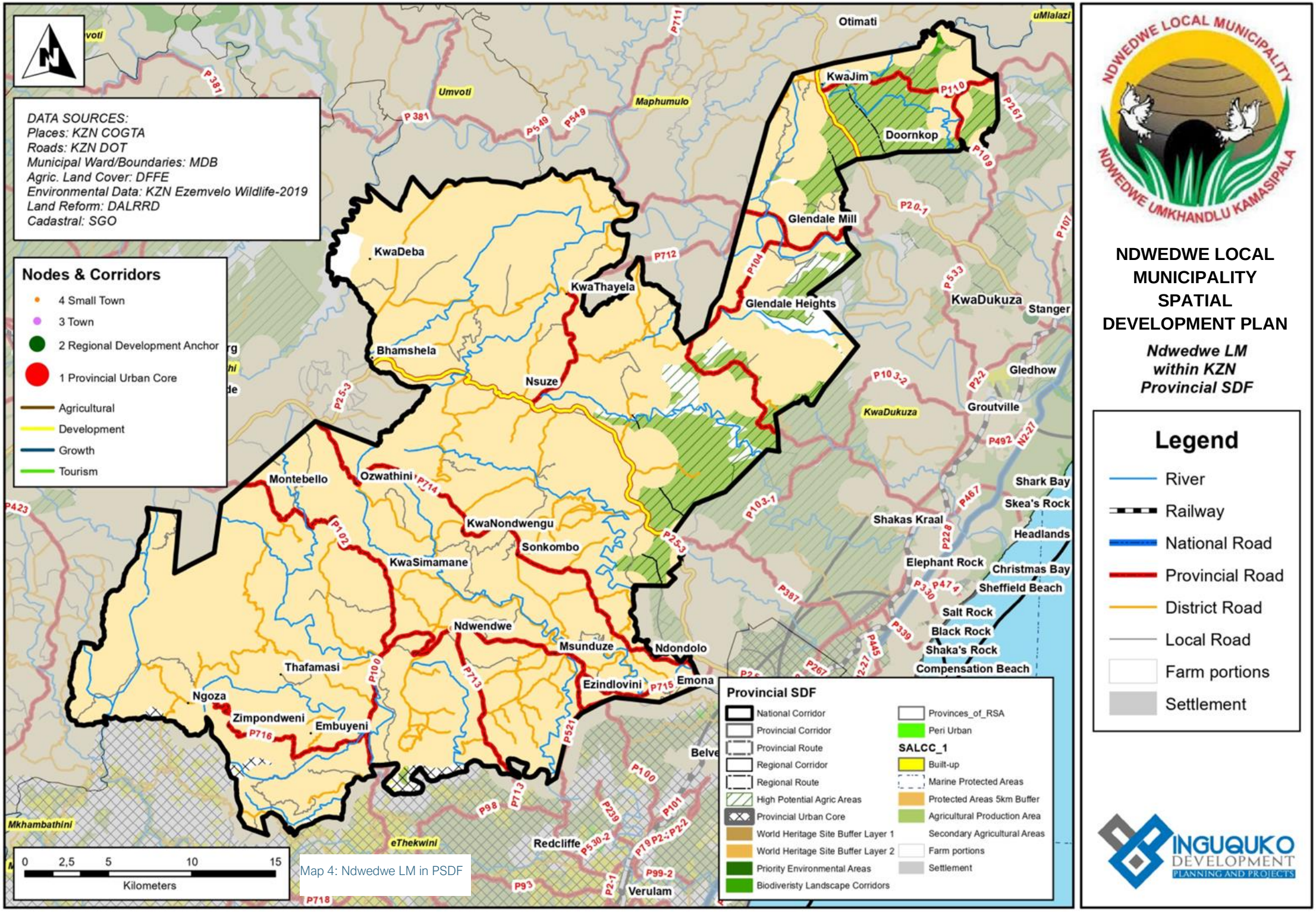
SPATIAL DIRECTIVES: The PSDF identified Ndwedwe town as a Small Town. The PSDF has proposed the following key interventions for the development of small towns in the province:

Certain strategic interventions are specifically aimed at these nodes and the areas immediately surrounding them. These interventions may include:

- Identifying secondary economic growth areas.
- Promoting these areas as secondary nodes to support corridor development.
- Encouraging compact urban development and combating urban sprawl.
- Facilitating focused investment and managed growth in these regions.
- Advocating for densification (brown agenda) and infill development.
- Establishing economies of scale to ensure effective and affordable service delivery.
- Implementing infill development in areas with high levels of available services (restructuring nodes).
- Increasing residential density (number of dwellings) in these locations.
- Focusing on socio-economic upliftment efforts.
- Ensuring sufficient bulk infrastructure services (demand and supply).
- Prioritizing spending on infrastructural upgrading needs (new and maintenance).
- Promoting efficient and effective public transportation systems connected to multi-modal facilities.
- Establishing a single land use management system (township formalization).
- Concentrating investment in people rather than just specific places in designated social inclusion areas.



Map 3: KwaZulu Natal Provincial SDF



Map 4: Ndwedwe LM in PSDF

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Ndwedwe LM within KZN Provincial SDF

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS

5.5. KZN HUMAN SETTLEMENTS MASTER SPATIAL PLAN, 2016

The KwaZulu-Natal (KZN) Human Settlements Master Spatial Plan (referred to as the "MSP") is a comprehensive and forward-looking development blueprint for human settlement development in the province of KZN, South Africa. This long-term plan outlines the vision, objectives, and strategies to be pursued over the next two decades with the aim of fostering sustainable human settlements and enhancing the overall well-being of residents.

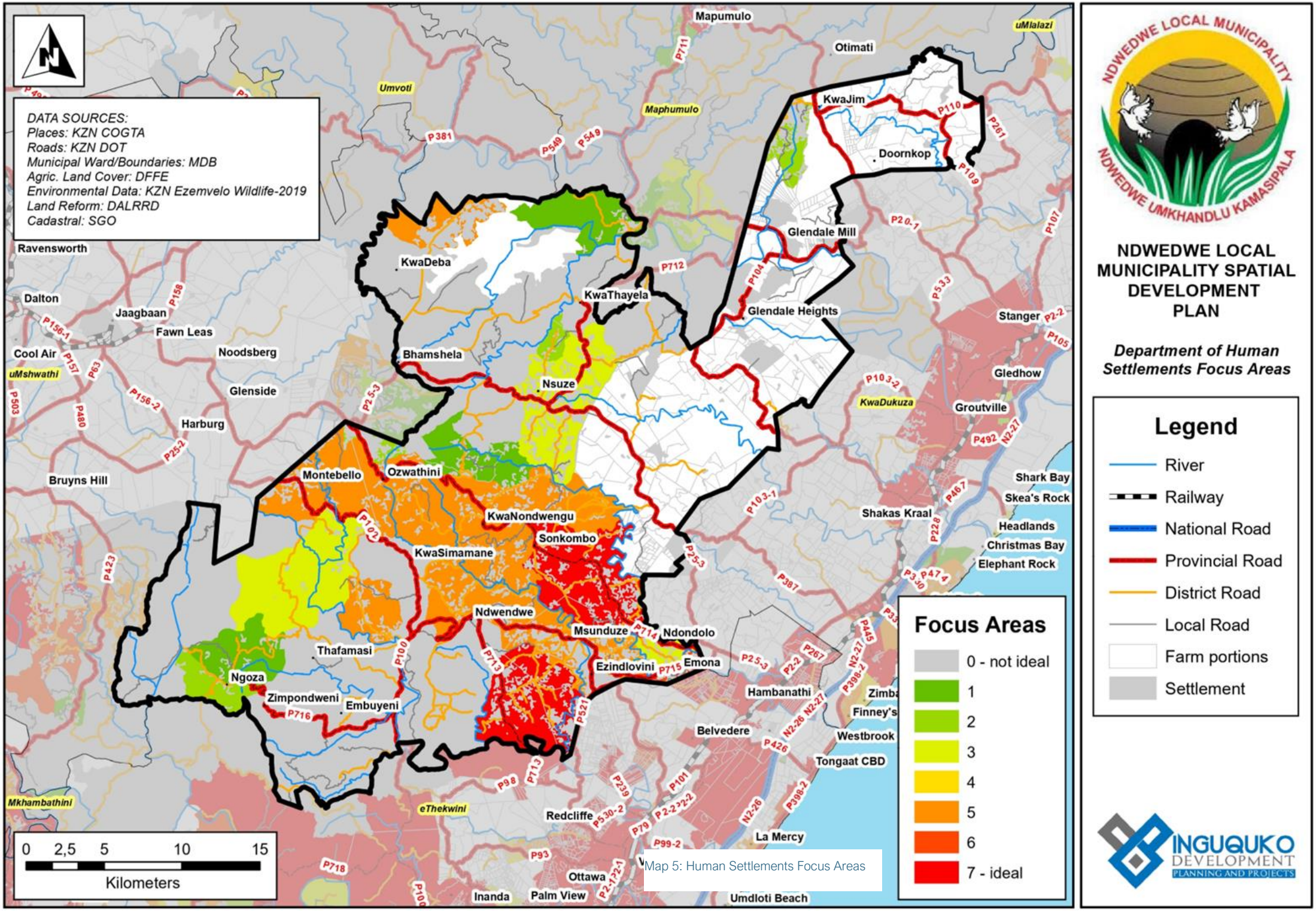
With a horizon of 20 years, the MSP serves as a guiding document for spatial development, land use, and infrastructure planning. It emphasizes the promotion of compact urban development, the encouragement of densification, and significant investments in infrastructure and public transportation systems.

The plan identifies priority areas for development, including rural regions, informal settlements, and underdeveloped urban areas. To address the needs of these areas effectively, the MSP puts forth specific projects that focus on improving housing, land tenure, infrastructure, and service delivery.

Developed through an inclusive and participatory process, the KZN Human Settlements Master Spatial Plan engaged various stakeholders, including government departments, municipalities, community organizations, and private sector entities. Having been officially adopted in 2019, this plan is expected to shape and direct human settlement development in KZN until the year 2040.

SPATIAL DIRECTIVES: According to the MSP the Ndwedwe Local Municipality has a housing demand of approximately 67 000 units. This needs to be addressed by the SDP in that the document will need to provide strategies on land identification. The municipality will also need to establish institutional arrangements with the Housing Development Agency for the facilitation of the acquisition of privately owned land for human settlements.





Map 5: Human Settlements Focus Areas

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Department of Human Settlements Focus Areas

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS

6. DISTRICT AND LOCAL POLICIES

6.1. ILEMBE DISTRICT MUNICIPALITY INTEGRATED DEVELOPMENT PLAN, 2023/24

The Integrated Development Plan (IDP) is a mandatory five-year plan established under the Municipal Systems Act, 2000. This legislation designates the IDP as the primary strategic planning tool that guides and informs all aspects of a Municipality's planning, development, and decision-making processes.

To comply with the Act, the IDP must be in harmony with national and provincial strategies. It is put into action through strategic policies and business plans, which prioritize the realization of the IDP's vision, objectives, projects, and programs. The IDP undergoes an annual review to ensure its relevance and effectiveness.

The document presents the IDP review for the 2023-2024 term, reaffirming the Municipality's commitment to expedite service delivery, address poverty, meet the needs of its citizens, and foster job creation. The IDP review aims to further align the IDPs of Local Municipalities, facilitating cross-sectoral integration and vertical and horizontal alignment with national and provincial government initiatives, strategic directives, policies, and procedures, including the Expanded Public Works Programme (EPWP), all within the context of a Credible IDP Framework.

SPATIAL DIRECTIVES: The IDM identifies challenges that hinder development in the district and in turn the local municipalities. These are as follows:

AGING INFRASTRUTURE: The district faces a funding shortage, preventing the complete implementation of all necessary water and sanitation projects to address existing backlogs and accommodate new developments. Moreover, the District experiences periodic disruptions in water and sanitation services due to the deterioration of its infrastructure over time.

LIMITIED SOURCES OF WATER: Among the rivers considered, the uThukela River appears to be the most feasible option as a Regional Bulk Water Source to supply KwaDukuza and Mandeni Municipalities. However, its water availability is restricted by upstream abstractions, which place limitations on the amount of water that can be utilized.

HIGH UNEMPLOYMENT RATES: Although the majority of people in the district fall within the working-age group, the existing employment opportunities are insufficient to accommodate them. As a result, the district is grappling with a high unemployment rate, which mirrors the prevailing challenge across the country. Additionally, this situation prompts skilled labour to migrate to other towns and cities in search of better prospects.

LACK OF INVESTMENT IN RURAL AND HINTERLAND AREAS: The Tourism sector still faces challenges in promoting and attracting investment towards the rural and hinterland areas of the district. The commercial sector is predominantly concentrated in specific areas such as KwaDukuza, Ballito, and Mandeni/Sundumbili, with limited development in rural service nodes like Maphumulo and Ndwedwe.

Despite these challenges, considerable progress has been achieved in addressing the key development issues within the Municipality.

UNSUSTAINABLE DEVELOPMENT PRACTICES AND HUMAN SETTLEMENTS: The rise in both formal and informal settlements, along with the influx of people to urban centres like KwaDukuza and Mandeni, is placing immense pressure on the existing infrastructure. Furthermore, the expansion of informal settlements into protected and high-risk areas is a matter of great concern.

6.2. ILEMBE DISTRICT MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK

The iLembe District Municipality Spatial Development Framework (SDF) is a strategic planning document that outlines the long-term vision, goals, and spatial development strategies for the iLembe District Municipality in KwaZulu-Natal, South Africa. The SDF serves as a comprehensive blueprint for guiding and coordinating land use, infrastructure development, and spatial planning within the district over a specific time horizon. Key components of the iLembe District Municipality Spatial Development Plan include:

- Vision and Objectives: The SDF sets out a clear and aspirational vision for the spatial development of the district and defines the objectives to be achieved to realize this vision.
- Spatial Analysis: It involves a thorough analysis of the district's existing spatial patterns, land use, infrastructure, and demographic trends to identify challenges and opportunities.
- Spatial Strategies: Based on the analysis, the SDP formulates strategic spatial development strategies and policies to guide future growth, development, and land use decisions.
- Land Use Planning: The SDP provides guidance on the allocation of land for various uses, such as residential, commercial, industrial, agricultural, and conservation areas.
- Infrastructure Planning: It emphasizes the development of infrastructure, transportation networks, and services to support the envisioned spatial development.
- Environmental Considerations: The SDP takes into account environmental conservation, sustainable development, and climate change adaptation and mitigation measures.
- Stakeholder Engagement: The SDP is typically developed through a participatory process, engaging various stakeholders, including government departments, municipalities, communities, and private sector entities.
- Implementation Strategies: The SDP outlines the mechanisms for implementing the proposed spatial development strategies, including phasing, prioritization of projects, and resource allocation.

The iLembe District Municipality Spatial Development Plan plays a critical role in guiding the district's growth and development, promoting sustainable land use, and ensuring a coordinated approach to spatial planning that aligns with broader regional and national development goals.

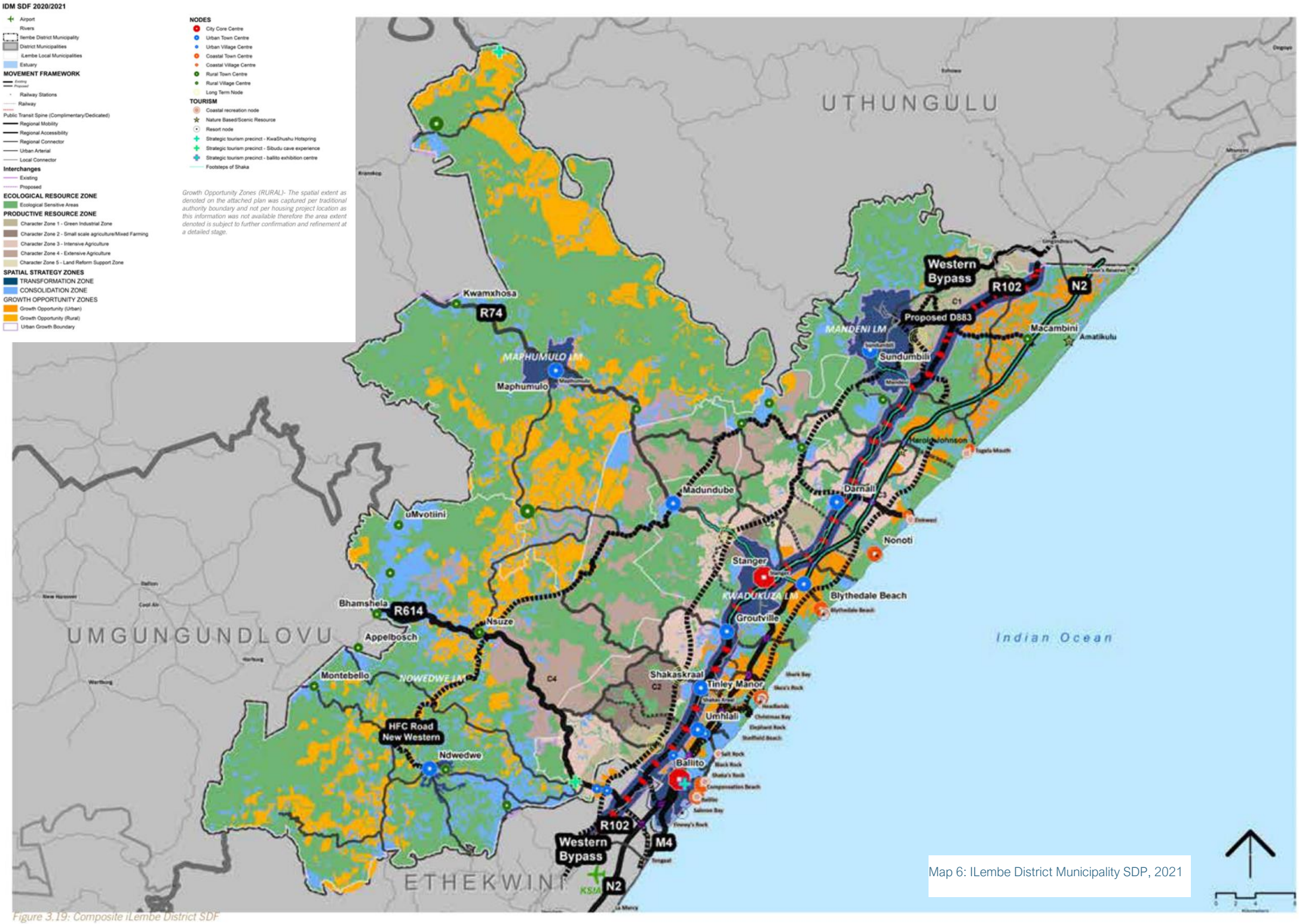
The District Municipality has set the following development vision for the future development of its jurisdiction:

"By 2030 iLembe District Municipality will be a sustainable people-centred economic hub providing excellent services and quality of life".

SPATIAL DIRECTIVES: Ndwedwe Town is earmarked as a "Consolidation Zone" which is described already established settled areas, encompassing both informal and formal settlements. This zone focuses on optimizing the existing areas by infilling vacant land, increasing density, and upgrading existing settlements through in-situ improvements, individual site enhancements, or precinct/estate upgrades. By doing so, it prevents urban sprawl and maximizes the utilization of existing infrastructure to create more opportunities for compact settlement and cohesive urban form. The following are the desired uses for these areas:

SHOPPING SPACE: This category encompasses various elements, including:

- Neighbourhood Shopping Centre/Retail/Office Space: This pertains to areas designated for local commercial activities, such as small shopping centres, retail outlets, and office spaces serving the nearby community.
- Social Facilities and Community Facilities: This includes spaces set aside for social amenities, such as community centres, police stations, fire stations, clinics, and private medical centres.
- Informal Sector - Street Traders: Identifying specific areas along pedestrian-intensive routes, public transportation facilities, or local clusters/nodes to accommodate street traders and provide necessary amenities.
- Home-Based Shops (Tuck Shops / Spaza Shops): Enabling and regulating these types of activities through a special consent process, allowing for home-based businesses like tuck shops or spaza shops to operate legally and contribute to the local economy.



Map 6: ILembe District Municipality SDP, 2021

Figure 3.19: Composite iLembe District SDF

6.3. ILEMBE DISTRICT MUNICIPALITY LOCAL ECONOMIC DEVELOPMENT STRATEGY

Under the Vuthela iLembe LED program, the Municipality engaged a service provider to reassess its LED District Strategy, which was initially adopted in 2015. Although a draft of the strategy has been prepared, its formal adoption was delayed due to the COVID-19 outbreak. Given the changing economic landscape, the underlying assumptions of the draft strategy are now outdated and require re-evaluation before it can be officially adopted. Moreover, the Municipality's current focus has shifted towards the Economic Recovery Plan, adding further impetus to review and update the LED District Strategy.

SPATIAL DIRECTIVES: The following challenges have been identified in the IDM LED Strategy that relate to the NLM:

- Over-burdened and under-capacitated LED Units
- Ineffective relationships between private and public sectors
- Coordination of government departmental policies and strategies at District and Local levels
- Discord between business, labour, government and civil society
- Inadequate levels of skills to respond to local economic opportunities.
- Limited financial resources for LED project implementation by the Municipalities
- The identification and implementation of projects that are not sustainable in the short to medium term, especially financially sustainability.
- New leadership entering the local government environment every 5 years with new sets of priorities.
- COVID-19 pandemic and disruption to economic activities.
- Business forums hindering the development and construction industry.

6.4. ILEMBE BIODIVERSITY SECTOR PLAN (BSP)

The Biodiversity Sector Plan (BSP) has been created specifically for the iLembe District Municipality, serving as a preliminary step towards a comprehensive bioregional plan. The primary objective of the bioregional plan is to map out biodiversity priorities, highlighting Critical Biodiversity Areas and Ecological Support Areas. Alongside this mapping, the plan provides essential land use planning and decision-making guidelines. These guidelines are intended to inform and guide various sectors involved in policies and decision-making processes that have an impact on biodiversity, including land use planning, environmental assessments, authorizations, and natural resource management. The ultimate goal is to promote effective and sustainable management of biodiversity within the iLembe District Municipality.

SPATIAL DIRECTIVES: The NLM Spatial Development Plan (SDP) should strive to achieve biodiversity targets by implementing the following measures:

- Consult the BSP map to determine the biodiversity conservation status of expansion areas.
- Refer to the land use guidelines within the BSP to identify compatible land uses and management types based on the biodiversity status of the land.
- Ensure that Protected Areas and locations identified as critical for biodiversity or ecosystem maintenance by the BSP are

appropriately buffered from the impacts of development and land use changes.
- Implement alien clearing programs to address the issue of invasive species.

By incorporating these actions into the SDP, the NLM can effectively contribute to biodiversity conservation and promote sustainable development practices that protect and enhance the natural environment.

6.5. ILEMBE ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)

The legal foundation of an Environmental Management Framework (EMF) is enshrined in various sections of the National Environmental Management Act, 1998 (NEMA), as amended. Specifically, Sections 24(2) & (3), Section 24(4) (bA)(i), Section 24O(1)(b)(v), and Section 44(2) of NEMA empower the Minister of Water and Environmental Affairs or a Member of the Executive Council (MEC) designated by a provincial premier with responsibility for environmental affairs to compile environmental information and maps for specific geographical areas. These compiled materials must be considered in decision-making processes by relevant authorities.

The Environmental Impact Assessment (EIA) Regulations, found in Chapter 8, Part 1, which are published under Chapter 5 of NEMA, outline the specific regulatory requirements governing the development of an EMF. As per these regulations, either the Minister or an MEC has the authority to initiate an EMF for a particular area. The process involves subjecting a draft EMF to a public participation procedure. Following the review of the draft EMF in light of any representations, objections, and comments received during the public participation process, the Minister or MEC may adopt the EMF as an official environmental management tool.

SPATIAL DIRECTIVES: The Environmental Management Framework (EMF) comprises biophysical information intended to serve as a guide for the Spatial Development Plan (SDP) in determining appropriate and sustainable land use options.

6.6. ILEMBE DISTRICT MUNICIPALITY STRATEGIC ENVIRONMENTAL ASSESSMENT 2016 AND STRATEGIC ENVIRONMENTAL MANAGEMENT PLAN

In essence, a Strategic Environmental Assessment (SEA) aims to present a clear overview of the current environmental conditions within a specific geographical area. This assessment involves identifying and addressing issues that pose a threat or have the potential to endanger the future state of the environment in that area. Based on these findings, the SEA provides recommendations to tackle these issues and prevent environmental degradation.

The primary objectives of conducting an SEA are twofold: firstly, to ensure a high level of environmental protection, and secondly, to promote sustainable development. Achieving these objectives involves integrating environmental considerations into the development and implementation of designated Plans and Programmes, thus contributing to a balanced approach that safeguards the environment while fostering sustainable growth and development.

SPATIAL DIRECTIVES: The NLM needs to synchronize with the ILM SEA to effectively map out environmentally sensitive features and establish a management framework, organizing these features into management zones. This approach aims to ensure the responsible and sustainable management of these features for the well-being and prosperity of future generations.

6.7. ILEMBE DISTRICT SPATIAL ECONOMIC DEVELOPMENT STRATEGY(DSEDS)

The DSEDS strives to capitalize on economic opportunities and advantages within the district to foster well-balanced economic growth across the region. The PSEDS conducts a thorough analysis of the district's economic foundation, utilizing various studies and frameworks to establish a comprehensive information base for coherent and detailed planning. Additionally, the PSEDS recognizes the need for growth in rural areas and addresses historical challenges, including infrastructure backlogs and land tenure issues, to ensure equitable and sustainable development.

SPATIAL DIRECTIVES: The NLM is encouraged to collaborate with the district municipality to formulate a comprehensive and long-term strategy that will guide future planning and infrastructure prioritization. The main goal of this collaboration is to achieve economic growth, job creation, and spatial equity within the region. The NLM's Spatial Development Plan (SDP) should be aligned with the following principles outlined in the DSEDS:

- Focus on investing in areas with high need and potential for development.
- Direct development towards designated activity corridors and nodes.
- Prioritize social development in underprivileged areas.
- Emphasize leveraging the district's strengths to combat poverty and generate employment opportunities.

By adhering to these principles, the NLM can effectively contribute to sustainable and inclusive growth while addressing the specific needs and challenges of the district.

6.8. ILEMBE DISTRICT MUNICIPALITY CLIMATE CHANGE RESPONSE STRATEGY AND PLAN 2017 (CCRS)

The Local Government Climate Change Support (LGCCS) program facilitated the development of the Climate Change Vulnerability Assessment and Response Plan for IDM. As part of this program, crucial climate change vulnerability indicators were identified for IDM, highlighting sectors believed to be at risk of climate change effects. These sectors encompass:

- Agriculture
- Biodiversity and Environment
- Coastal and Marine
- Human Health
- Disaster Management, Infrastructure, and Human Settlements
- Water

The introduction of these indicators to IDM was intended to support the formulation of a comprehensive Climate Change Response Plan,

enabling the municipality to address climate-related challenges effectively.

SPATIAL DIRECTIVES: Climate change poses significant threats to various aspects of KwaZulu-Natal, including water resources, food security, health, infrastructure, ecosystem services, and biodiversity. When formulating the ILM Spatial Development Plan (SDP), due consideration should be given to the specific context of rural areas, taking into account their unique challenges and vulnerabilities.

In rural areas, the majority of the population relies heavily on natural resources for their daily activities and economic pursuits, particularly those involved in informal markets. Therefore, the SDP should address the specific needs of these areas to ensure their resilience and sustainable development in the face of climate change impacts.

Furthermore, the SDP should identify and prioritize areas and sectors that are most vulnerable to climate change effects. Adaptive measures should be formulated and implemented in conjunction with the responses provided in the Climate Change Response Strategy (CCRS) to enhance the region's ability to cope with and mitigate the adverse impacts of climate change.

6.9. ILEMBE DISTRICT MUNICIPALITY WATER SERVICES DEVELOPMENT PLAN

In 2003, the district assumed the responsibility of being the Water Services Authority and Water Services Provider for the iLembe region. In 2016, the Municipality adopted its Water Services Development Plan (WSDP) with the aim of providing water and sanitation services across the entire district and addressing any existing backlogs. The Technical Services Department is tasked with the responsibility of ensuring the provision of water and sanitation services throughout the district, thus working towards the elimination of any service gaps.

SPATIAL DIRECTIVES: Umgeni Water is executing this project with the aim of supplying bulk water to address the water scarcity issues in Ndwedwe. So far, three (3) phases of the project have been successfully completed. Currently, iLembe is benefiting from the water supply provided in phase 3, extending to Nondabula (Ward 9).

Phase 1 is designated to supply water to the Wosiyane and KwaChili/Shangase areas, while Phase 5 will enhance the water supply to Ozwathini, Ndwedwe Town, and all areas in between, including Wards 2, 3, 4, 6, 7, and 8. The construction of these phases was scheduled to commence in September 2021.

Phases 4, 5, and 6 are in different stages of implementation. Once completed, they will effectively supplement the bulk water requirements for Ndwedwe and Maphumulo regions. The total cost of the project is estimated at around R2.2 billion.

The primary goal of this project is to provide adequate bulk water and sanitation services to Ndwedwe Town. However, Ward 15's project is currently on hold due to underperforming service providers. A new service provider will be appointed to develop a business plan that will increase the capacity of the plant to meet the growing demands in the area.

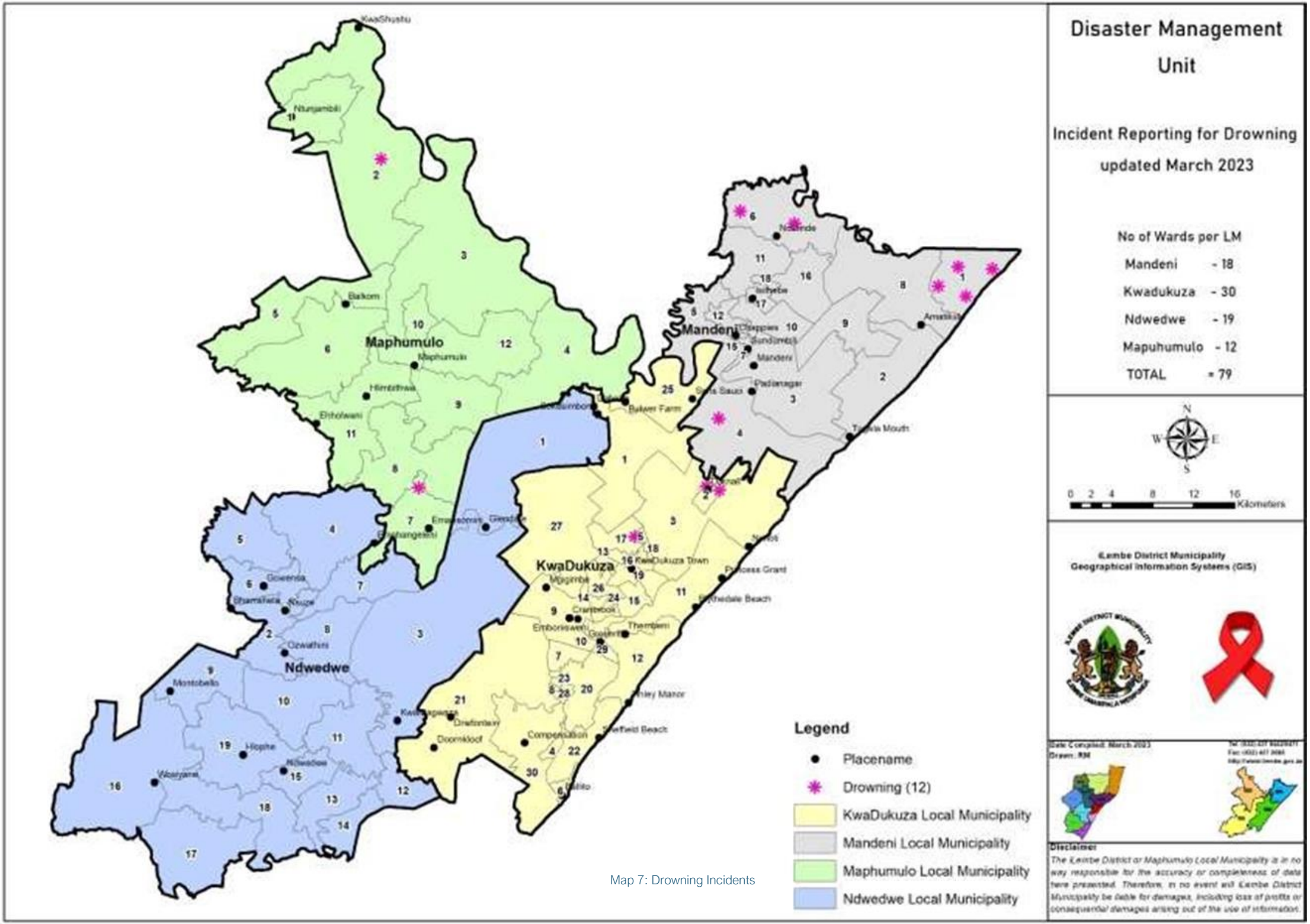
6.10. ILEMBE DISTRICT MUNICIPALITY DISASTER MANAGEMENT PLAN

iLembe District Municipality has a fully operational District Disaster Management Centre (DDMC) established in accordance with the Disaster Management Act No. 57 of 2002. The DDMC is located at No. 12 Haysom Road in KwaDukuza. Acknowledging the lack of firefighting capabilities within the district and its associated municipalities, iLembe District recognizes that only KwaDukuza and Mandeni have established firefighting services. Ndwedwe Local Municipality has taken steps to initiate the establishment of a firefighting service, but currently, there are no firefighting services in iLembe District and Maphumulo Local Municipality.

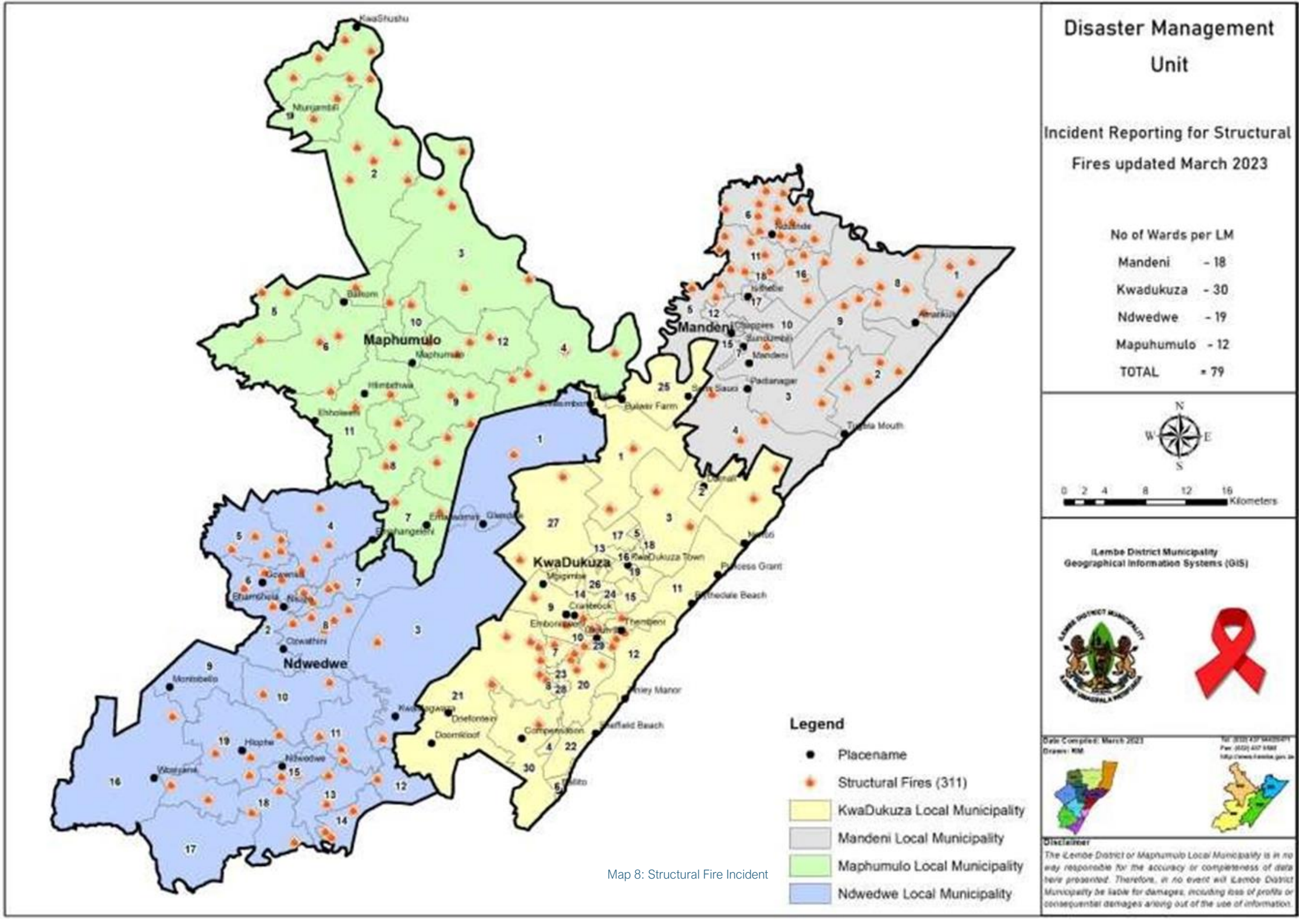
To address this issue and develop firefighting capacity within the district, iLembe has prepared a Draft Conceptual Document with the specific goal of building firefighting capabilities. Various institutional measures have been put in place to ensure compliance with disaster management legislation and policies.

The iLembe District Municipality's Disaster Management Plan was initially developed in 2009. Subsequently, it underwent a review process, which was completed and adopted by the iLembe District Council during the 2018/19 financial year. Additionally, the iLembe District Disaster Management Centre has made it a practice to internally review the District Disaster Management Plan on an annual basis. The primary purpose of the iLembe District Disaster Risk Management Sector Plan is to establish a comprehensive framework for implementing the provisions outlined in the Disaster Management Act No. 57 of 2002, including the Disaster Management Amendment Act No. 16 of 2015, and the National Disaster Risk Management Policy Framework of 2005. It also encompasses relevant aspects of the Municipal Systems Act No. 32 of 2000. This Sector Plan is designed to facilitate coordination among various departments, agencies, and jurisdictions involved in disaster and disaster risk management interventions. Both disaster risk management and disaster response activities are to be coordinated effectively under this plan. As mandated by the Disaster Management Act (Act 57 of 2002) and the National Disaster Management Framework, it is a requirement for municipalities to conduct disaster risk assessments within their respective areas of jurisdiction.

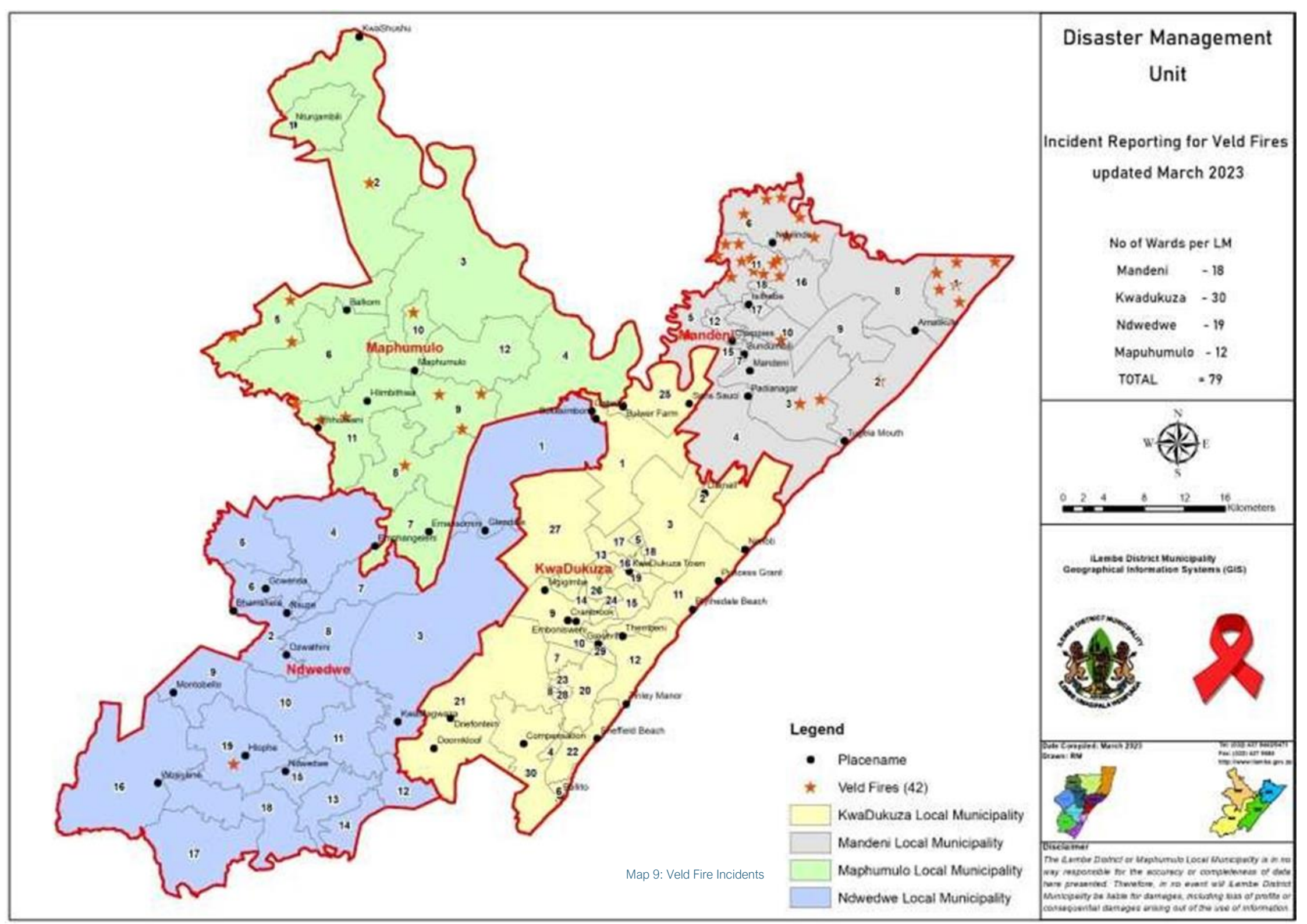
SPATIAL DIRECTIVES: The DMP has identified several disaster incidents in Ndwedwe Municipality that the SDP will need to develop strategies to mitigate against.



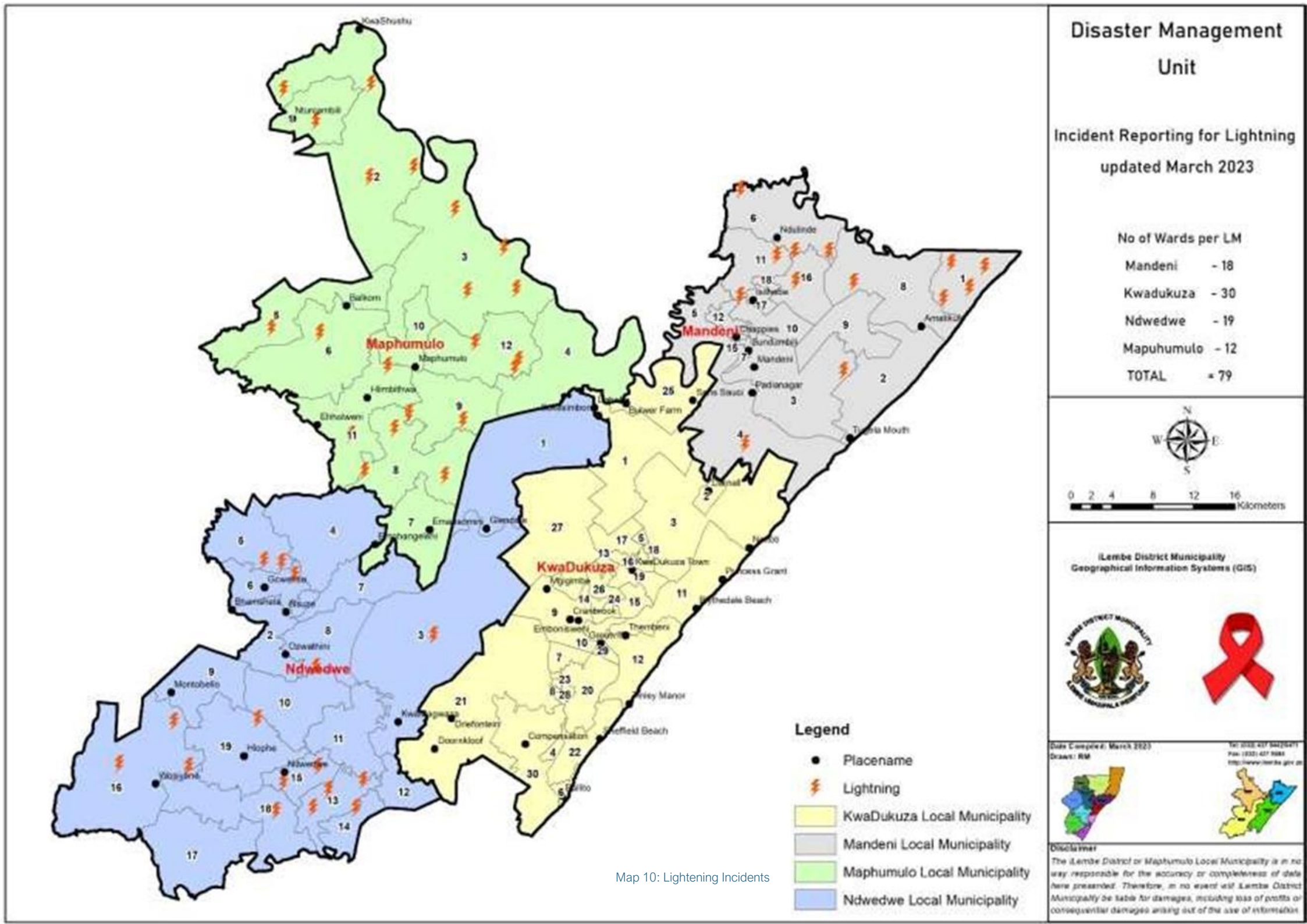
Map 7: Drowning Incidents



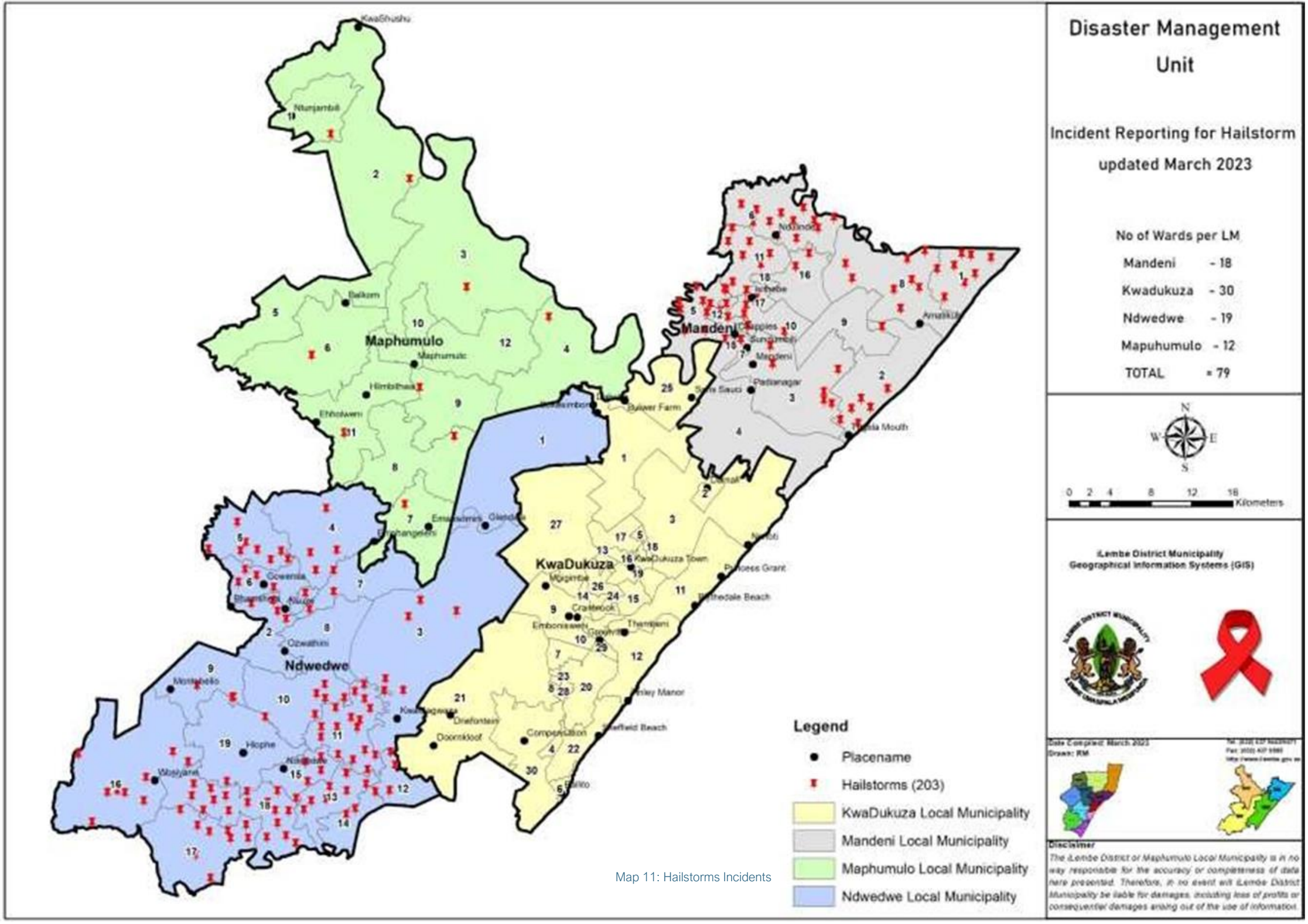
Map 8: Structural Fire Incident



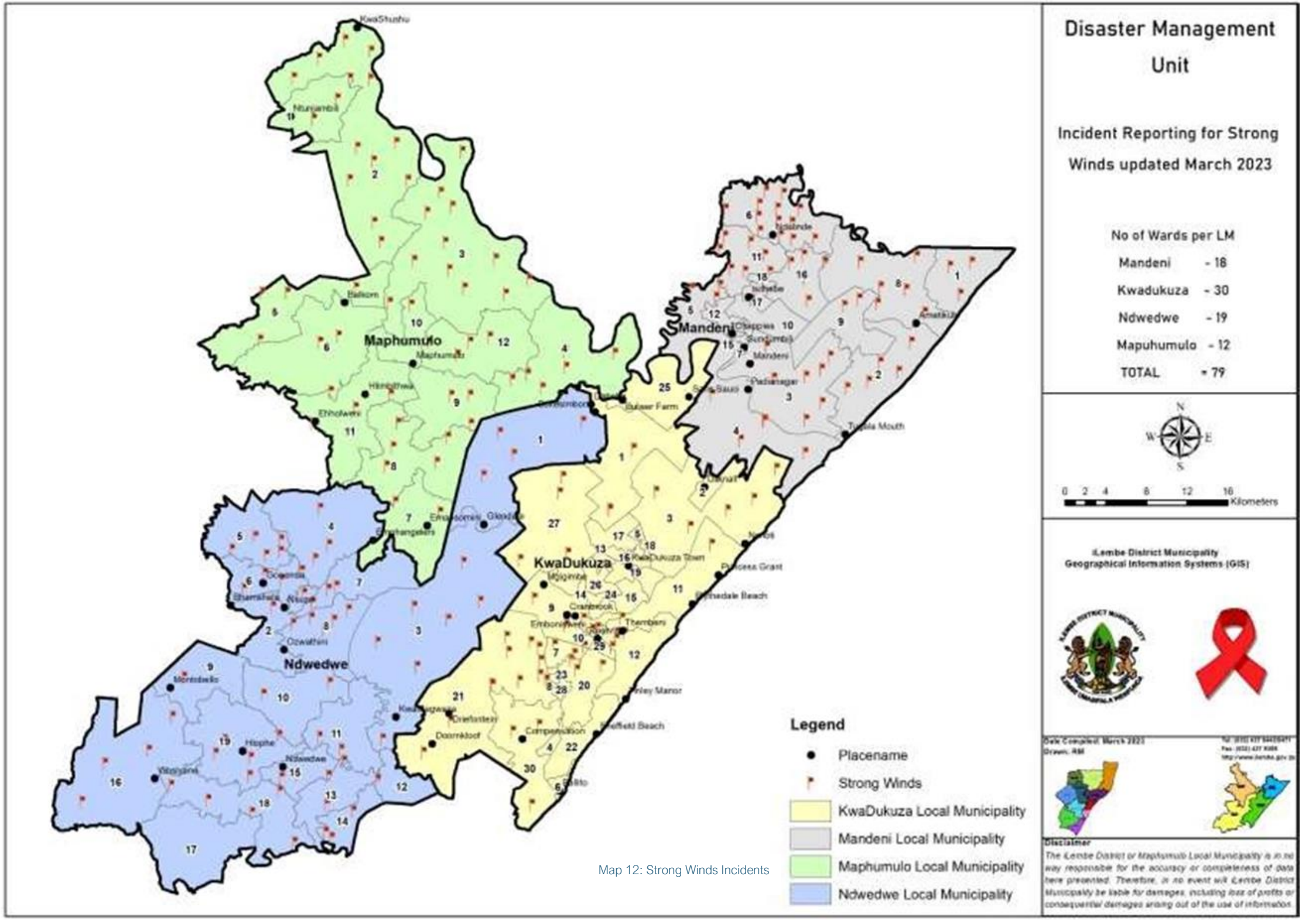
Map 9: Veld Fire Incidents



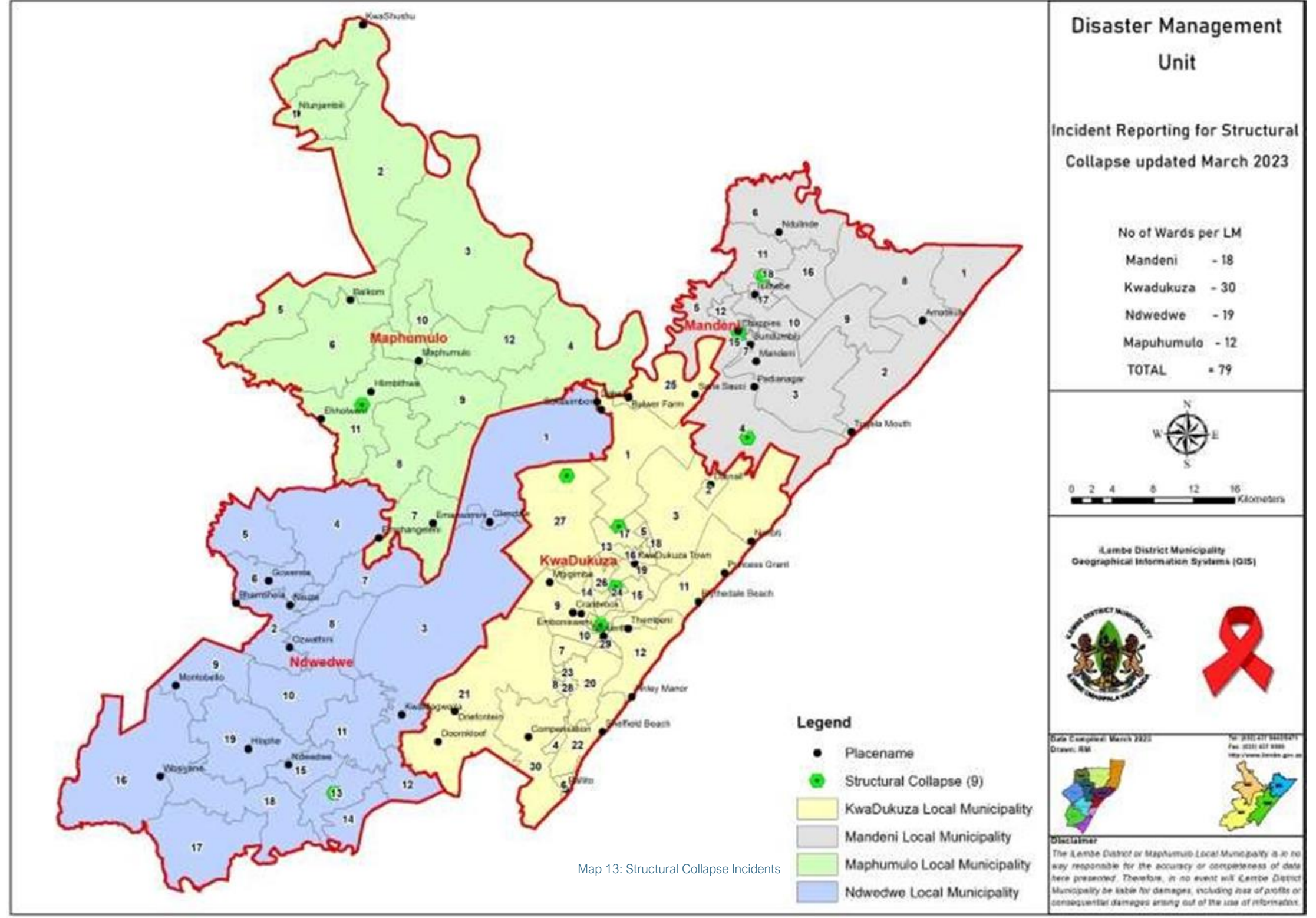
Map 10: Lightening Incidents



Map 11: Hailstorms Incidents



Map 12: Strong Winds Incidents



Map 13: Structural Collapse Incidents

6.11. NDWEDWE LOCAL MUNICIPALITY INTEGERATED DEVELOPMENT PLAN

NLM has formulated an Integrated Development Plan (IDP) that will serve as a blueprint for future developments within the local area. The municipality envisions a prosperous and dynamic economy for the people of Ndwedwe, where their aspirations are fulfilled by the year 2030.

The mission of NLM is to ensure the provision of quality and sustainable municipal services. This will be achieved through community involvement in the development process and by fostering strategic alliances and partnerships with government departments, NGOs, CBOs, and the Private Sector. These collaborative efforts are aimed at facilitating swift and coordinated service delivery for the benefit of the community.

SPATIAL DIRECTIVES: The NLM Spatial Development Plan (SDP) is intended to be the primary spatial strategy in response to the development context, requirements, and vision outlined in the NLM Integrated Development Plan (IDP). This SDP will serve as a long-term vision and plan, spanning over 20 years, providing the necessary spatial planning context for the NLM IDP.

By utilizing a set of plans, the strategic objectives of the NLM SDP will be translated into more detailed plans that include location-specific physical development proposals and guidelines for land use management. These plans will ultimately shape the preparation of comprehensive schemes covering the entire area.

6.12. NDWEDWE LOCAL ECONOMIC DEVELOPMENT (LED) STRATEGY

Local Economic Development (LED) is a collaborative process involving the public sector, businesses, and civil society, with the aim of fostering improved conditions for economic growth and job creation. The primary goal is to strengthen the economic capacity of a local area, thereby enhancing its economic prospects and the overall quality of life for its residents. A successful approach to Local Economic Development centres on promoting competitiveness, fostering sustainable growth, and ensuring that the benefits of growth are shared inclusively among the community.

SPATIAL DIRECTIVES: The NLM Spatial Development Plan (SDP) needs to synchronize with the goals of the NLM Local Economic Development (LED) strategy. This alignment should be achieved through a thorough examination of the demographic, socio-economic, and institutional trends prevalent within the jurisdiction of NLM. Additionally, the SDP should identify and assess the comparative and competitive advantages of the area, giving due attention to significant nodes. A comprehensive review of proposed projects and their current status or relevance is also essential.

To ensure successful implementation, the NLM SDP must develop a well-structured implementation program, incorporating strategies, programs, and projects outlined in the LED strategy. This comprehensive approach will facilitate the integration of spatial planning and economic development efforts, leading to coordinated and effective growth and development within the region.

6.13. NDWEDWE DISASTER MANAGEMENT PLAN

The Disaster Management Sector Plan (DMSP) is a crucial element of the Integrated Development Plan (IDP). According to Section 26 (g) of the Municipal Systems Act No. 32 of 2000, the municipal IDP is required to incorporate a relevant Disaster Management Sector Plan (DMSP). Additionally, as per Section 53 (2) (a) of the Disaster Management Act No. 57 of 2002, a disaster management sector plan for a municipal area should be an integral part of the municipality's IDP.

The Disaster Management Plan was officially adopted during the 2018/2019 period and is subject to annual review. Ensuring the alignment of the DMSP with the IDP is crucial to effectively address disaster management and to integrate disaster preparedness and response measures into the broader development planning framework.

SPATIAL DIRECTIVES: The local disaster management plan will serve as a guideline for the Spatial Development Plan (SDP), indicating areas that should be avoided for specific activities due to their high susceptibility to disaster risks.

6.14. NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK, 2022/2024

The Spatial Development Framework (SDF) of Ndwedwe Municipality is a comprehensive plan that outlines the spatial vision, objectives, and strategies for the development and growth of the municipality. It provides a blueprint for the sustainable and coordinated use of land, infrastructure, and resources within the municipality's jurisdiction. The SDP aims to promote economic development, social inclusion, environmental protection, and overall improvement in the quality of life for its residents.

The municipal spatial vision is expressed in the following manner:

"By 2040 Ndwedwe Local Municipality will consist of an economically viable, environmentally sustainable and socially inclusive region, promoting education for all and infrastructure development for the formal and informal market."

SPATIAL DIRECTIVES: The Municipal Spatial Development Framework is over a 20-year horizon, with projects plans to be implemented over the long term. The Spatial Development Plan is a short to medium term plan which has a 5-year horizon with projects and plans to be implemented within the next five years. The SDP thus acts as an implementation tool for the SDF.

6.15. NDWEDWE LOCAL MUNICIPALITY HOUSING SECTOR PLAN

Under Section 9(1) of the National Housing Act 107 of 1997, every Municipality is obligated to create an Integrated Development Planning (IDP) as a framework for its development initiatives. This IDP should involve the identification of suitable land for various land uses, with housing being a critical aspect of this planning process.

To comply with this legal requirement, Ndwedwe Municipality has undertaken the task of preparing a Municipal Housing Sector Plan. The purpose of this plan is to provide guidance for housing-related investment decisions and the integration of housing with other land uses.

To ensure comprehensive coverage, the Housing Sector Plan of Ndwedwe Municipality should include the following components:

- Housing delivery objectives
- Implementation strategies for sustainable housing projects
- A strategic focus to be improved over a five-year period, aligned with the IDP plans.
- Consideration of the housing socio-economic context of the area.

The ultimate goal is to facilitate the effective and sustainable development of housing within the municipality's area, in line with its overall development objectives.

The key objectives are as follows:

- To optimize the allocation of limited resources among numerous potential development interventions.
- To establish a formal and practical method for prioritizing housing projects and gaining political consensus on their implementation sequence.
- To promote more integrated development by bringing together relevant stakeholders from various sectors to coordinate their development interventions in a single plan.
- To strengthen spatial linkages between the Spatial Development Plan and the physical execution of projects on the ground.
- To define a specific housing focus for the Integrated Development Plan (IDP).
- To bridge the gap between integrated development planning and the practical execution of housing projects.
- To facilitate effective subsidy budgeting and cash flows at both the local municipal and provincial levels.

SPATIAL DIRECTIVES: The current municipal housing sector plan is outdated and needs to be reviewed in the short term. The HSP stated that the municipality's housing backlog has increased from 19 188. The SDP will thus need to provide strategies for sustainable human settlements in alignment with the programmes offered by the Department of Human Settlements.

6.16. NDWEDWE LOCAL MUNICIPALITY AGRICULTURE SECTOR PLAN

The Integrated Development Plan (IDP) of Ndwedwe Local Municipality has prioritized Local Economic Development (LED) as a top concern. A prominent LED strategy for Ndwedwe involves formulating an Agricultural Development Sector plan. This plan aims to harmonize with the New Growth Path, PGSDS, and the Municipality's IDP and LED frameworks. Its intent is to position Agriculture as a focal point for business growth and employment generation within the municipality.

The Economic Development and Planning office of Ndwedwe Local Municipality has engaged Ubhaqa Land and Agrarian Reform Agency to conduct a comprehensive reassessment of the Agricultural Sector Plan. Originally established in March 2008, the Ndwedwe Local Municipality Agricultural Sector Plan has not undergone subsequent evaluations. It is imperative to review this strategy to ensure its continued alignment with the municipality's vision and strategic goals.

SPATIAL DIRECTIVES: Ndwedwe Local Municipality has large tracks of land that are identified as high potential agricultural land. The purpose of the SDP unlocks the full potential of the agriculture sector by developing strategies to enhance the agriculture value chain.

7. VISION DIRECTIVES

The NLM spatial vision for the year 2043 has been formulated to provide guidance for the Municipality's direction and growth. The vision is inspired by the principles of SPLUMA, the Provincial Growth and Development Strategy vision for 2035, and the District Growth and Development Strategy vision for 2030, along with the District and Local Integrated Development Plans (IDPs). According to Section 21(c) of SPLUMA, these factors contribute to the preparation of the long-term spatial development vision statement. The NLM's spatial planning vision is rooted in the Batho Pele Principles, with a strong emphasis on being "people focused." The vision commits the municipality to prioritize efficient and cost-effective municipal services and people-centred socio-economic development. Moreover, it advocates for compact and integrated development, aiming to attract investments to the municipal area. Under this vision, the NLM also takes responsibility for protecting the environment and preserving agricultural land. The overall objective is to ensure a balanced and sustainable approach to development, benefitting both residents and the natural resources of the municipality.

7.1. SUMMARY (PGDS) AND THEMES FOR NDWEDWE LOCAL MUNICIPALITY VISION STATEMENT

Table 1: Spatial Vision Directives

PGDS GOALS	PGDS OBJECTIVES	THEMES FOR NLM VISION STATEMENT
INCLUSIVE ECONOMY		
This Strategic Goal is in line with National Outcome 4, which emphasizes the following objectives: ➢ Promoting growth that generates more employment opportunities. ➢ Enhancing competitiveness to expand the production capacity, withstand global competition, increase net exports, and elevate the share of trade in the global market while enhancing its quality.	The strategic goals are as follows: ➢ Harness and advance the agricultural potential. ➢ Strengthen sectoral development through trade, investment, and business retention. ➢ Promote spatial economic development initiatives. ➢ Enhance the efficiency, innovation, and diversity of government-led job creation programs.	Promoting economic development in Ndwedwe Local Municipality: ➢ Advancing the local economy of Ndwedwe. ➢ Fostering growth within the Ndwedwe Local Municipality's economy. ➢ Attracting businesses to the municipality to stimulate job creation. ➢ Supporting the development of SMMEs and cooperatives.

PGDS GOALS	PGDS OBJECTIVES	THEMES FOR NLM VISION STATEMENT
➢ Providing better support to various businesses, including small enterprises, by reducing the costs associated with conducting business activities.	➢ Foster Small, Medium, and Micro Enterprises (SMMEs) and entrepreneurial development. ➢ 6. Facilitate the growth of the knowledge economy.	
HUMAN RESOURCE DEVELOPMENT		
This goal is in alignment with National Outcomes 1, Education, and Outcome 5, Skills Development. National Outcome 1, Education, focuses on enhancing the education sector across all levels, from early childhood to tertiary education, and ensuring sufficient infrastructure. It is closely connected to National Outcome 5, Skills Development, which emphasizes the provision of adequate skills within the education sector.	Enhancing skills and human capital in the municipality through the following measures: ➢ Enhancing and expanding Early Childhood Development (ECD) programs. ➢ Strengthening primary and secondary education. ➢ Developing and supporting skills that align with the requirements of the local economy. ➢ 4. Facilitating the advancement of youth and adult skills development.	Enhancing capacity in the education and skills development sector through the following strategies: ➢ Ensuring the provision of adequate and sustainable education facilities. ➢ Strengthening early childhood development initiatives. ➢ Promoting the development and improvement of Adult Basic Education and Training (ABET) programs. ➢ Facilitating vocational training, particularly for the youth.
STRATEGIC INFRASTRTUCTURE		
This Strategic Goal is in line with National Outcome 6, which emphasizes the establishment of an efficient, competitive, and responsive economic infrastructure network. It aims to maintain and enhance the efficiency and effectiveness of the infrastructure network.	The following development objectives are pursued: ➢ Advancing seaports and airports. ➢ Expanding road and rail networks. ➢ Developing ICT infrastructure.	The focus areas for infrastructure development include: ➢ Fundamental infrastructure development, covering water, electricity, and sanitation.

PGDS GOALS	PGDS OBJECTIVES	THEMES FOR NLM VISION STATEMENT
	➢ Ensuring the availability and sustainable management of water and sanitation for all. ➢ Ensuring access to affordable, reliable, sustainable, and modern energy for all. ➢ Strengthening waste management capacity in KZN.	➢ Incorporating sustainability factors in infrastructure provision. ➢ Aligning infrastructure with the requirements of the fourth industrial revolution. ➢ Establishing an integrated waste management plan.
SPATIAL EQUITY		
The objective is to effectively safeguard and consistently enhance the province's environmental assets and natural resources through cohesive development practices. This goal aligns with National Outcome 10, which aims to ensure the proper protection and continual improvement of environmental assets and natural resources at the national level.	The following objectives are targeted: ➢ Strengthening the resilience of ecosystems. ➢ Expanding the adoption of green technologies. ➢ Adapting and responding to climate change.	➢ Preserving environmentally sensitive areas, such as Meycol Nature Reserve, through effective protection measures. ➢ Ensuring the sustainable utilization of environmentally sensitive areas for promoting economic development. ➢ Raising environmental awareness among the population.

7.2. NDWEDWE LM IDP GOALS AND OBJECTIVES AND KEY THEMES FOR THE SPATIAL VISION STATEMENT

Table 2: Ndwedwe Local Municipality IDP Goals and Objectives and Key Themes Spatial Vision Statement

OBJECTIVES	THEMES FOR THE NLM SPATIAL VISION
GOAL #1: TO PROMOTE GOOD GOVERNANCE AND PUBLIC PARTICIPATION	
• To administer the affairs of the municipality in accordance with the relevant legislations and policies. • To ensure quality, reliable financial statements and performance management information. • To promote a culture of participatory democracy. • Effective public awareness on municipal business through information dissemination. • To provide legal advice and ensure legal matters are handled on behalf of the municipality.	The key themes from the given objectives are as follows: ➢ **Governance and Compliance:** Administering municipal affairs in alignment with pertinent legislations and policies underscores a commitment to effective governance, compliance, and adherence to established legal frameworks. ➢ **Financial Integrity:** Ensuring the availability of accurate and dependable financial statements and performance management information highlights the emphasis on maintaining financial integrity, transparency, and accountability in municipal operations. ➢ **Participatory Democracy:** Promoting a culture of participatory democracy signifies the municipality's dedication to involving citizens in decision-making processes, fostering inclusivity, and encouraging active civic engagement. ➢ **Transparent Communication:** Effective public awareness through information dissemination emphasizes transparent communication, enabling residents to be well-informed about municipal activities, initiatives, and developments. ➢ **Legal Stewardship:** Providing legal advice and managing legal matters on behalf of the municipality underscores the importance of legal expertise, safeguarding the municipality's interests and ensuring proper handling of legal affairs.
GOALS #2: TO PROMOTE GOOD GOVERNANCE AND PUBLIC PARTICIPATION	
• To provide effective waste management services. • Promote nation building and social cohesion.	The key themes from the given objectives are as follows:

OBJECTIVES	THEMES FOR THE NLM SPATIAL VISION
• To ensure that there is effective implementation of disaster risk reduction programmes aimed at prevention and mitigation against identified risks. • To ensure rapid and effective response in assisting vulnerable communities during incidents and disasters. • To improve access to basic services. • Promote nation building and social cohesion. • To ensure effective Enterprise Risk Management	➢ **Environmental Sustainability:** Providing effective waste management services reflects a commitment to environmental sustainability and responsible waste disposal practices. ➢ Community Unity: Promoting nation building and social cohesion underscores the municipality's dedication to fostering a sense of unity, inclusivity, and social harmony among diverse communities. ➢ **Disaster Preparedness:** The objective of effective implementation of disaster risk reduction programs emphasizes the importance of proactive measures, prevention, and mitigation strategies to address identified risks and enhance community resilience. ➢ **Emergency Response:** Ensuring rapid and effective response for vulnerable communities during incidents and disasters highlights the municipality's readiness to provide timely assistance and support in times of crisis. ➢ **Basic Services:** Improving access to basic services underscores the commitment to enhancing the well-being and quality of life for residents by ensuring equitable access to essential amenities. ➢ **Social Integration:** The repetition of "Promote nation building and social cohesion" underscores the ongoing emphasis on fostering unity, inclusivity, and social cohesion among the municipality's diverse population. ➢ **Risk Management:** The objective of ensuring effective Enterprise Risk Management emphasizes the importance of identifying, assessing, and managing potential risks across various aspects of municipal operations to enhance overall governance and decision-making.
GOAL #3: TO FACILITATE INSTITUTIONAL TRANSFORMATION AND ORGANIZATIONAL DEVELOPMENT & TO FACILITATE SKILLED AND CAPABLE WORKFORCE TO SUPPORT AN INCLUSIVE GROWTH PATH	

OBJECTIVES	THEMES FOR THE NLM SPATIAL VISION
• To create a financial sustainability municipality that conforms to all the financial legislations. • To ensure sound revenue management • To create a financial sustainability municipality that conforms to all the financial legislations. • To implement valuation, roll that aligns to the Municipal Property Rates Act • To create a financial sustainability municipality that conforms to all the financial legislations. • To ensure effective Enterprise Risk management • To improve access to basic services	The key themes from the given objectives are as follows: ➢ **Financial Stewardship:** The repeated objective of creating a financially sustainable municipality that conforms to financial legislations underscores the emphasis on responsible financial management, adherence to legal requirements, and long-term fiscal sustainability. ➢ **Revenue Optimization:** Ensuring sound revenue management reflects a focus on maximizing income sources, optimizing financial resources, and maintaining a healthy revenue stream to support municipal operations. ➢ **Compliance and Governance:** The reiterated objective of conforming to financial legislations highlights the significance of adhering to legal frameworks, regulations, and governance practices to ensure transparency, accountability, and ethical financial practices. ➢ **Property Valuation:** The objective to implement valuation rolls aligned with the Municipal Property Rates Act emphasizes accurate property assessment, fair taxation, and compliance with relevant property rate regulations. ➢ **Risk Management:** Ensuring effective Enterprise Risk Management underscores the commitment to identifying, evaluating, and mitigating potential risks across various aspects of the municipality's operations, enhancing overall governance and decision-making. ➢ **Service Accessibility:** The goal of improving access to basic services signifies the municipality's dedication to enhancing residents' quality of life by ensuring equitable and widespread access to essential amenities and services.
GOAL #4: TO FACILITATE A STRONG LOCAL ECONOMY THAT PRODUCES LONG TERM, SUSTAINABLE JOBS AND LOWERS POVERTY	

OBJECTIVES	THEMES FOR THE NLM SPATIAL VISION
• To make the conditions favourable for the advancement of society and the economy. • To ensure effective Enterprise Risk management Implementation of Enterprise Risk • To facilitate co-ordinated planning and development	The key themes from the given objectives are as follows: ➢ **Socio-Economic Progress:** The objective to make conditions favourable for the advancement of society and the economy highlights a focus on creating an enabling environment for social and economic growth, prosperity, and development. ➢ **Risk Management:** The repeated objective of ensuring effective Enterprise Risk Management underscores the emphasis on identifying, assessing, and managing potential risks to enhance overall governance, resilience, and decision-making. ➢ **Integrated Development:** The objective to facilitate coordinated planning and development emphasizes the importance of cohesive and synchronized efforts in planning and executing various developmental initiatives, projects, and strategies.

7.3. PROPOSED NDWEDWE LOCAL MUNICIPALITY SPATIAL VISION STATEMENT

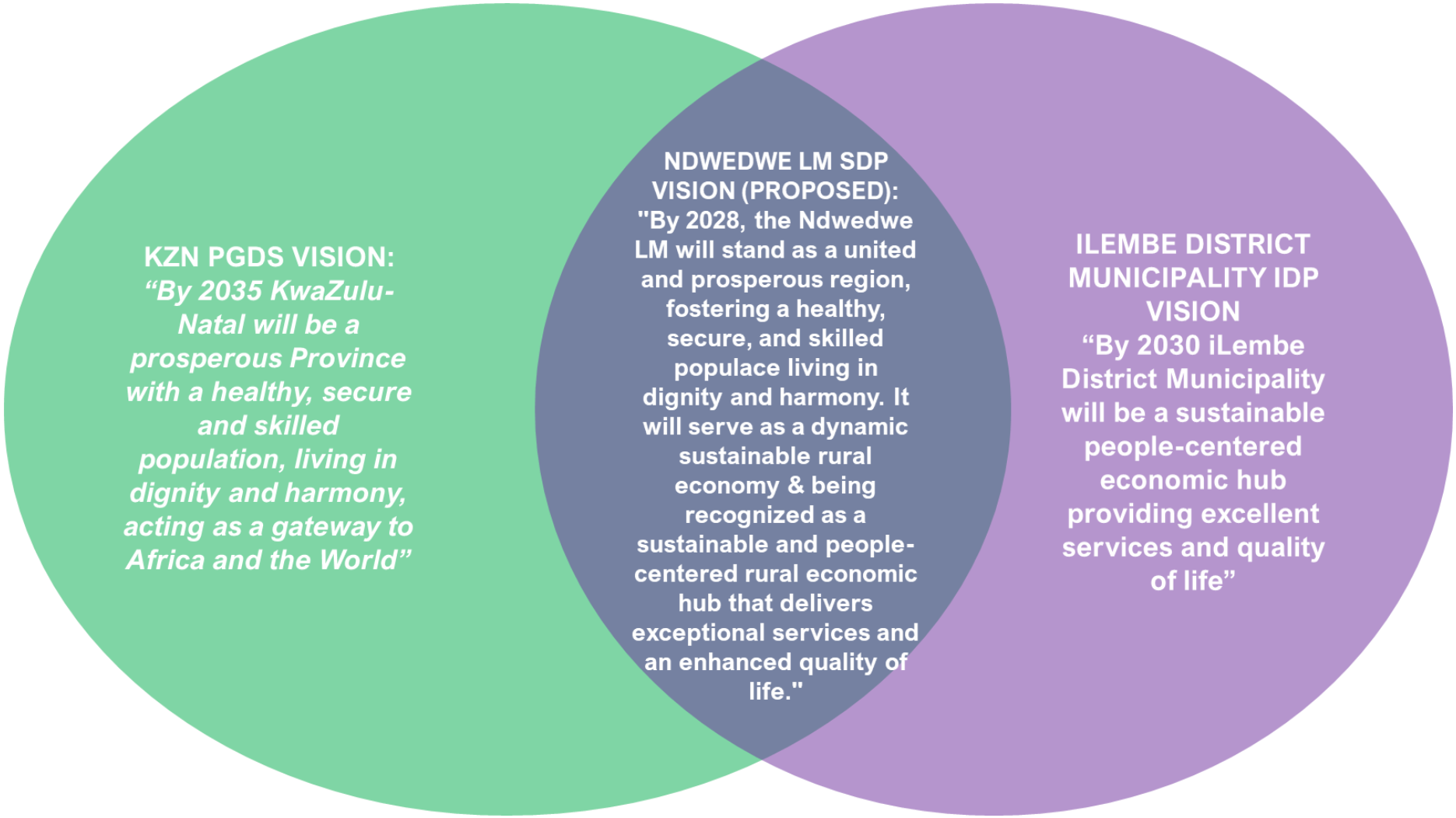


Figure 11: Municipal Spatial Development Vision

CROSS BORDER ALIGNMENT

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

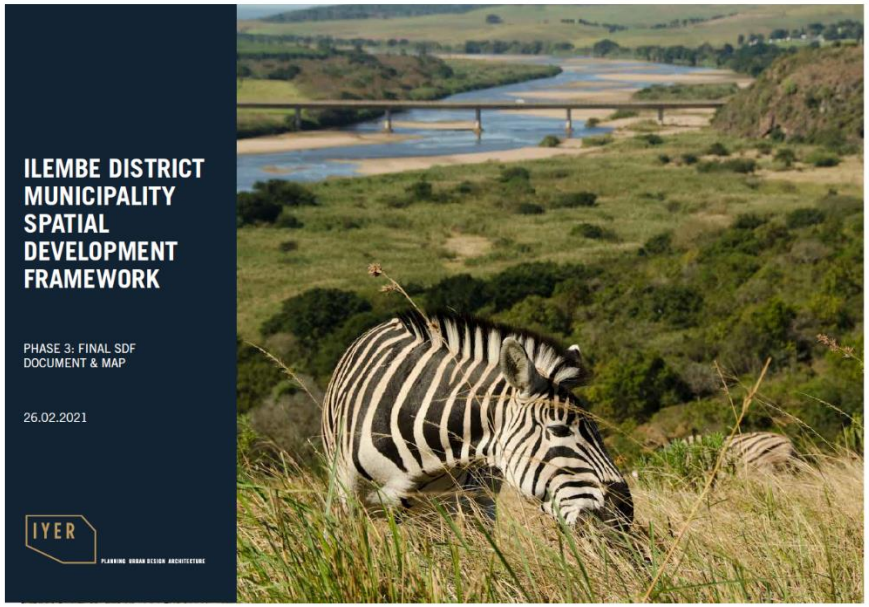
8. CROSS BORDER ANALYSIS

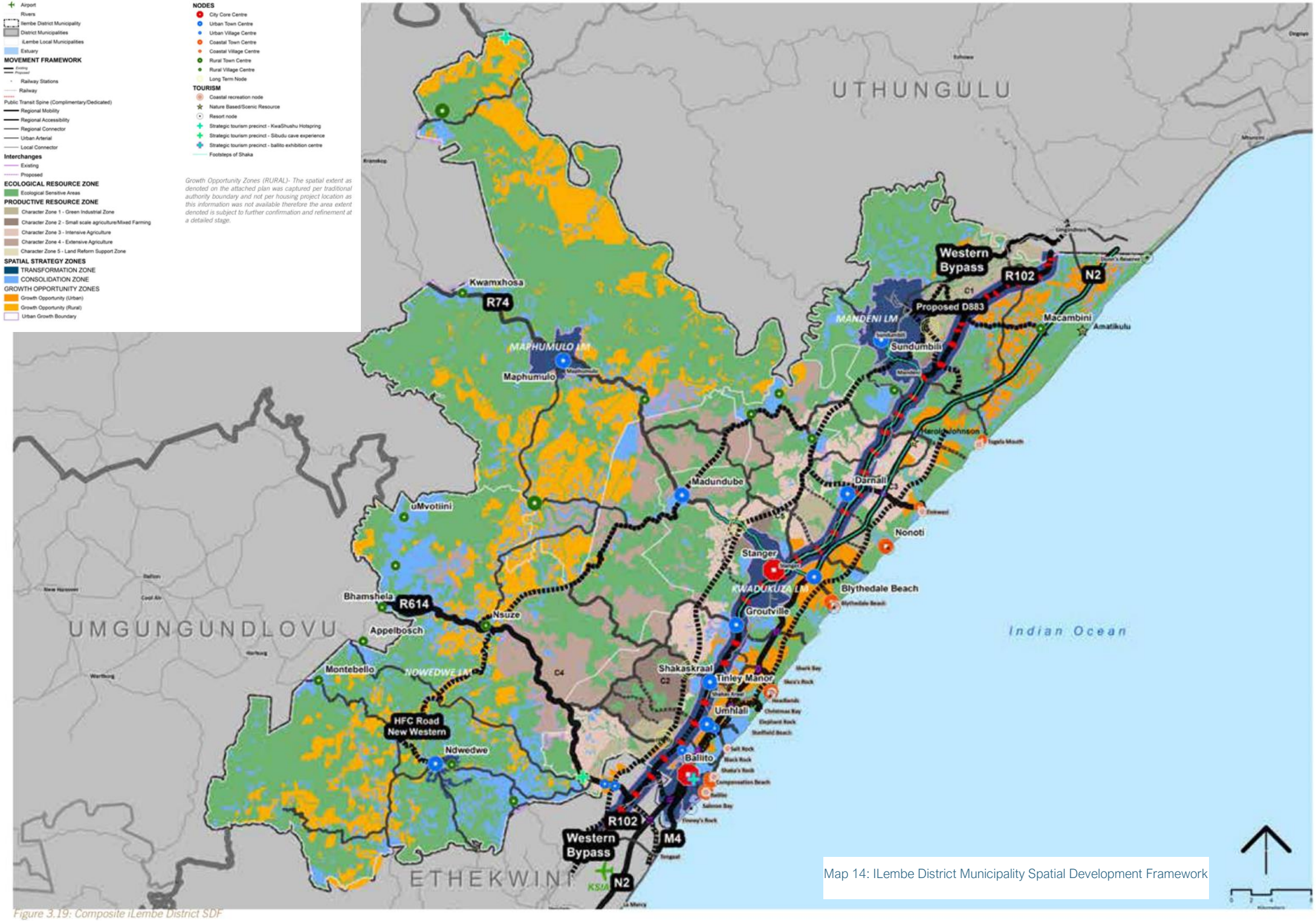
8.1. ILEMBE DISTRICT MUNICIPALITY SPATIAL DEVELOPMENT PLAN

The SDF of iLembe District Municipality aims to provide guidance for future regional planning and development, both internally and externally. It offers direction to local Municipalities regarding priorities, areas for investment, spatial objectives, and interventions. Additionally, it outlines its role in regional planning within neighbouring districts and the province.

Ndwedwe Local Municipality, alongside KwaDukuza, Maphumulo, and Mandeni Local Municipalities, constitutes a part of iLembe District Municipality. As such, they are influenced internally, ensuring that their SDP aligns with that of the district, particularly concerning strategic matters of national, provincial, and district significance. They are also influenced externally, ensuring their interactions with neighbouring districts and their contributions to the district remain consistent with the principles of the district SDF. Key components such as National and Provincial Roads, the district's economic and administrative center, significant tourism destinations, the district's economic foundation, and areas prioritized for social investment are among the central considerations emphasized by the District SDF. Consequently, it is expected that Ndwedwe Local Municipality will harmonize with the District SDP rather than contradict it.

Among the key factor identified by the District SDF are the following: The N2 and R102 routes, are identified as national and provincial corridors. They are the main transportation routes within the District with the N2 being the primary distributor within the District Municipality and the main passenger and freight route linking main economic centres of Durban through to the Eastern Cape. KwaDukuza is identified as the district node and the administrative node for the iLembe District Municipality. It is an important transport hub, as it lies at the intersection of many secondary roads leading to the N2.





Map 14: ILembe District Municipality Spatial Development Framework

Figure 3.19: Composite iLembe District SDF

8.2. NEIGHBOURING MUNICIPALITIES

8.2.1. ETHEKWINI MUNICIPALITY

The eThekwini Metropolitan Municipality, categorized as Category A, is situated within the South African province of KwaZulu-Natal. Within this province, eThekwini stands as the largest city and ranks as the third-largest urban center in the nation. Notably, its land area surpasses that of other cities within South Africa and features a distinctive topography characterized by hills, gorges, and ravines, with minimal true coastal plains.

ENVIRONMENTAL LINKAGES: Ndwedwe and EThekwini Municipality share numerous environmental connections, including biodiversity linkages represented by Ecological Support Areas and Irreplaceable Critical Biodiversity Areas. Additionally, these municipalities are interconnected through river systems that contribute to the region's water sources namely:

- Umdloti River
- Dangwane River
- Umlazi River
- Wewe River
- Honothi River
- Umgeni River

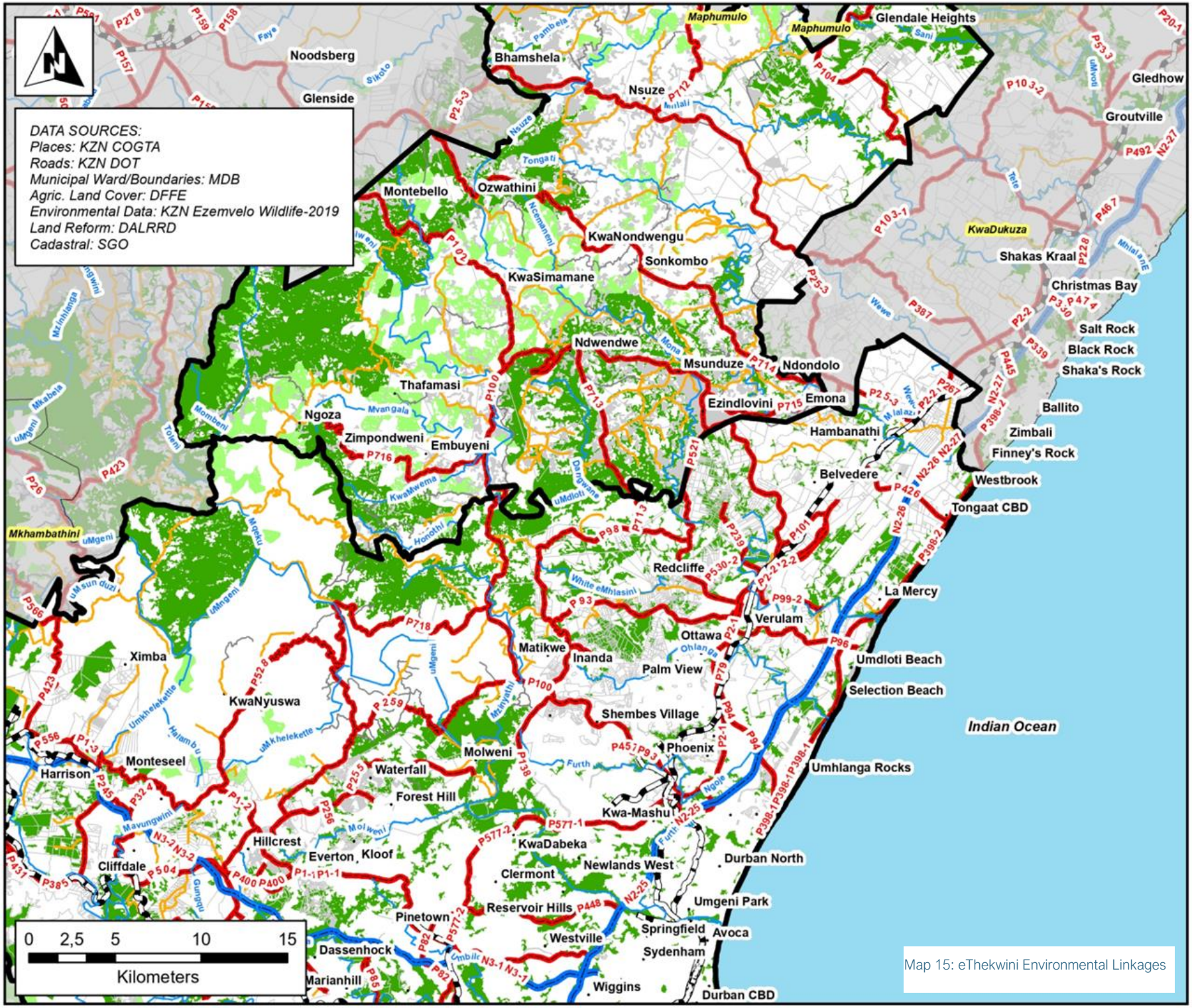
TRANSPORTATION LINKAGES: The transportation linkages connecting the two municipalities are mainly provincial roads. These roads are:

- P521 provincial road in the Redcliffe vicinity.
- P100 provincial road which connects Ndwedwe town to the Inanda and other settlements in the EThekwini Municipality.
- P713 provincial road which links Ndwedwe town to Redcliffe.
- P2 provincial road which connects Ezindlovini and Msunduze with KwaMashu to the south in EThekwini Municipality.

BORDERING SETTLEMENTS: Communities positioned along the mutual boundary of these two municipalities encompass Ngoza, Zimpondweni, Embuyeni, Ezindlovini Emona, Msunduze and Ndondolo in NLM as well as Hambanathi, Belvedere, and Redcliffe in EThekwini Municipality. Notably, Tongaat stands out as the solitary urban locality situated in proximity to the shared border of these two municipalities. It serves as a hub of amenities and resources that are utilized by individuals residing in Ndwedwe Municipality.

LAND COVER/LAND USE: The land uses and land cover along the borders of the two municipalities are built up areas in the form of formal, informal and traditional settlements, cultivated land in the form of commercial agriculture (sugarcane farms), and forestland which forms part of land identified as critical biodiverse.

SPATIAL PROPOSALS: The spatial proposals along the border of the EThekwini Municipality include the preservation and conservation of the aforementioned environmental sensitive and critical biodiverse areas and the maintenance of existing agriculture.



Map 15: eThekwini Environmental Linkages

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

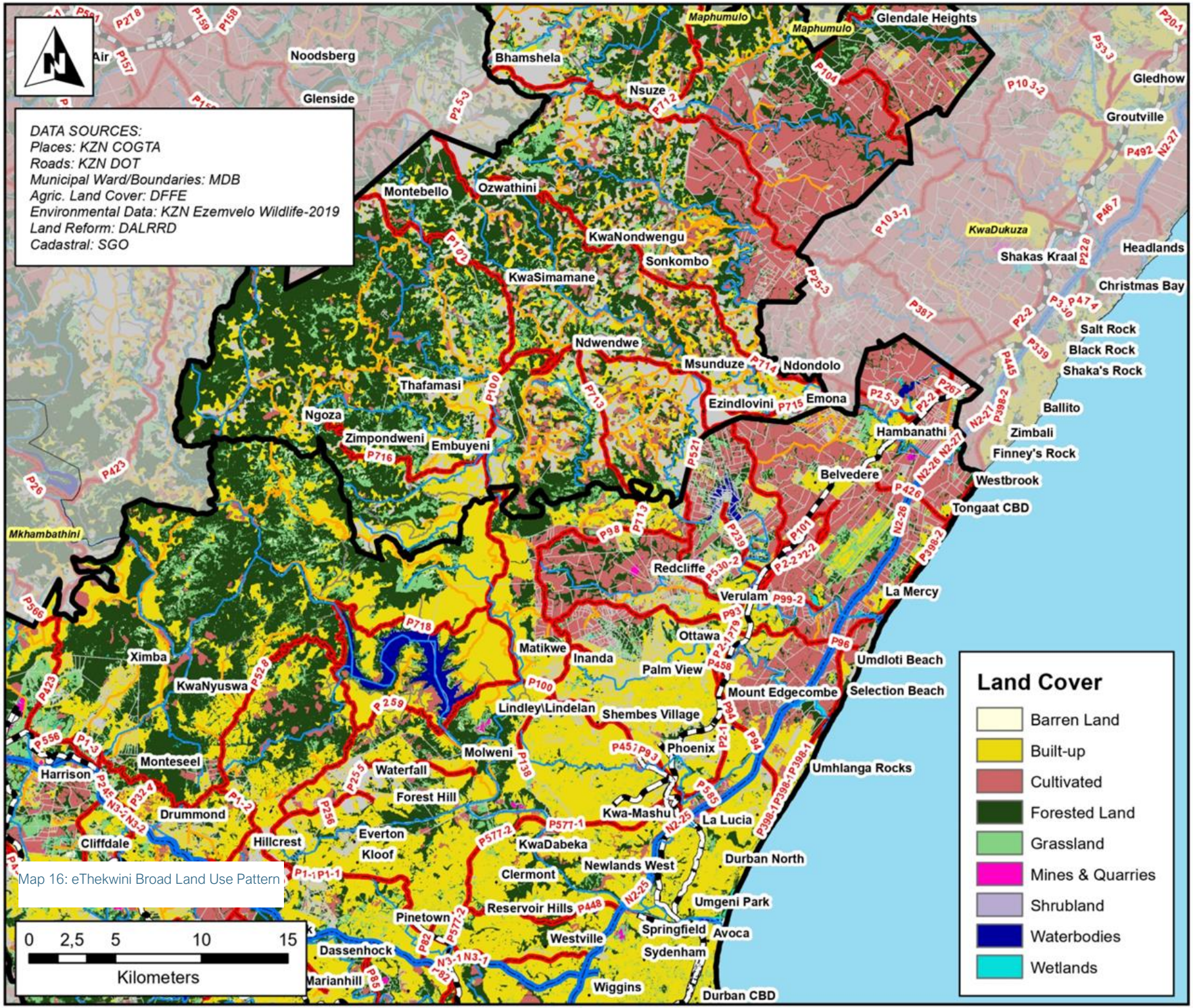
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Cross Border EThekwini Municipality (Environmental Linkages)

Legend

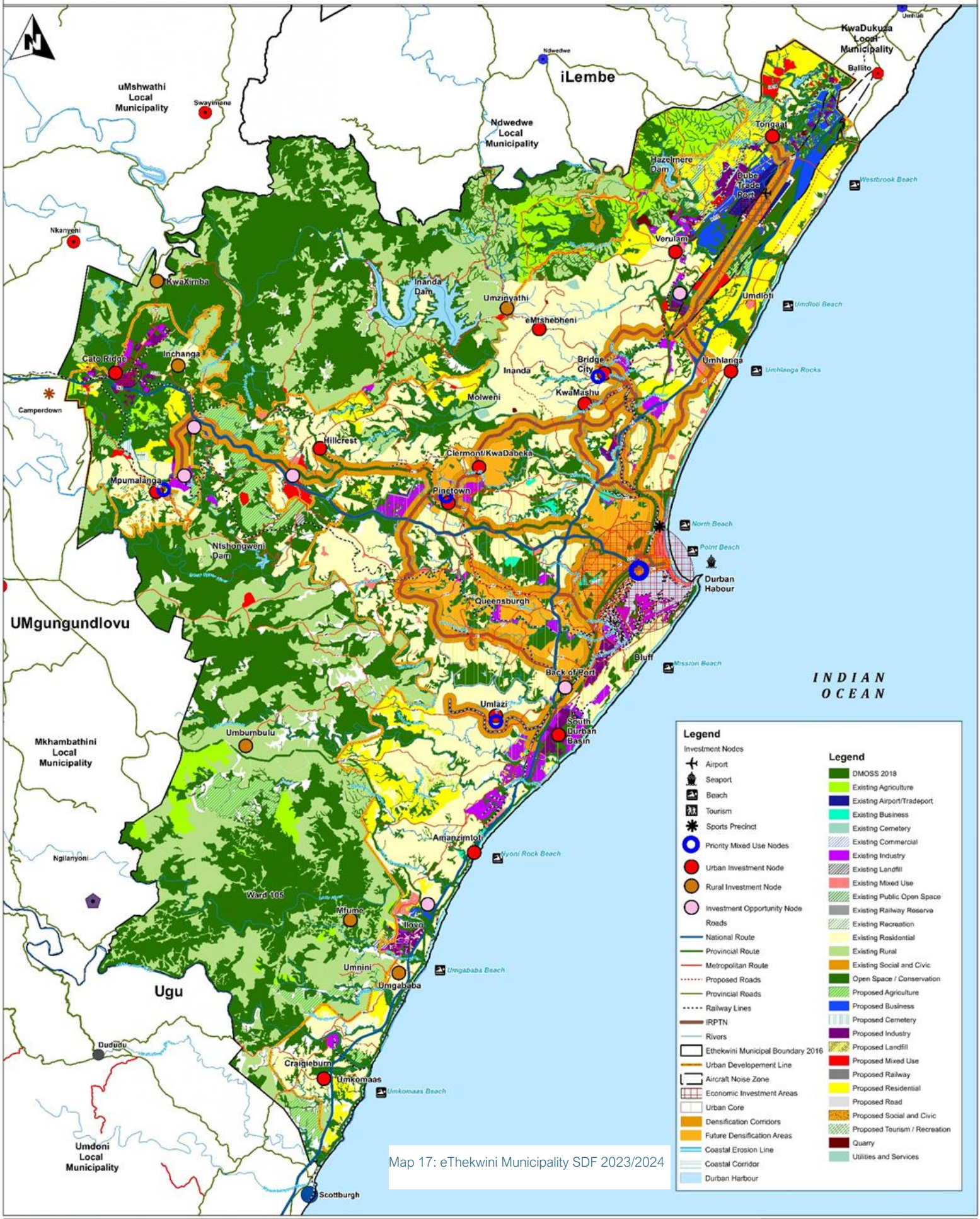
- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- CBA: Irreplaceable
- CBA:Optimal
- ESA
- ESA Species Specific

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS



Map 16: eThekwini Broad Land Use Pattern

SPATIAL DEVELOPMENT FRAMEWORK 2023-2024



Map 17: eThekwini Municipality SDF 2023/2024

ETHEKWINI MUNICIPALITY

Prepared By:

STRATEGIC SPATIAL PLANNING BRANCH
DEVELOPMENT PLANNING DEPARTMENT
ENQUIRIES: (031) 311 7450

Scale: 1:90 000

0 2 500 5 000 10 000 15 000
Meters

Limits of Liability and Warrent Disclaimer

This data is for information purposes only. No liability shall devolve upon the local authority or it's officials through the use thereof.

8.2.2. KWADUKUZA MUNICIPALITY

The KwaDukuza Local Municipality, classified as a Category B municipality, is situated within the iLembe District of the KwaZulu-Natal Province. Its expanse spans from the Zinkwazi River to the north to the Tongaat River to the south. Notably, it constitutes one of the four municipalities comprising the district. Within the iLembe District, KwaDukuza (formerly known as Stanger) holds the status of the district's primary node and serves as its predominant commercial hub.

Encompassing both coastal and inland areas, the KwaDukuza Municipality extends approximately 50km in length and 14km in width, encompassing an array of clustered settlements, ad hoc communities, and small towns. The municipality is interlinked by a well-established network of roadways and railway infrastructure. A noteworthy focal point of KwaDukuza is the N2 Development Corridor.

ENVIRONMENTAL LINKAGES: Ndwedwe and KwaDukuza Municipality exhibit significant environmental interdependencies, evident in their biodiversity linkages encompassing Ecological Support Areas and Irreplaceable Critical Biodiversity Areas. Furthermore, the interconnectedness extends to river systems that play a pivotal role in augmenting the region's water sources, namely:

- UMhlali River
- Sani River
- Umvoti River
- Umdloti River

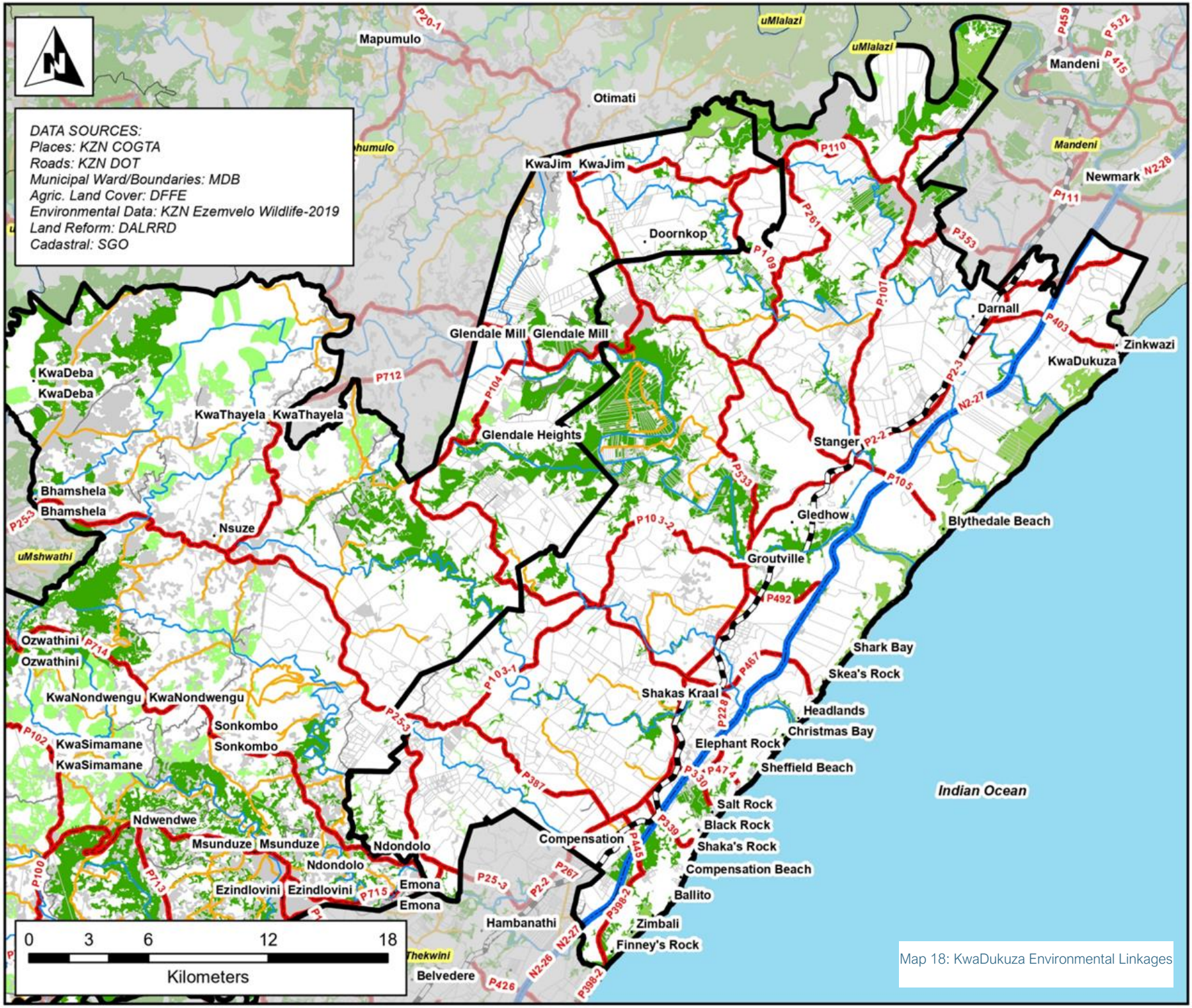
TRANSPORTATION LINKAGES: The transportation connections that link the two municipalities primarily consist of provincial road networks. These roads include:

- P25-3 provincial road which is a east-west connector, linking Nsuze in NLM with Compensation in KwaDukuza Municipality.
- P467 provincial road which branches from the N2 freeway at Headlands in KwaDukuza Municipality and links to Ndwedwe Municipality.
- P104 provincial road which links Glendale Heights to the western region of the KwaDukuza Municipality.
- P105 provincial road which links Blythedale in KDM to KwaJim and beyond.
- P109 provincial road which branches from P105 and links to Doornkop in NLM.
- P110 provincial road located in the northern region of the two municipalities.

BORDERING SETTLEMENTS: Settlements along the NLM-KDM broder include Glendale Heights Glendale Mill, and Doornkop in the northern regions of the municipalities as well as Ndondolo, Emona and Msunduze located in the southern region of the border.

LAND COVER/LAND USE: Land uses along the border comprise mainly of commercial agriculture in the form of sugarcane farms as well as areas that are rich in biodiversity.

SPATIAL PROPOSALS: The spatial proposals along the border of the eThekwini Municipality include the preservation and conservation of the aforementioned environmental sensitive and critical biodiverse areas and the maintenance of existing agriculture.



Map 18: KwaDukuza Environmental Linkages

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

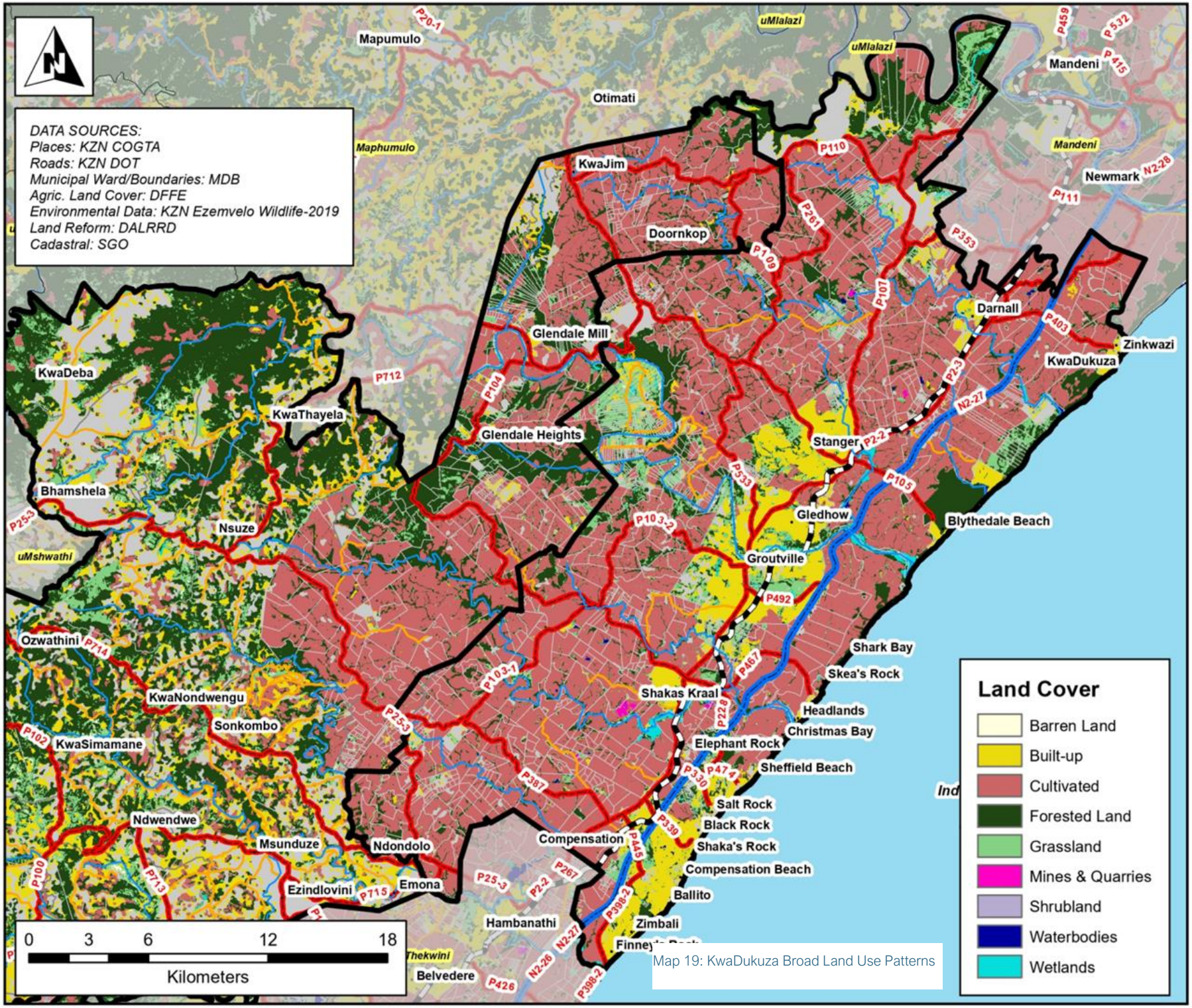
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Cross Border KwaDukuza Municipality (Environmental Linkages)

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- CBA: Irreplaceable
- CBA:Optimal
- ESA
- ESA Species Specific

INGUQUKO DEVELOPMENT
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Map 19: KwaDukuza Broad Land Use Patterns

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Cross Border KwaDukuza Municipality (Land Cover/Infrastructural Linkages)

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement

INGUQUKO DEVELOPMENT
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8.2.3. MAPHUMULO LOCAL MUNICIPALITY

The Maphumulo Local Municipality operates as a Category B municipality within the iLembe District of KwaZulu-Natal and is located along the eastern border of the NLM. Within the district's makeup, it stands as one of the quartet of municipalities, encompassing nearly a third of the district's total geographic expanse. Maphumulo, an isiZulu term, translates to 'place of rest'.

The municipality predominantly exhibits rural characteristics, with tribal land forming the predominant landscape, overseen by the Ingonyama Trust on behalf of local communities. The economic and land use focus revolves around the cultivation of sugar cane, with subsistence agricultural practices manifesting as small crop areas affiliated with traditional family units, defining the predominant land utilization pattern.

For accessibility, the R74 Main Road acts as a conduit, linking KwaDukuza to the hinterland, subsequently extending towards Kranskop and Greytown. The connection to the N2 assumes a critical role, facilitating the transportation of migrant labour and offering access to commercial and employment hubs within the Durban Metro, as well as the Tongaat/Maidstone, Dolphin Coast, KwaDukuza, Darnall, and Isithebe regions.

ENVIRONMENTAL LINKAGES: Maphumulo and NLM share several environmental linkages which include watercourse such as:

- Nyenzane River
- Mushane River
- Malazi River
- Zinsimba River

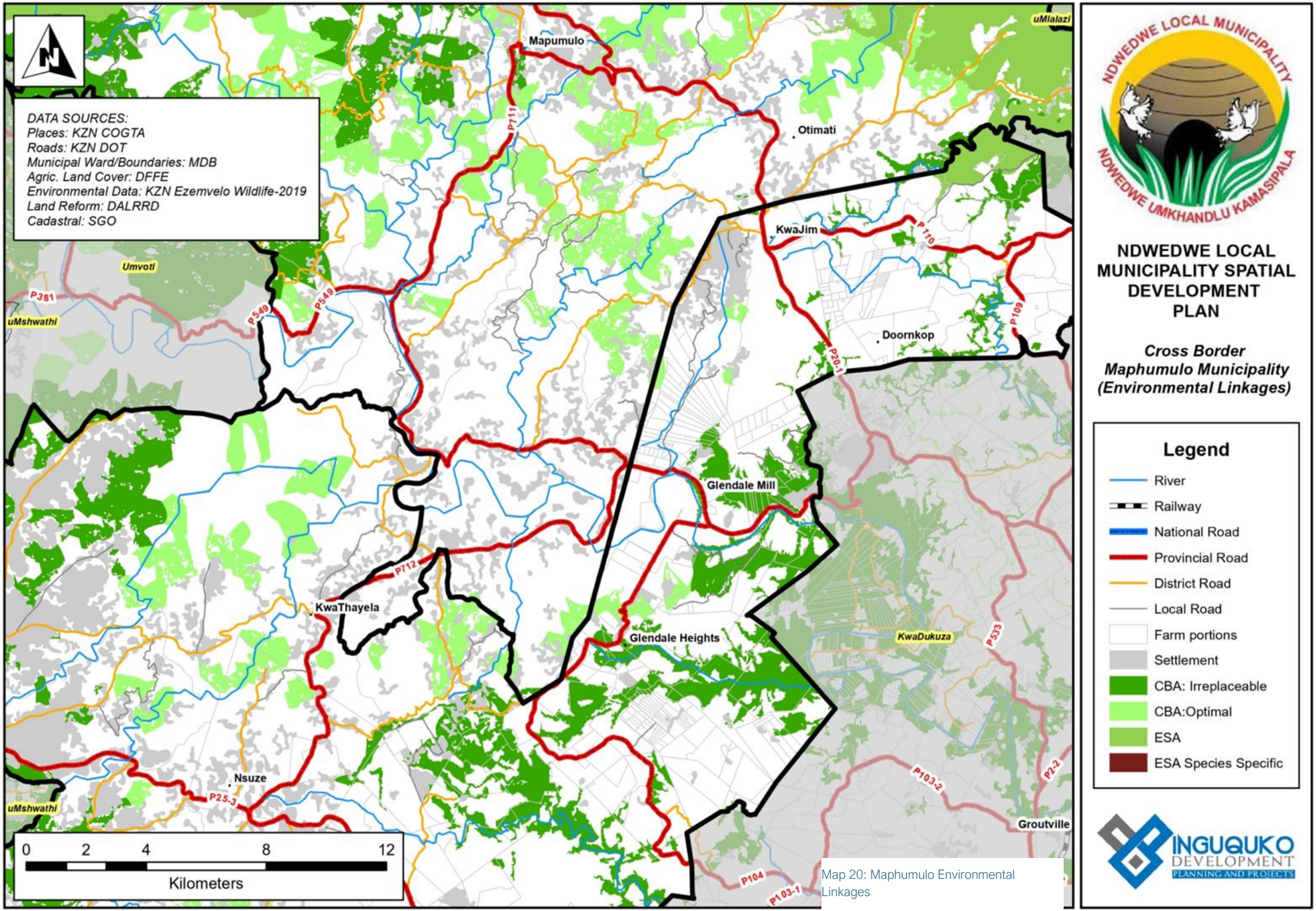
TRANSPORTATION LINKAGES: The two municipalities are linked by the following roads:

- P172 provincial road linking Glendale Mill to the southern region of the Maphumulo Local Municipality.
- P711 provincial road linking Glendale Mill to Maphumulo town (the primary node of the Maphumulo Local Municipality).

BORDERING SETTLEMENTS: Settlements located at the border of these two municipalities include Glendale Heights, Glendale Mill and KwaThayela in the Ndwedwe Local Municipality, as well as Otimati, Umvoti and Mthandeni located in the south-eastern region of the Maphumulo Local Municipality.

LAND COVER/USE: Land cover and land use in the bordering regions of the municipalities comprises of traditional settlements, both commercia and subsistence farming as well as areas that are identified as forestland which are environmentally sensitive.

SPATIAL PROPOSALS: The spatial proposals in the Maphumulo Local Municipality encourage the preservation and maintenance of critical biodiversity areas.



NDWEDWE LOCAL MUNICIPALITY

NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

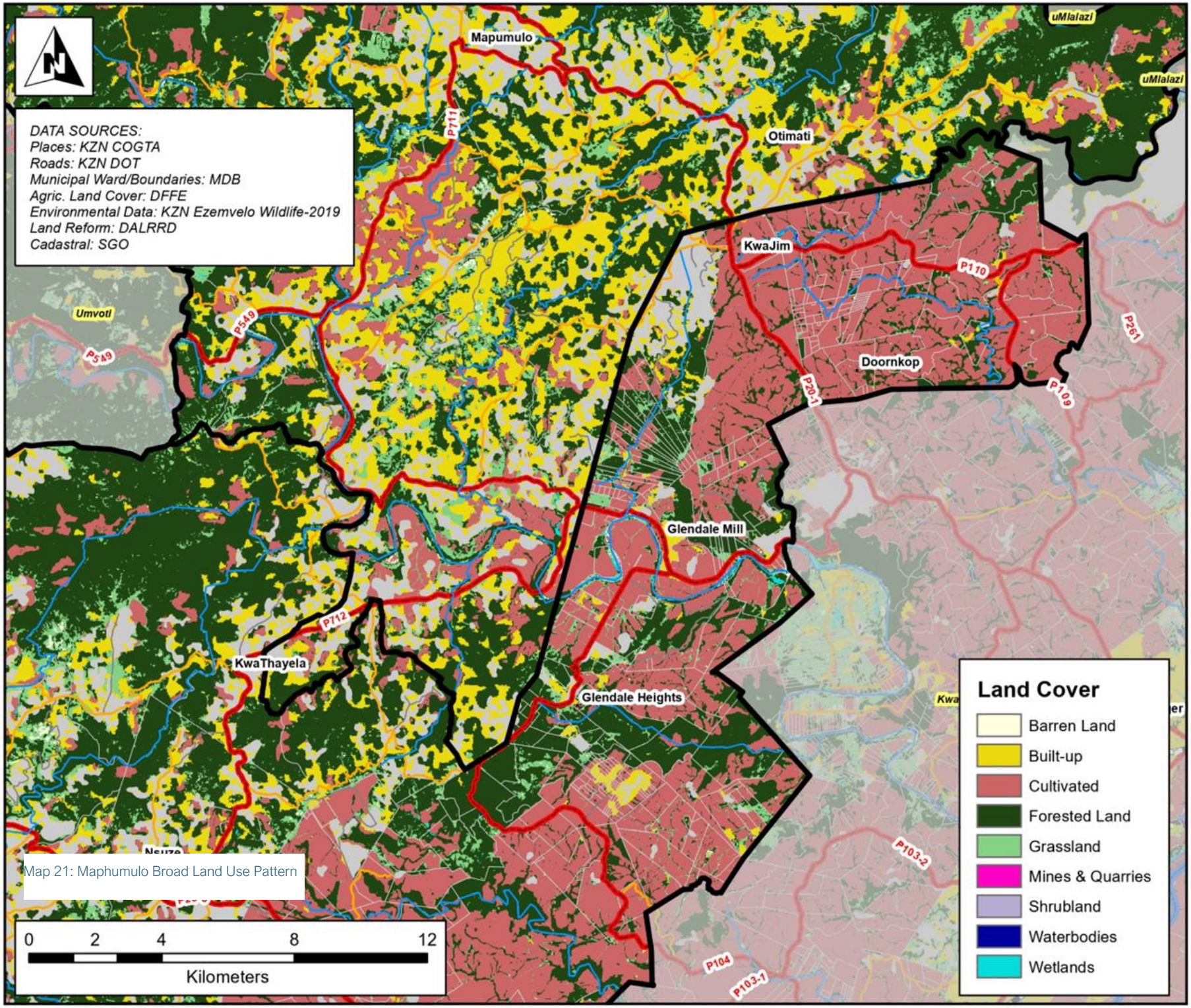
Cross Border Maphumulo Municipality (Environmental Linkages)

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- CBA: Irreplaceable
- CBA:Optimal
- ESA
- ESA Species Specific

INGUQUKO DEVELOPMENT
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Map 20: Maphumulo Environmental Linkages



Map 21: Maphumulo Broad Land Use Pattern

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

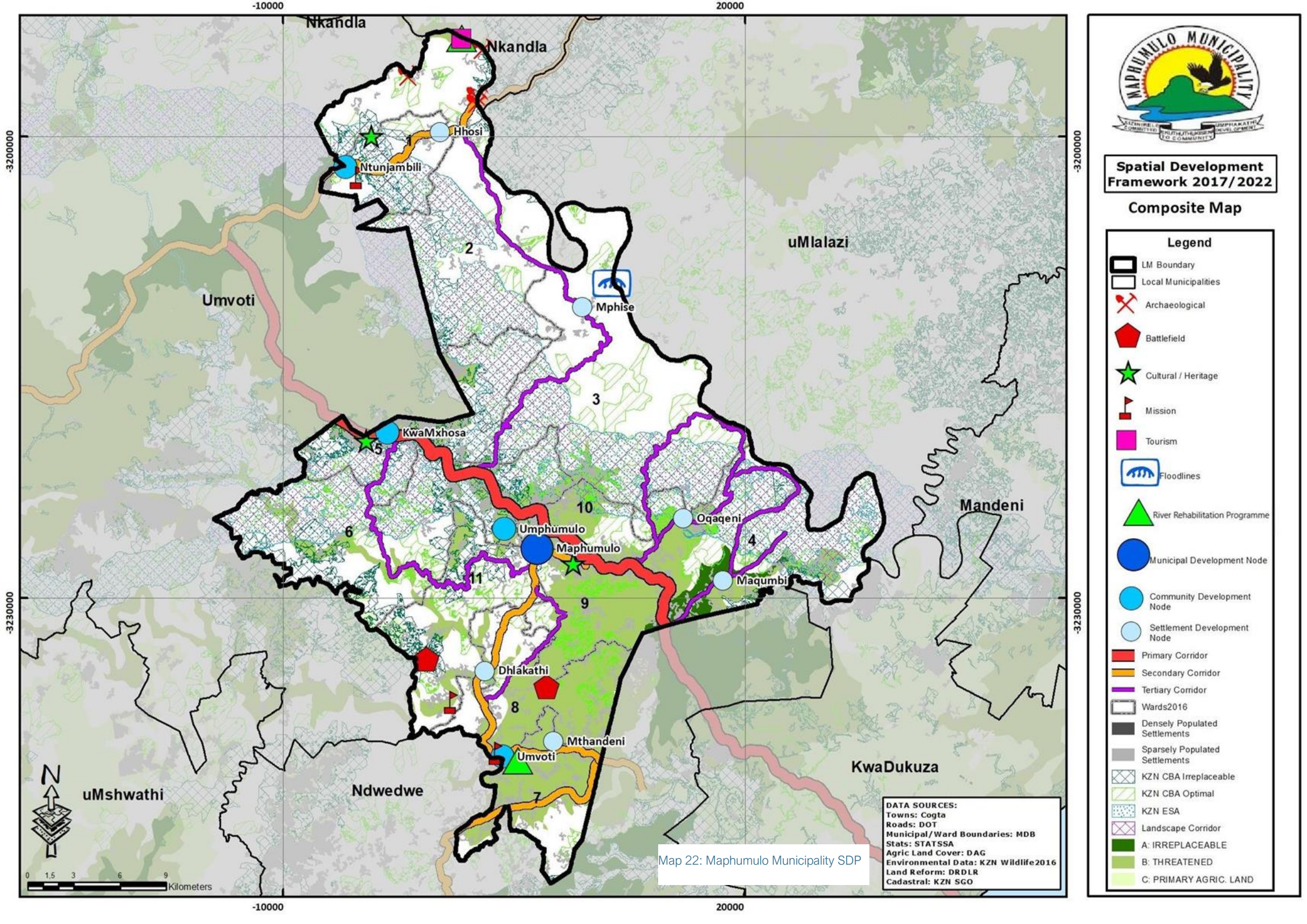
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Cross Border Maphumulo Municipality (Land Cover/Infrastructural Linkages)

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS



Map 22: Maphumulo Municipality SDP

8.2.4. UMSHWATHI LOCAL MUNICIPALITY

The uMshwathi Local Municipality functions as a Category B municipality, positioned within the uMgungundlovu District, directly adjacent to Pietermaritzburg in the KwaZulu-Natal Province. Notably, it holds the distinction of being the largest municipality among the seven within the district. This municipality finds its location within an area that until recently was largely under the governance of tribal authorities. However, within the remaining portion, towns were established by German immigrants approximately 150 years ago. During the 1850s, a group of 13 cotton planter families from Osnabruck unter Bergthell departed Germany and settled in this region. Following them were missionaries and other settlers, primarily from Hanover, who established settlements such as New Hanover and Wartburg. These settlers not only brought the Lutheran faith but also introduced German language and culture. The nomenclature of Wartburg itself pays homage to the castle in Eisenach, where Dr. Martin Luther translated the Bible into German. The village emblem portrays the immigrants' arrival by sailing ship, the Luther Rose, along with the call to 'pray and work'. While agriculture is the predominant land use, urban development is concentrated in the main towns. In contrast, the communities residing in underdeveloped areas encounter significant challenges, facing limited access to fundamental physical and social necessities, coupled with scarce economic opportunities. The existing authority structures currently struggle to address the pressing need for improvements in the basic living conditions urgently required by the rural populace.

ENVIRONMENTAL LINKAGES: The two municipality share environmentally sensitive areas that are identified as critically biodiverse, with irreplaceable biodiversity found in the Montebello area. The municipalities are linked by the following rivers:

- Mholweni River
- Mombeni River
- Nsuze River
- Phambela River

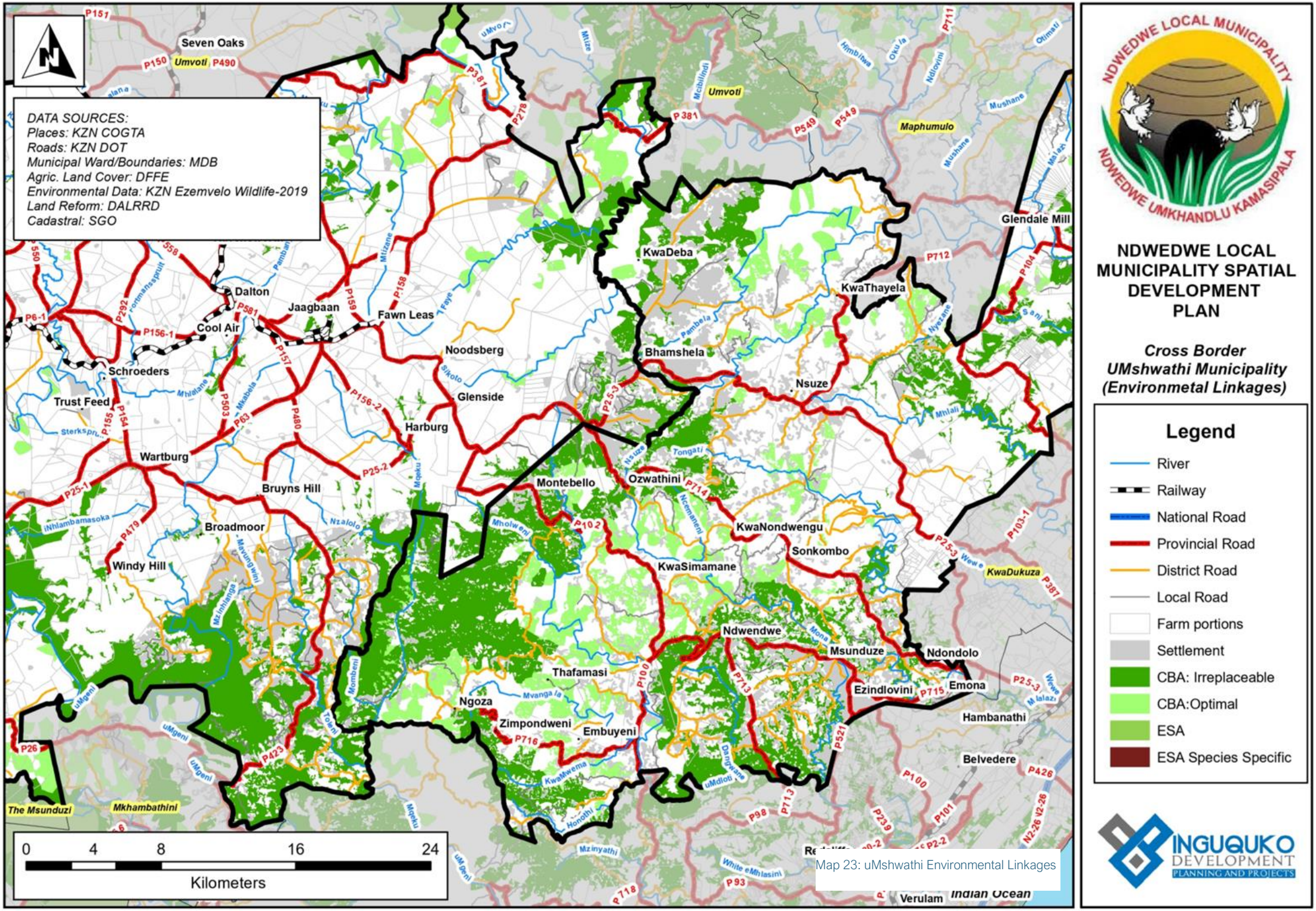
TRANSPORTATION LINKAGES: The two municipalities are linked by the following roads:

- P102 provincial road linking P100 in Ndwedwe to Glenside and Noordsberg.
- P25-3 provincial linking Nsuze and Bhamshela to the eastern region of the Umshwathi Local Municipality.
- P172 provincial road linking Glendale Mill to the southern region.

BORDERING SETTLEMENTS: Settlements located along the Umshwathi-Ndwedwe Municipal borders include Montebello, Ozwathini, KwaDeba in Ndwedwe Municipality, as well as Glenside, Harburg, and Noodsberg in UMshwathi Local Municipality.

LAND COVER/USE: Land uses along the border include commercial farming and traditional settlements predominantly on the Umshwathi Local Municipality.

SPATIAL PROPOSALS: Spatial proposals in the Umshwathi Local Municipality include the preservation of high potential agriculture and areas of environmental sensitivity and significance.



Map 23: uMshwathi Environmental Linkages

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

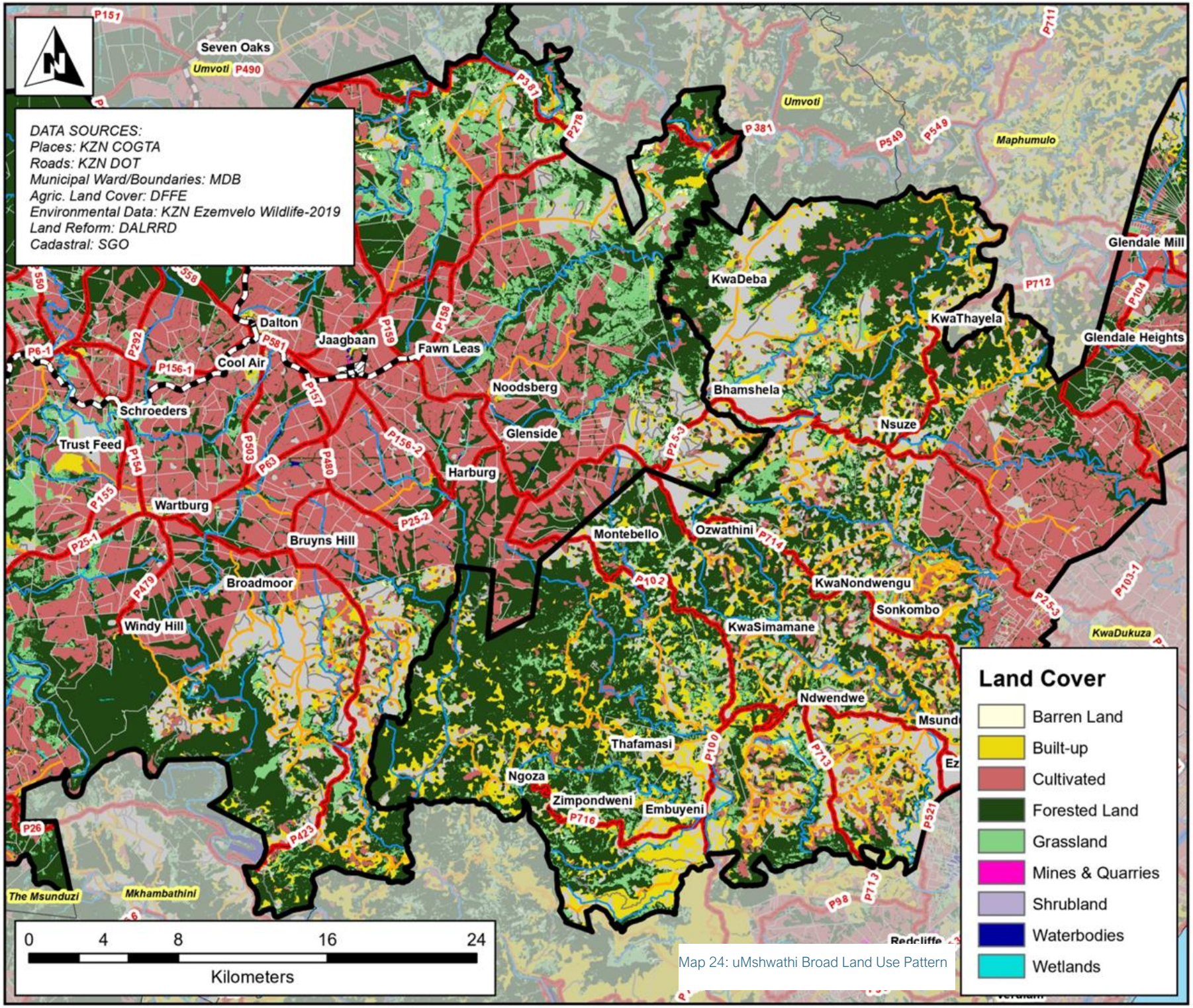
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Cross Border UMshwathi Municipality (Environmetal Linkages)

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- CBA: Irreplaceable
- CBA:Optimal
- ESA
- ESA Species Specific

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS



Map 24: uMshwathi Broad Land Use Pattern

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

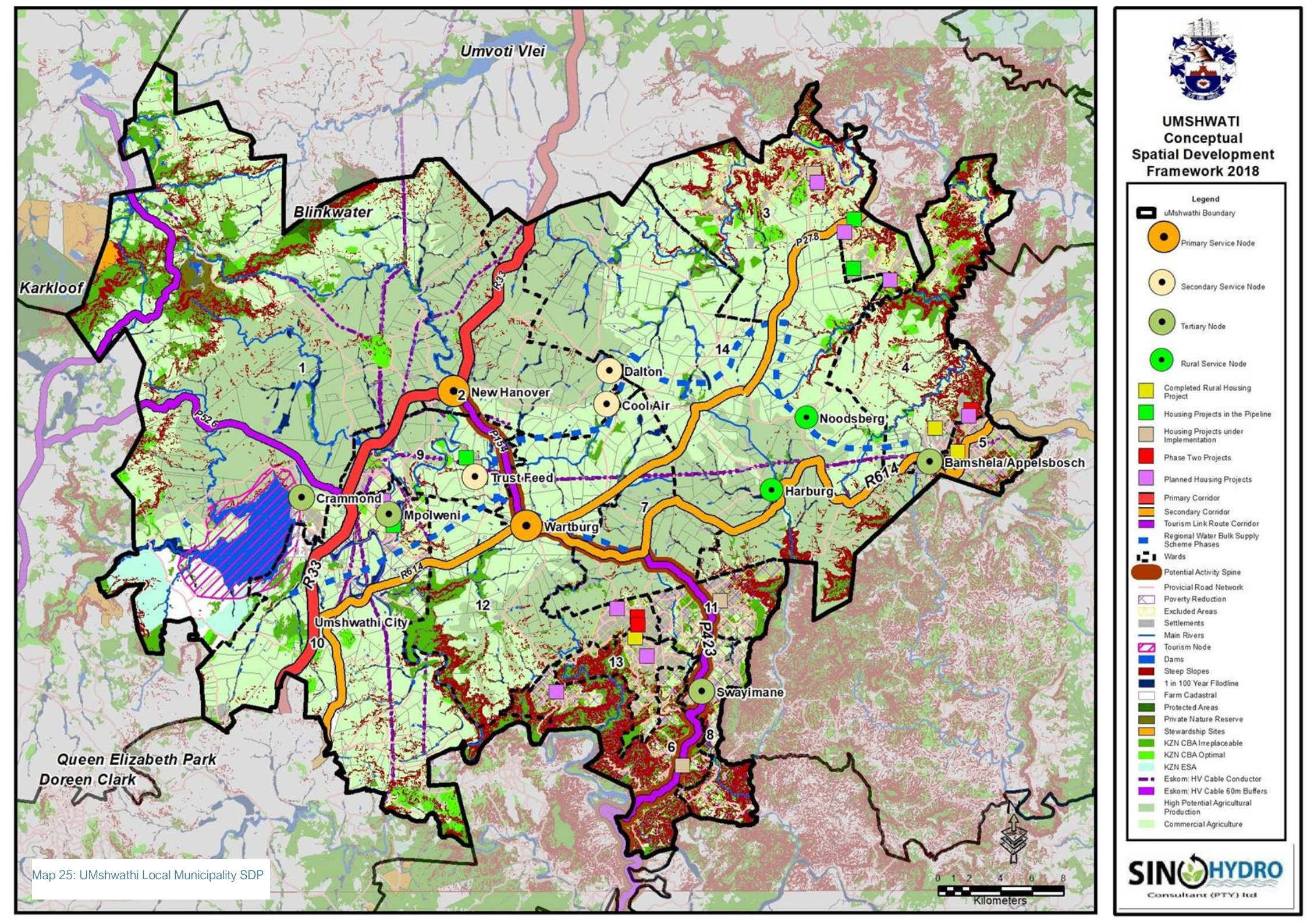
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Cross Border UMshwathi Municipality (Land Cover/ Infrastructural Linkages)

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS



Map 25: UMshwathi Local Municipality SDP

8.2.5. UMVOTI LOCAL MUNICIPALITY

The Umvoti Local Municipality operates as a Category B municipality, situated along the eastern boundary of the uMzinyathi District within the KwaZulu-Natal province. Positioned at a distance of approximately 65km from Dundee and roughly 70km from Pietermaritzburg, it claims the distinction of being the largest municipality out of the four that constitute the district, encompassing about one-third of its total geographical expanse.

Umvoti encompasses five distinct traditional authority domains, all of which lie beyond a 40km radius from Greytown, the central hub within the municipality's area. The heart of the region is predominantly adorned with fertile commercial farmland, characterized by a relatively sparse population density.

Benefitting from its strategic placement, Umvoti is well-connected by a network of provincial and regional roadways, given its pivotal location at the crossroads of routes leading to Pietermaritzburg, the coastal areas, the Drakensberg Mountains, and the renowned Battlefields Route.

ENVIRONMENTAL LINKAGES: Environmental linkages along the border of the municipalities include critical biodiversity areas and watercourses namely:

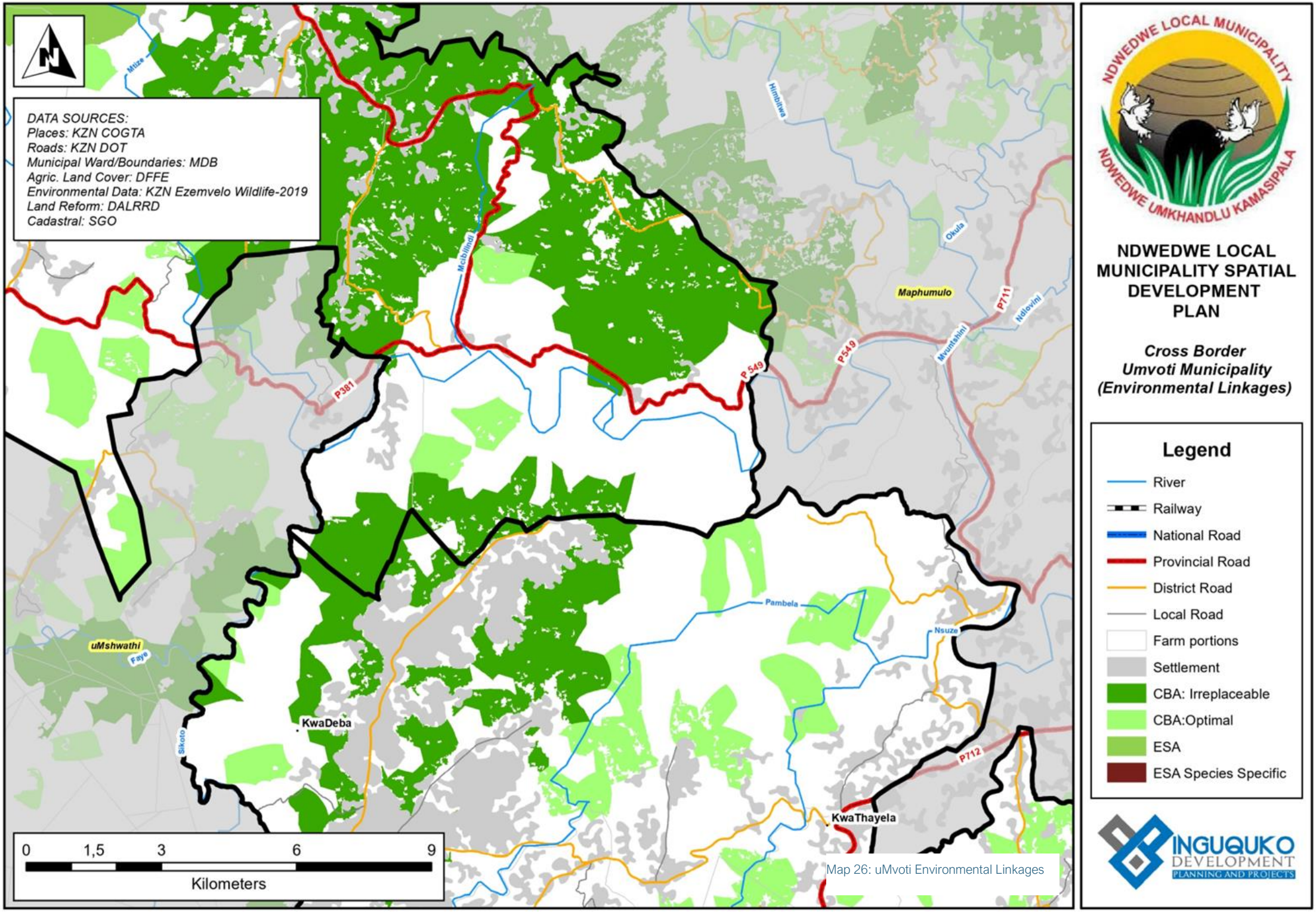
- Sikoto River

TRANSPORTATION LINKAGES: There are very few transportation linkages between the municipalities. The transportation linkages that do exist are local roads which are gravel and not adequate public transport.

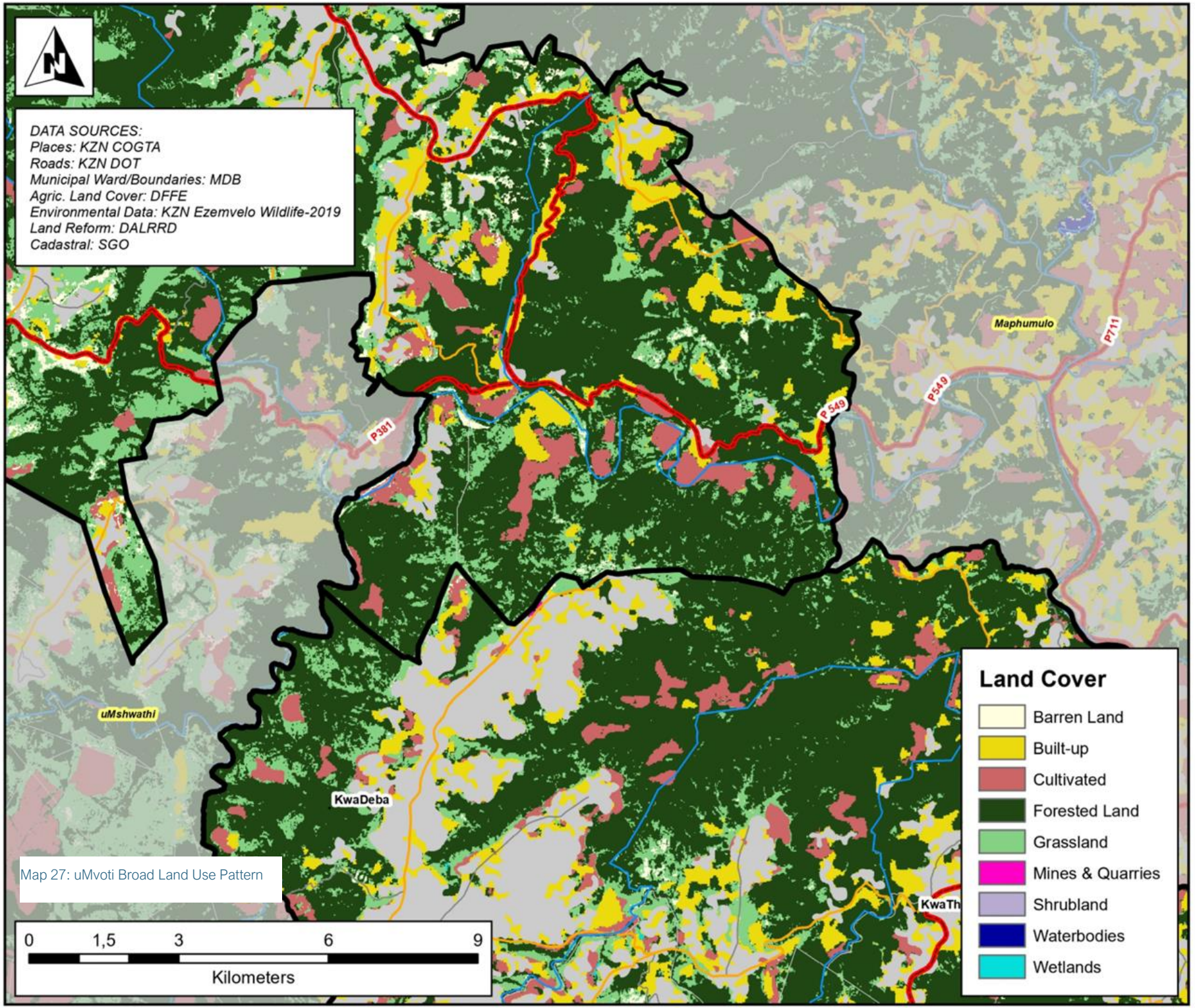
BORDERING SETTLEMENTS: KwaDeba in Ndwedwe Local Municipality and Mhlangandlovu in Umvoti Local Municipality are the settlements located at the border of the municipalities. These are rural/traditional settlements which have supporting social facilities serving the immediate surrounding communities.

LAND COVER/USE: Land uses along the borders are predominantly traditional settlements, forestland and small tracks of land used for commercial agriculture.

SPATIAL PROPOSALS: Spatial proposals along the border include areas earmarked for Community Conservation and high potential agricultural land.



Map 26: uMvoti Environmental Linkages



Map 27: uMvoti Broad Land Use Pattern

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

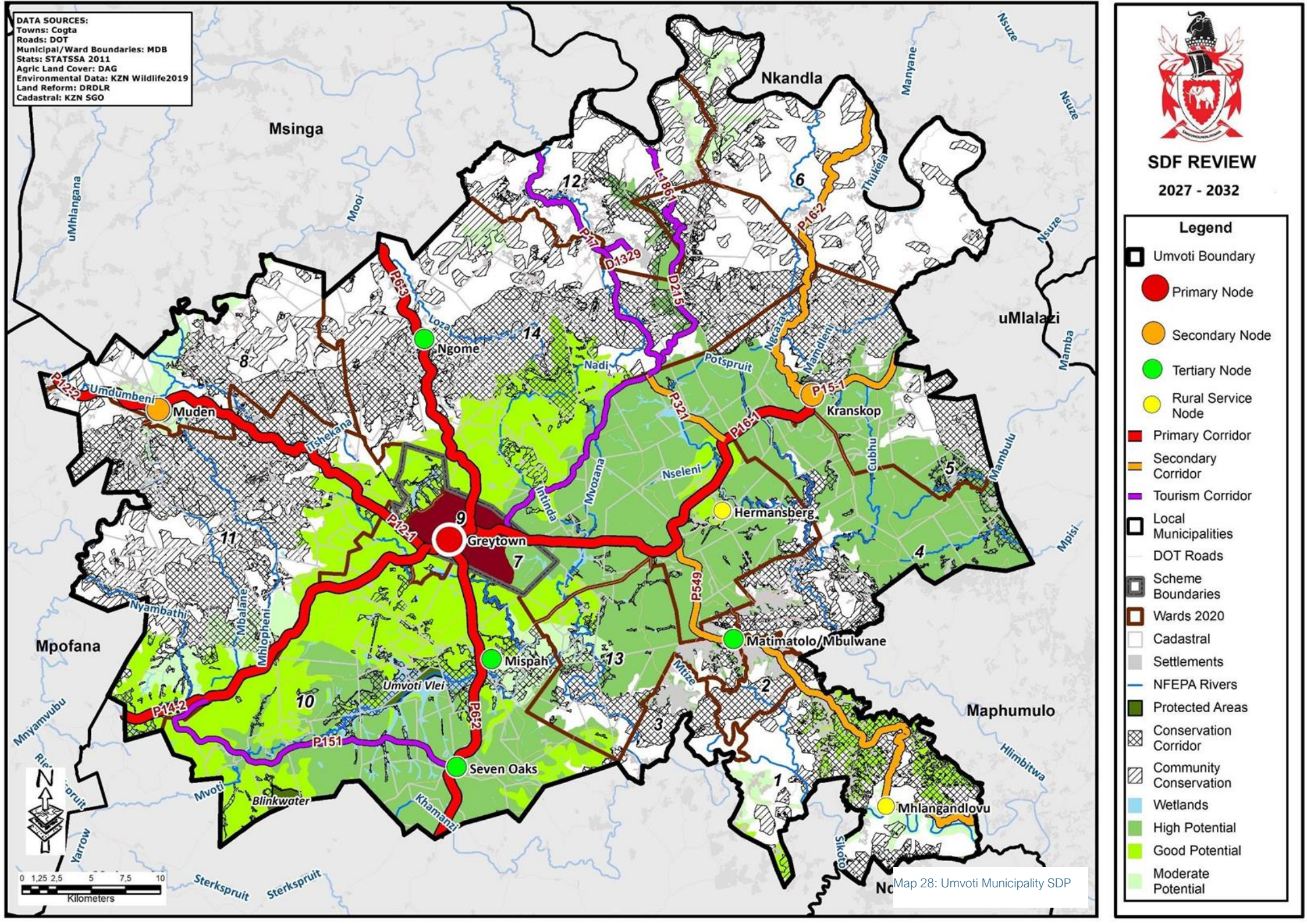
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Cross Border Umvoti Municipality (Land Cover/ Infrastructural Linkages)

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS



Map 28: Umvoti Municipality SDP

8.3. IMPLICATIONS ON THE SPATIAL DEVELOPMENT PLAN

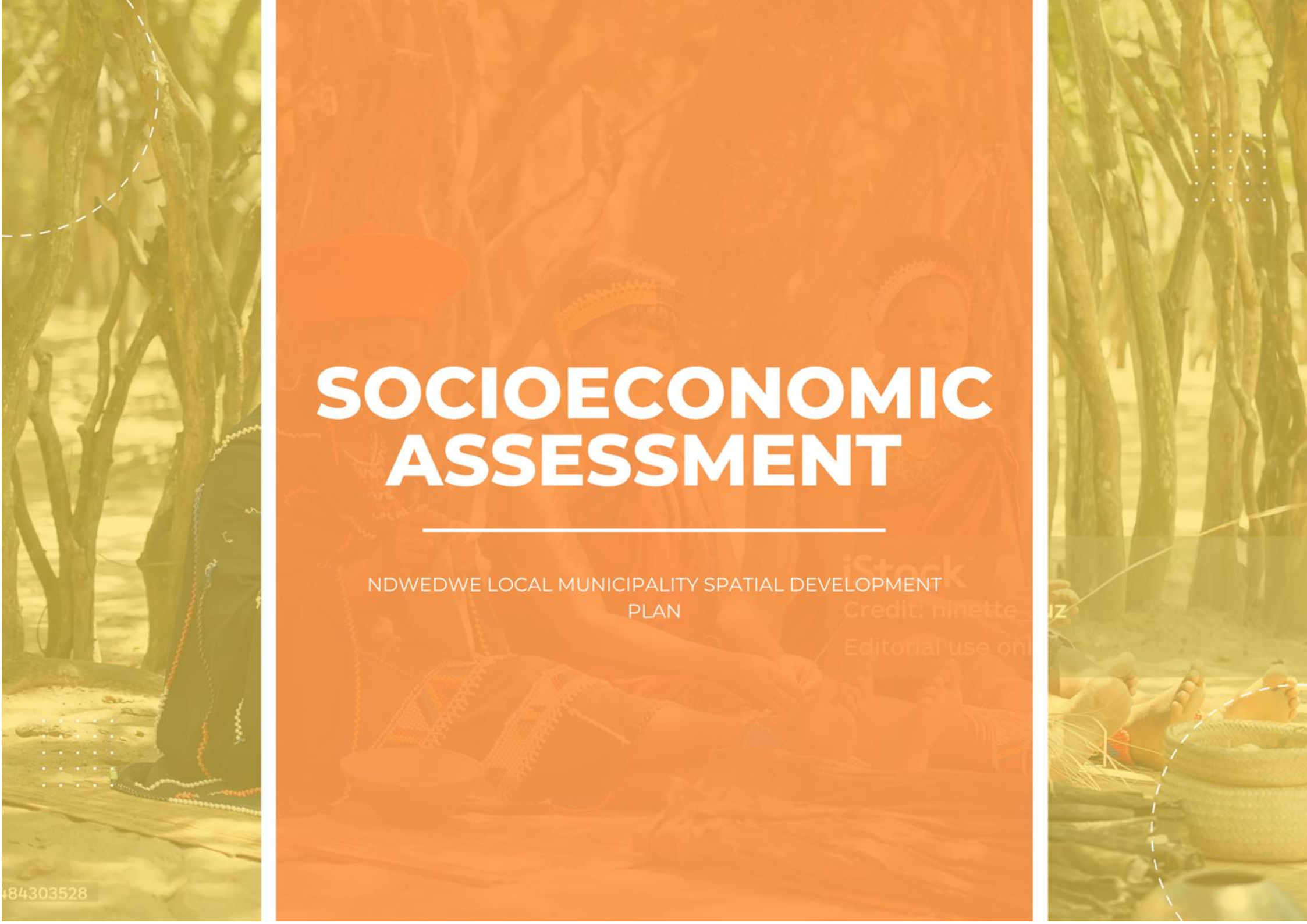
Ndwedwe is an integral component within a broader framework of local governance and regional economic dynamics. It holds the power to influence and be influenced by development activities in its neighbouring regions. The rise of cross-border planning concerns has gained prominence and significance. The focal point centres on strategic or collaborative development matters that stand to gain from a unified approach. This involves actively engaging with pertinent neighbouring authorities to explore the potential for cooperative efforts.

Prominent landscape corridors traverse through Ndwedwe as well as adjacent Local Municipalities. These landscape corridors operate on a provincial scale and were conceived as a network of altitudinal and bio-geographic pathways. Their purpose is to facilitate evolutionary, ecological, and climate-related processes, ultimately crafting an interconnected landscape to safeguard species within a fragmented environment (Jewitt, 2009). Sustaining connectivity via these corridors emerges as pivotal for several ecological processes tied to movement, including species migration, seasonal and altitudinal dispersion, and adapting range shifts in response to climate shifts. It's crucial to recognize that these corridors aren't solely linked to specific biodiversity targets; rather, they prioritize regional connectivity to ensure the persistence of crucial ecosystem processes. The ensuing ramifications can be outlined as follows:

The preservation and continual maintenance of the transportation routes become imperative. Moreover, the agricultural and tourism endeavours along this route should be strategically pursued to harness maximum potential opportunities.

The Ndwedwe Local Municipality, along with its exclusive domain, boasts a considerable presence of hydrological features. The pristine nature of these natural assets necessitates their conservation, protection, and preservation. This imperative arises not only due to the potential diminishment of biodiversity but also to maintain the undisturbed functioning of the ecosystem, which supports a multitude of species reliant upon it.

Ndwedwe Local Municipality holds substantial untapped tourism potential stemming from its blend of natural and cultural assets. The municipality should actively engage as stakeholders in these assets to reap economic benefits.



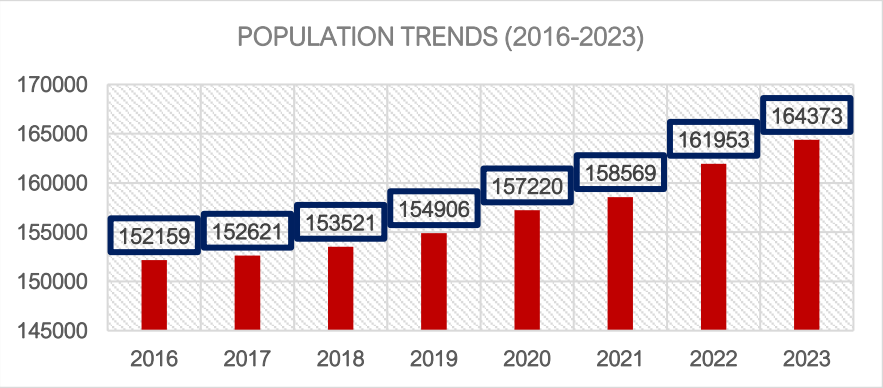
SOCIOECONOMIC ASSESSMENT

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

9. SOCIOECONOMIC AND DEMOGRAPHIC ASSESSMENT

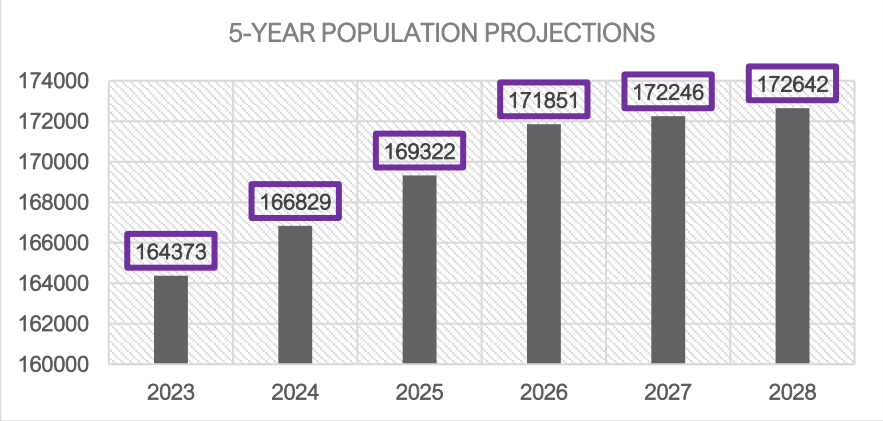
The demographic section offers a summary of crucial demographic factors that will guide municipal planning and budgeting. This section will delve into the estimated population size and its density, the way the population is distributed across different age groups, dependency ratios, and also examine household size and density within the iLembe municipal area.

9.1. POPULATION TRENDS AND PROJECTIONS



Graph 2: Population Trends (2016-2023)

Source: Municipal Socioeconomic Profile (MSEP), 2021

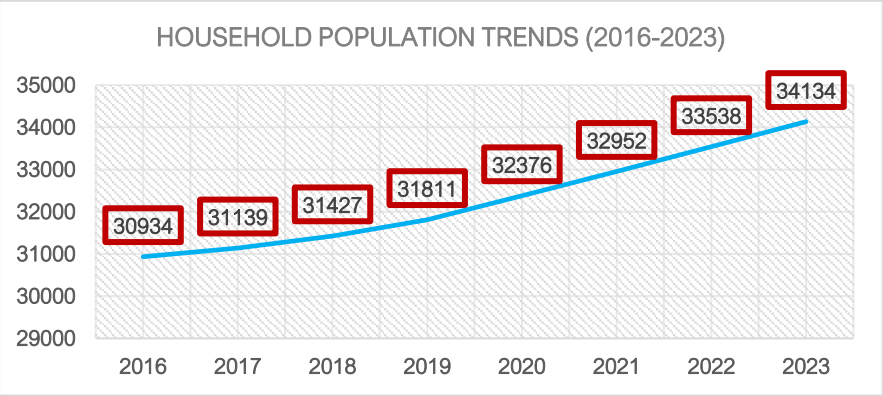


Graph 1: 5-Year Population Projections

Source: MSEP, 2021

Population refers to the count of individuals residing in a defined geographical area. In 2016, the Ndwedwe Municipality had a population of 152,159 people. The projected total population for the iLembe Municipality is expected to rise to 171,851 by 2026, with an average annual growth rate of 0.23%. This growth rate is lower than that observed in the district from 2016 to 2019, which was 0.45%. Graph 1 illustrates the actual population figures up to 2023 and Graph 2 illustrates the 5-year projections from 2023 to 2028.

9.1.1. HOUSEHOLDS POPULATION TRENDS AND PROJECTIONS



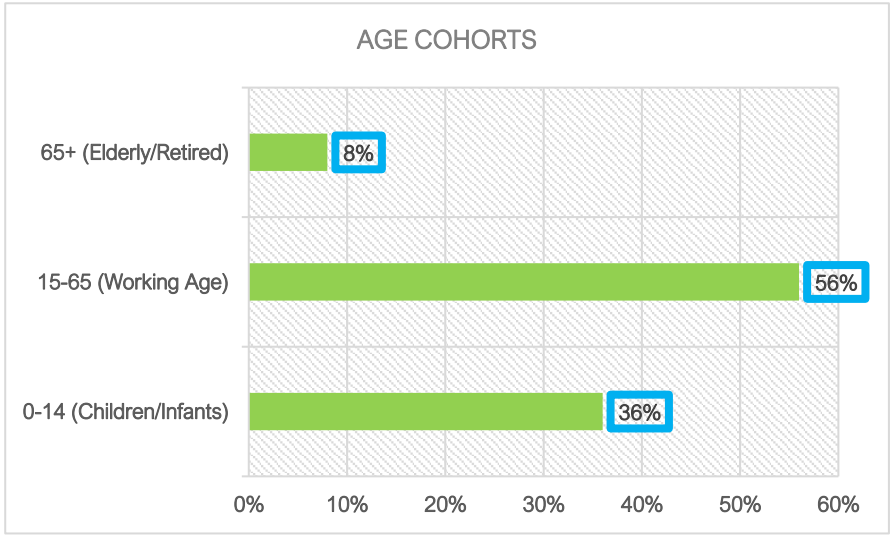
Graph 3: Household Population Trends

Source: MSEP, 2021

A household is defined as a collective of individuals residing together or a solitary person dwelling independently. In 2016, the Ndwedwe Municipality had 30,934 households, a number projected to increase to 35,987 by 2026. The municipality's average annual household growth rate stands at 0.36%, which is lower than that observed in the iLembe District at 0.62%.

The Ndwedwe Municipality has larger household sizes compared to those in the iLembe District. In 2016, the average household size in the Ndwedwe Municipality was 4.92 individuals, and this is projected to see a slight increase to 4.93 individuals by 2026.

9.2. AGE COHORTS



Graph 4: Age Cohorts

Source: MSEP, 2021

The dependency ratio represents the proportion of dependents (individuals aged below 15 and over 65) in relation to the working-age population (those aged 15 to 64). A higher ratio indicates a greater financial responsibility on the working-age population to provide for those who are not engaged in economic activities.

9.3. DEPENDENCY RATIO

Table 3: Dependency Ratio

2016	2020	2026
74,1	76,1	76,4

Source: MSEP, 2021

The dependency ratio represents the proportion of dependents (individuals aged below 15 and over 65) in relation to the working-age population (those aged 15 to 64). A higher ratio indicates a greater financial responsibility on the working-age population to provide for those who are not engaged in economic activities.

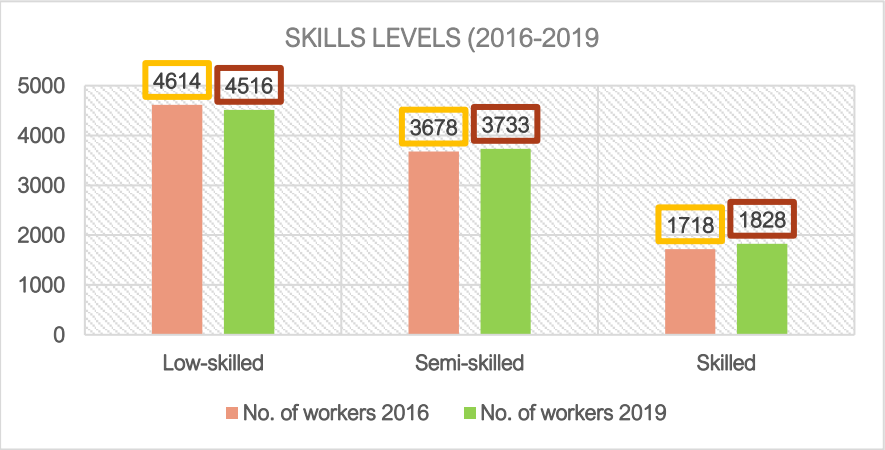
In 2020, the Ndwedwe Municipality had an estimated dependency ratio of 76.06% meaning that there are about 76 dependents for every 100 people of working age. The dependency ratio is expected to increase to 76.37% by 2026.

9.4. EDUCATION LEVELS

The education section offers a summary of the education-related metrics at hand. Education plays a significant role in influencing the employability and income-generating capacity of individuals in a municipal region, ultimately affecting the municipality's revenue collection capabilities. In this chapter, we will examine factors such as skill levels, average years of schooling, adult literacy rates, and anticipated years of schooling within the Ndwedwe Municipality.

9.4.1. SKILLS LEVEL

The graph below illustrates the skill levels found in the Ndwedwe Municipal area, which can serve as a gauge for assessing the educational attainment within this locality or region.



Graph 5: Skills Levels

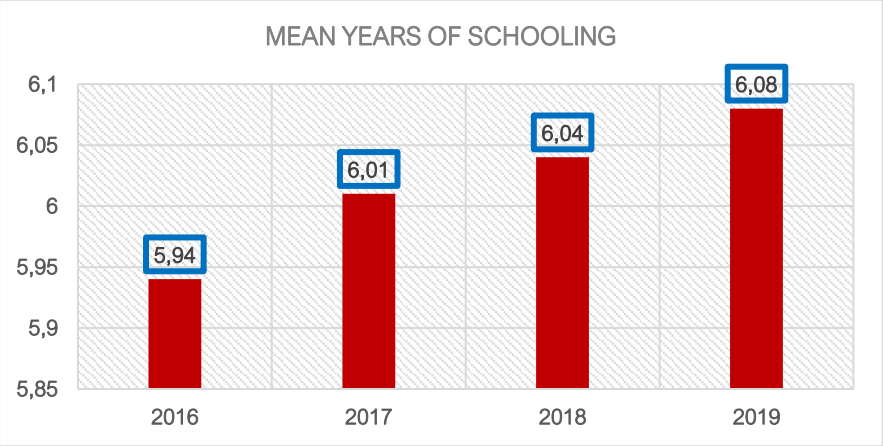
Source: MSEP, 2021

In 2019, Ndwedwe Municipality employed 4,516 individuals in low-skilled positions, 3,733 in semi-skilled roles, and 1,828 in skilled occupations. Over the period from 2016 to 2019, there was a collective increase in job opportunities across all these skill categories.

9.4.2. MEAN YEARS OF SCHOOLING

The mean years of schooling represent the average number of completed education years within a population, making it a commonly employed metric to gauge the human capital of an area or region.

Figure 2.1 illustrates the mean years of schooling in the Ndwedwe Municipality from 2016 to 2019.



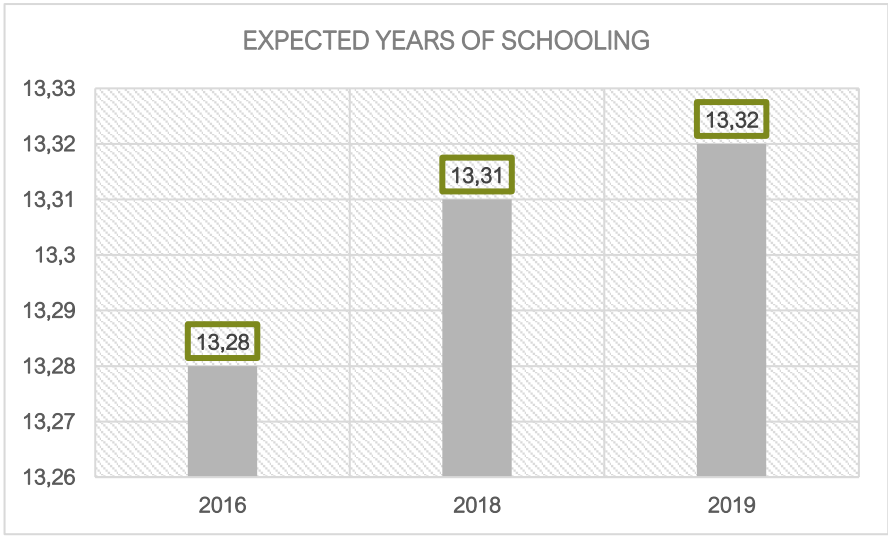
Graph 6: Mean Years of Schooling

Source: MSEP, 2021

Starting in 2016, the mean years of schooling in the Ndwedwe Municipality have risen from 5.94 years to reach 6.08 years by 2019. In 2019, when compared to the iLembe District, Ndwedwe had a lower average number of years of completed schooling.

9.4.3. EXPECTED YEARS OF SCHOOLING

Expected years of schooling are determined by considering the duration of education at every educational level, along with the enrolment of individuals across various age groups in all educational tiers and the total number of school-age children within the population for each educational level. The graph below displays the anticipated years of schooling for both the Ndwedwe Municipality and the iLembe District spanning from 2016 to 2019.



Graph 7: Expected Years of Schooling

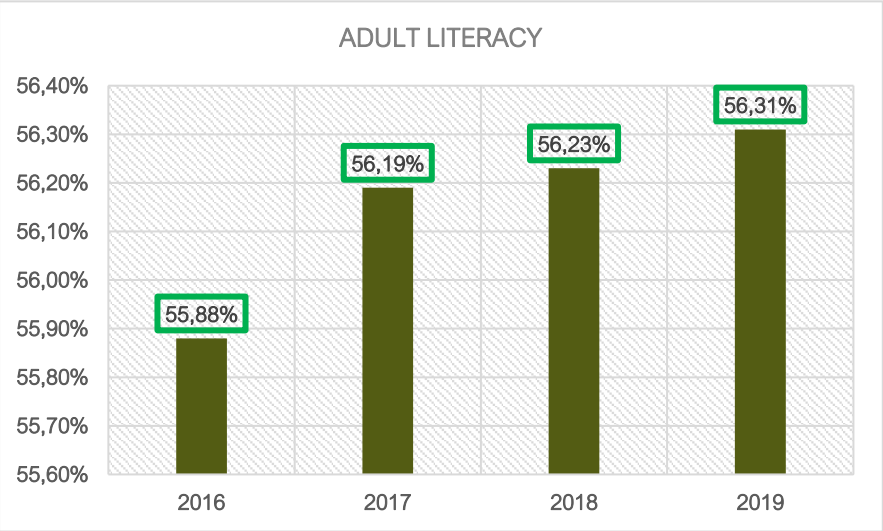
Source: MSEP, 2021

From 2016 to 2019, the anticipated years of schooling in the Ndwedwe Municipality experienced growth. In 2019, when compared to the iLembe District, Ndwedwe exhibited a higher level of expected years of schooling.

9.4.4. ADULT LITERACY

The functional adult literacy rate of the population refers to the proportion of individuals aged 20 and above whose highest level of education attained is Grade 7 or higher. Those individuals with an education level below Grade 7 are categorized as illiterate. The literacy

rate of the population plays a significant role in shaping the employability of the local workforce.



Graph 8: Adult Literacy

Source: MSEP, 2021

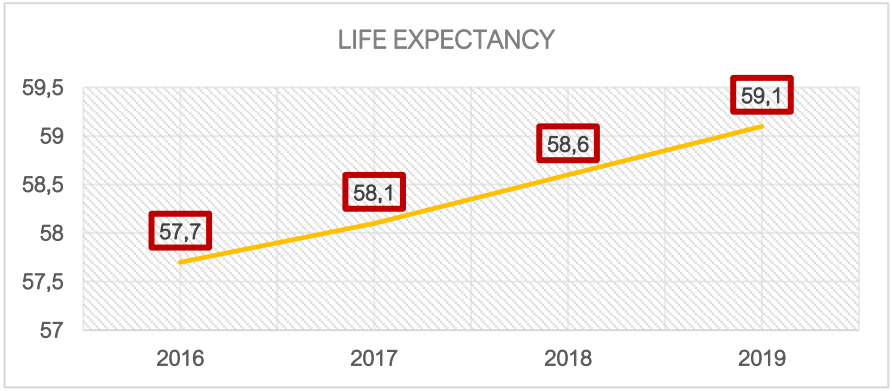
In 2016, the adult literacy rate in the Ndwedwe Municipality stood at 55.9%, and by 2019, it had risen to 56.3%.

9.5. HEALTH INDICATORS

This section offers a synopsis of critical health metrics. The well-being of citizens plays a role in determining economic well-being. Subpar health has adverse effects on workforce productivity, places added strain on healthcare systems, and diminishes the overall quality of life for individuals. In this chapter, we will examine the accessibility of healthcare facilities, HIV statistics, child health results, and maternal health outcomes within the Ndwedwe Municipality.

9.5.1. LIFE EXPECTANCY

Life expectancy is the projected duration in years that a newborn would live if the existing patterns of mortality rates, which are specific to different age groups at the time of birth, were to remain constant throughout the individual's lifetime (DPME, 2017).



Graph 9: Life Expectancy

Source: MSEP, 2021

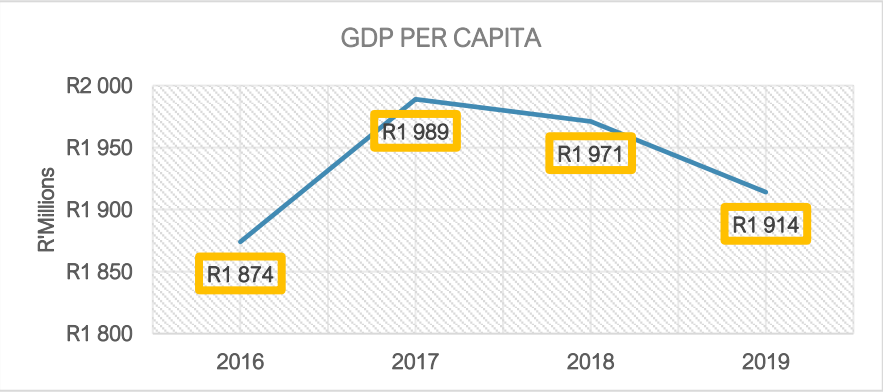
Between 2016 and 2019, the life expectancy in the Ndwedwe Municipality has risen from 57.7 to 59.1 years. Additionally, the life expectancy in the Ndwedwe Municipality is lower when compared to that of the iLembe District.

9.6. POVERTY INDICATORS

This section, we will examine several poverty-related indicators within the Ndwedwe Municipality. These include Gross Domestic Product per Region (GDPR) per capita, household income, the prevalence of indigent households, income inequality, and measures of human development.

9.6.1. GDP PER CAPITA

The GDPR per capita represents the economic productivity per individual and is frequently utilized as an indicator of living standards.



Graph 10: GDP Per Capita

Source: MSEP, 2021

The Ndwedwe Municipality exhibits a GDPR per capita that is lower than both the iLembe District and the national average in South Africa. Over the period from 2016 to 2019, the GDPR per capita within the Municipality experienced a modest average annual growth rate of 0.709%.

9.6.2. HOUSEHOLD INCOME

Tabulated below is the mean monthly household income (in current prices) within the Ndwedwe Municipality, as well as the average monthly income in both the iLembe District and South Africa. Additionally, the table presents the yearly growth in household income during the period from 2016 to 2019.

Table 4: Household Income Indicators

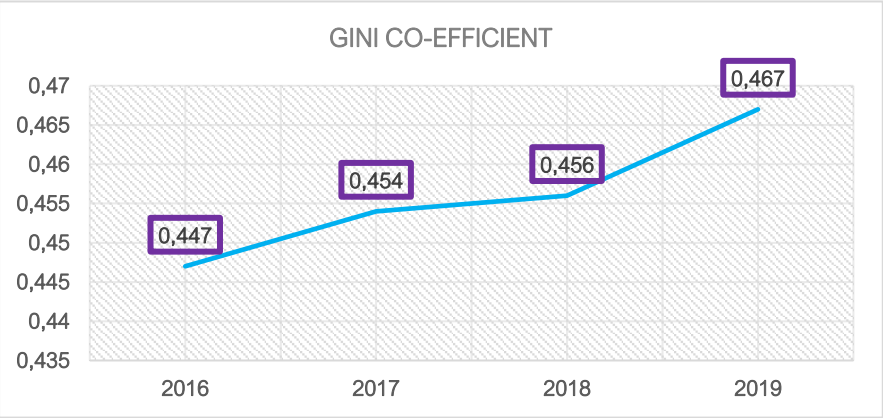
AVERAGE HOUSEHOLD INCOME (2019)	AVERAGE HOUSEHOLD INCOME GROWTH (2016-2019)
R191,00	2,04%

Source: MSEP, 2021

Households within the Ndwedwe Municipality had incomes lower than the district's average. The average monthly household income, after expenses, saw a consistent annual growth rate of 2% from 2016 to 2019. Notably, the average income growth for households in the Ndwedwe Municipality outpaced the national average in South Africa during the same period from 2016 to 2019.

9.6.3. GINI CO-EFFICIENT

The Gini coefficient serves as a metric for gauging income inequality by quantifying how far the income distribution among households deviates from a perfectly equal distribution. A Gini coefficient of 0 signifies complete equality, while a value of 1 denotes total inequality.

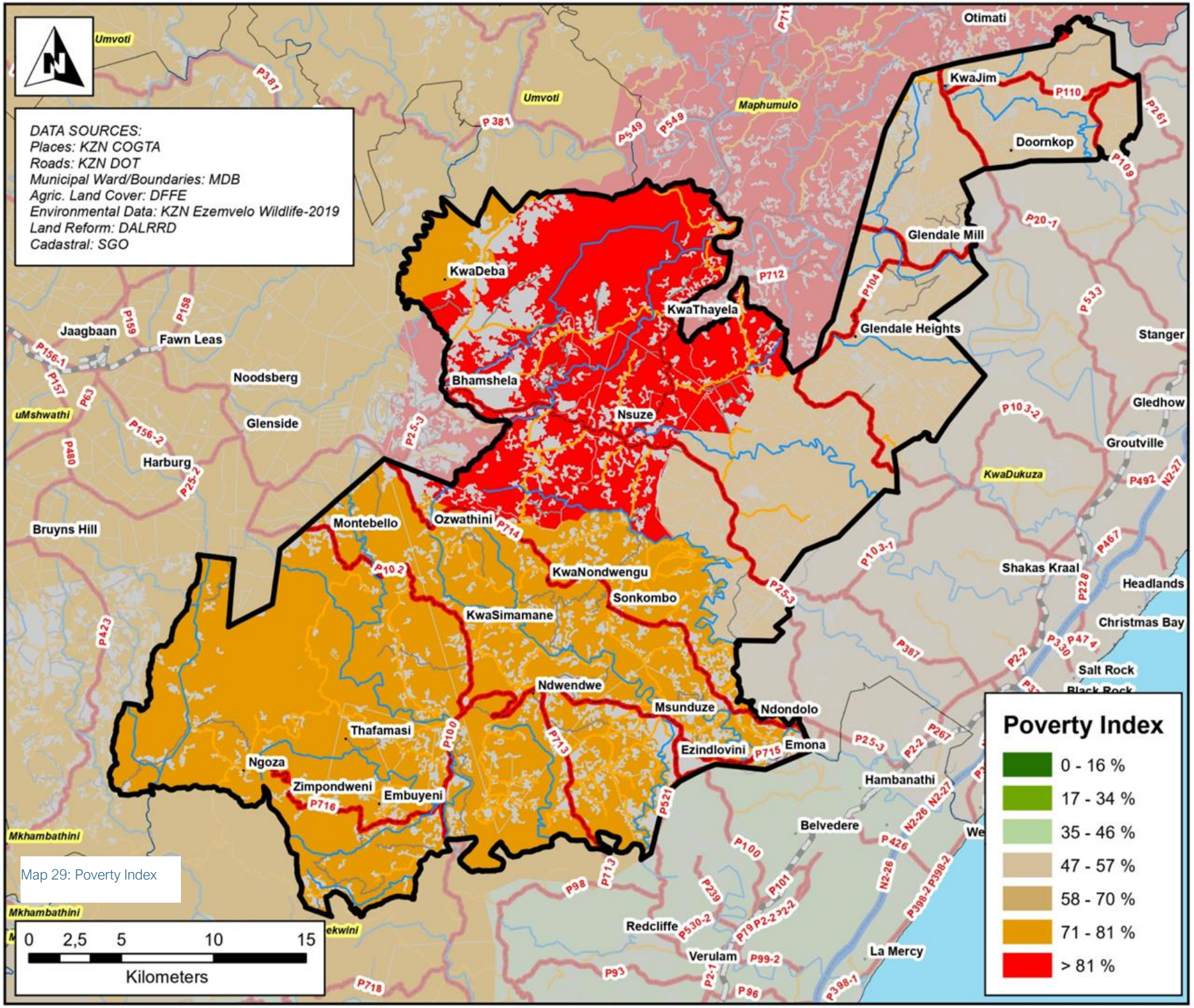


Graph 11: Gini Co-Efficient
Source: MSEP, 2021

In 2019, the Gini coefficient for the Ndwedwe Municipality stood at 0.467. This value suggests that income inequality within the Municipality is less pronounced than in the iLembe District. Additionally, it's worth noting that the Gini coefficient has been on the rise within the Municipality over the specified time frame, indicating an increasing trend in income inequality during that period.

9.6.4. POVERTY INDEX

A poverty index is a quantitative measure used to assess the extent and severity of poverty within a population or region. It combines various indicators and data related to income, consumption, living conditions, and access to basic services to generate a single numerical value or index. This index helps policymakers, researchers, and organizations understand the prevalence and depth of poverty in a particular area, allowing them to design and implement targeted poverty reduction programs and policies. Common examples of poverty indices include the Human Development Index (HDI), the Multidimensional Poverty Index (MPI), and the Poverty Headcount Ratio, among others. Mapped below is the Poverty Index for the Ndwedwe Local Municipality. Evident from the map is that the majority of households (71%-81%) are living below the poverty line.



Map 29: Poverty Index

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Poverty Index

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement

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9.7. SUMMARY OF KEY SOCIOECONOMIC FINDINGS

The Ndwedwe Municipality exhibited a lower GDP per capita compared to both the iLembe District and South Africa as a whole. Over the period from 2016 to 2019, there was a modest 2% increase in the average household income. Concurrently, income inequality has been on the rise, while the Human Development Index for the Municipality increased from 0.58 to 0.601 between 2016 and 2019.

9.7.1. IMPLICATIONS ON THE SDP

Addressing the spatial planning and development implications for a Ndwedwe Local Municipality over the next 5 years will require a comprehensive and integrated approach. The following are high level strategies that the municipality will need for focus on in the short to medium term (5-year horizon):

Education and Skills Development: Invest in education and skills development programs to raise literacy and education levels. Establish adult literacy programs to target those who missed out on formal education. Develop vocational training centres to equip the youth with practical skills that match local job opportunities and economic needs of the municipality.

Poverty Alleviation: Implement poverty alleviation programs that focus on job creation, especially in sectors like agriculture, agribusiness, and small-scale manufacturing. Facilitate access to microfinance and entrepreneurship training to encourage small business development.

Youth Engagement: Promote youth engagement through recreational and educational activities. Establish youth centres and mentorship programmes. Encourage youth involvement in community development projects to instil a sense of ownership and responsibility.

Employment Generation: Foster an environment conducive to attracting investment and business growth. Support local entrepreneurs and cooperatives. Promote the development of industries that can absorb the working-age population.

Infrastructure and Basic Services: Invest in essential infrastructure such as roads, clean water supply, sanitation, and electricity to improve the quality of life and attract investment. Upgrade and expand healthcare facilities and schools to meet the needs of the increasing population.

Land Use Planning: Develop a land use plan that considers the growing population and the need for residential, commercial, and industrial zones. Encourage mixed-use developments to reduce the need for long commutes and improve access to jobs.

Environmental Sustainability: Promote sustainable agriculture practices to ensure food security and reduce environmental degradation. Implement waste management and conservation programs to protect natural resources.

Community Engagement and Participation: Involve the community in the planning and decision-making processes to ensure that development projects align with their needs and aspirations. Establish mechanisms for feedback and accountability.

Digital Infrastructure: Invest in digital infrastructure and connectivity to enable access to online education, remote work opportunities, and e-commerce.

Local Governance and Capacity Building: Strengthen local government institutions and build their capacity to plan, manage, and implement development initiatives effectively.

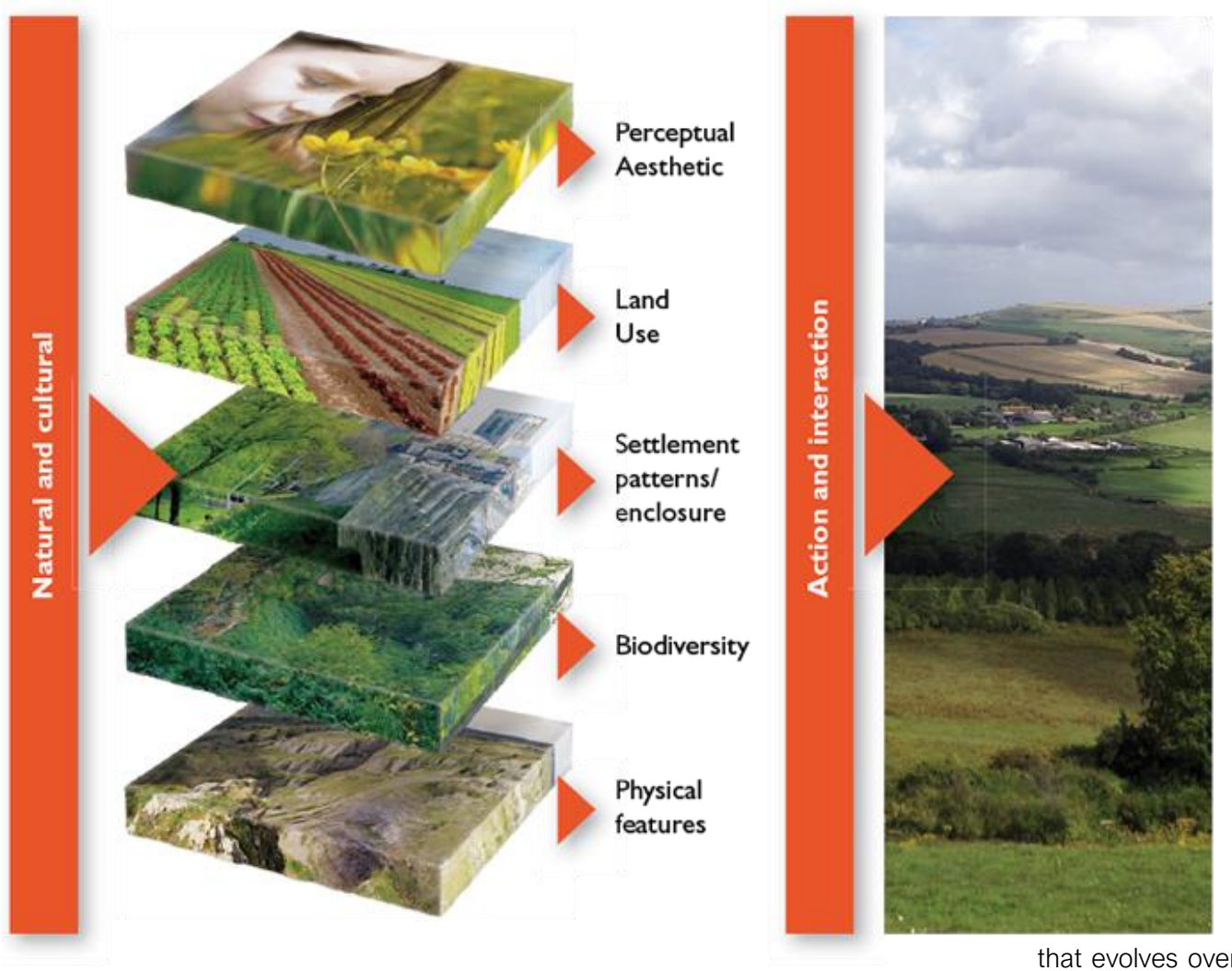
Monitoring and Evaluation: Establish a robust system for monitoring and evaluating the impact of development programs to make data-driven adjustments as needed.

BUILT ENVIRONMENT ASSESSMENT

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

10. BUILT ENVIRONMENTAL ASSESSMENT

10.1. LANDSCAPE APPEARANCE AND ARCHITECTURAL STRUCTURE



Landscape, within the realm of spatial planning, constitutes a multifaceted concept that transcends mere physical geography. It embodies the intricate interplay between natural and human-made elements within a specific geographical area, serving as a vital framework for informed and sustainable development.

At its core, landscape in spatial planning encompasses the entirety of a terrain's visual and functional attributes. It delves into the composition and arrangement of landforms, vegetation, water bodies, infrastructure, and human structures, each contributing to the overall character of a place. This holistic approach considers not only the aesthetic appeal but also the ecological, cultural, and social significance that collectively shape the essence of a landscape.

Spatial planning, as a deliberate process of organizing land use and activities, recognizes landscape as a dynamic entity that evolves over time due to both natural processes and

human interventions. It entails a comprehensive analysis of the existing landscape to guide future development while preserving and enhancing its inherent qualities. Through this lens, landscape becomes a strategic tool for achieving sustainability, resilience, and improved quality of life within communities.

A key aspect of understanding landscape in spatial planning lies in its dual nature – as both a physical reality and a perceptual experience. It not only encompasses tangible features but also embodies the emotions, memories, and cultural attachments that individuals associate with a place. Therefore, effective spatial planning considers the socio-cultural narratives intertwined with landscapes, recognizing their role in shaping identity and fostering a sense of belonging.

Furthermore, landscape serves as a valuable indicator of spatial functionality and efficiency. Different land uses and activities are visually manifested within the landscape, providing insights into the distribution of urban, rural, recreational, and industrial zones. This visual representation aids decision-makers in optimizing land allocation, ensuring a balanced and harmonious coexistence of diverse functions.

Incorporating landscape considerations into spatial planning entails a multidisciplinary approach, integrating fields such as urban design, environmental science, architecture, sociology, and economics. It demands a nuanced understanding of ecological processes, heritage preservation, infrastructure design, and social equity. This interdisciplinary synergy allows for a comprehensive evaluation of trade-offs and opportunities, steering development towards long-term prosperity.

As landscapes continue to evolve in response to changing demographics, economic dynamics, and environmental factors, spatial planning plays a pivotal role in steering this evolution towards desired outcomes. Landscape-oriented spatial planning fosters the creation of places that are not only visually pleasing but also environmentally resilient, culturally rich, and socially inclusive.

In conclusion, landscape within the context of spatial planning is a multifaceted entity that embodies the physical, cultural, and functional attributes of a geographical area. It encapsulates both the tangible features and intangible meanings associated with a place, guiding sustainable development and enhancing the overall well-being of communities. By acknowledging the significance of landscape, spatial planning endeavours to craft vibrant, resilient, and harmonious environments that stand the test of time.

10.1.1. LANDSCAPE

A landscape comprises the observable attributes of a terrain, encompassing tangible elements such as geographical formations like mountains, hills, and trees, water expanses, land cover, human-constructed edifices, and prevailing weather conditions. The Ndwedwe Local Municipality area unfortunately, lacks noteworthy built structures or distinctive landscape traits that evoke ambition. Notwithstanding the aforementioned, scattered across different sectors of the municipal expanse, there exist a handful of natural attractions. These captivating features predominantly manifest within farming zones. However, due to their predominantly rural setting, there is a constrained presence of built elements that could potentially compromise the integrity of these scenic landscape components.





10.2. SETTLEMENT TYPOLOGY

The Ndwedwe Local Municipality faces a substantial challenge in addressing the extensive infrastructure backlog that pervades various sections of its territorial expanse. The complexity of this endeavour is exacerbated by the unique terrain and settlement distribution within the municipality.

Characteristic of rural regions, the settlements within Ndwedwe are dispersed unevenly across the landscape. This distribution appears to be somewhat influenced by the prevailing road network, resulting in higher concentrations of settlements along major transportation corridors and in proximity to economically and socially significant areas. Notable examples include Bhamshela, Ndwedwe Village, and Montebello.

Upon closer observation, it becomes evident that the northeastern sector of Ndwedwe exhibits fewer settlements, primarily attributed to its predominant utilization for commercial farming purposes. Conversely, a majority of settlements are clustered within the central, eastern, western, southern, and northern portions of the municipal map. This discernible settlement pattern in Ndwedwe appears to be guided by considerations of accessibility and close proximity to facilities and services, both of a commercial and social nature. Localities such as Bhamshela, Montebello, Qinisani, Ndwedwe Town, and similar areas enjoy a heightened concentration of settlements, consequently leading to increased population densities.

10.2.1. TOWNS

Ndwedwe town is the main town in the Ndwedwe Local Municipality and is the commercial core and administrative centre for the municipality. The town comprises of the municipal offices, shops and supporting social facilities. The town forms part of one single parent farm which is yet to subdivided to unlock the towns full potential in terms of having a mixed pattern of land use and development. The town is characterised by both formal and informal commercial activity in the form of shopping centres, car washes and informal traders.

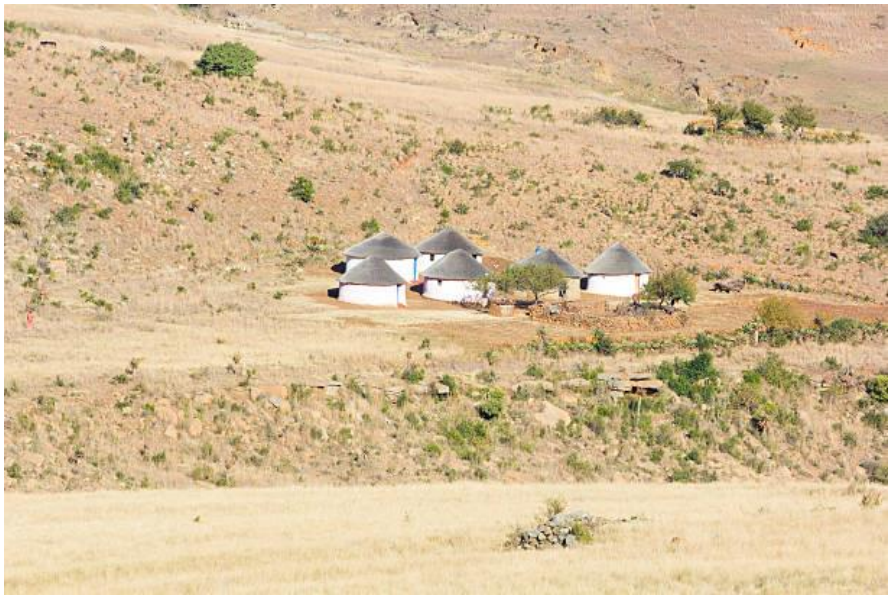




10.2.2. RURAL/TRADITIONAL SETTLEMENTS

In accordance with the works of Cater (1990) and Nagle (2000), the morphology of rural settlements is encompassed by three key aspects: typology, pattern (spatial arrangement), and the form (configuration) of these settlements. The typology element acknowledges a spectrum of rural settlements, ranging from solitary structures or dwellings to villages composed of clustered residences. The pattern, or spatial organization, reflects the density of dwellings or buildings within a typology, leading to either nucleated or dispersed formations. Meanwhile, the form component scrutinizes the arrangement and shape of buildings within a typology, encompassing linear or curvilinear arrangements.

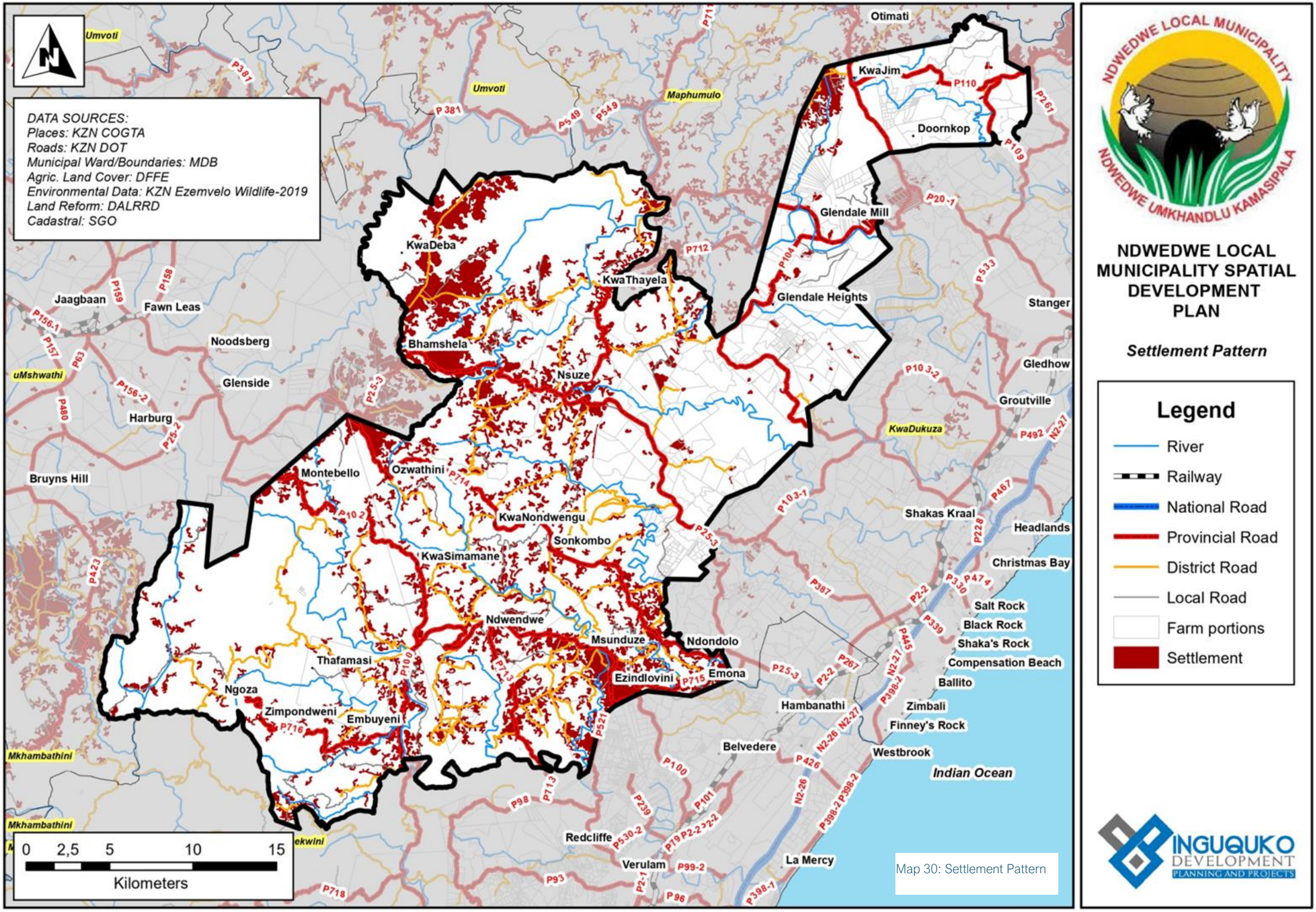
These rural settlements are situated in the central, southern and western regions of the municipality. Notable settlements within this vicinity include Msunduze, Sonkomo, Ndondolo, Emona, Ezondlovini, Embuyeni, Zimpondweni, Thafamasi, Ngoza, Ozwathini, KwaThayela, KwaNondwengu, and KwaSimamane. These rural settlements are characterized by substantial expanses of farmland and forestry, coupled with a relatively scattered distribution of structures. Some of these settlements are positioned in remote and challenging-to-access areas, often lacking adequate basic services and communal amenities. Therefore, there exists a pressing necessity to enhance their conditions through the implementation of rural housing subsidies.





10.2.3. COMMERCIAL FARMS

The Ndwedwe municipal region is predominantly characterized by privately owned commercial farms, constituting a significant portion of the area. These farms are primarily dedicated to agricultural activities such as food cultivation and livestock breeding. Within this landscape, designated settlement zones cater to the farming community, encompassing a central farmer homestead as well as smaller homesteads intended for farm laborers. It's worth noting that certain farms also accommodate rural settlements, a topic explored in the preceding subsection.



NDWEDWE LOCAL MUNICIPALITY
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NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Settlement Pattern

Map 30: Settlement Pattern

INGUQUKO DEVELOPMENT
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10.3. SETTLEMENT DENSITY

The settlement density is classified into the following categories:

- Medium-order settlements: The municipality contains a single urban area, namely Ndwedwe Town.
- High-density rural settlements: This encompasses locales such as the aforementioned rural settlements.
- Low-density rural settlements: This category comprises settlements situated on commercial farms.

10.4. BROAD LAND USE PATTERNS

10.4.1. RURAL TOWN AND SURROUNDING SETTLEMENTS

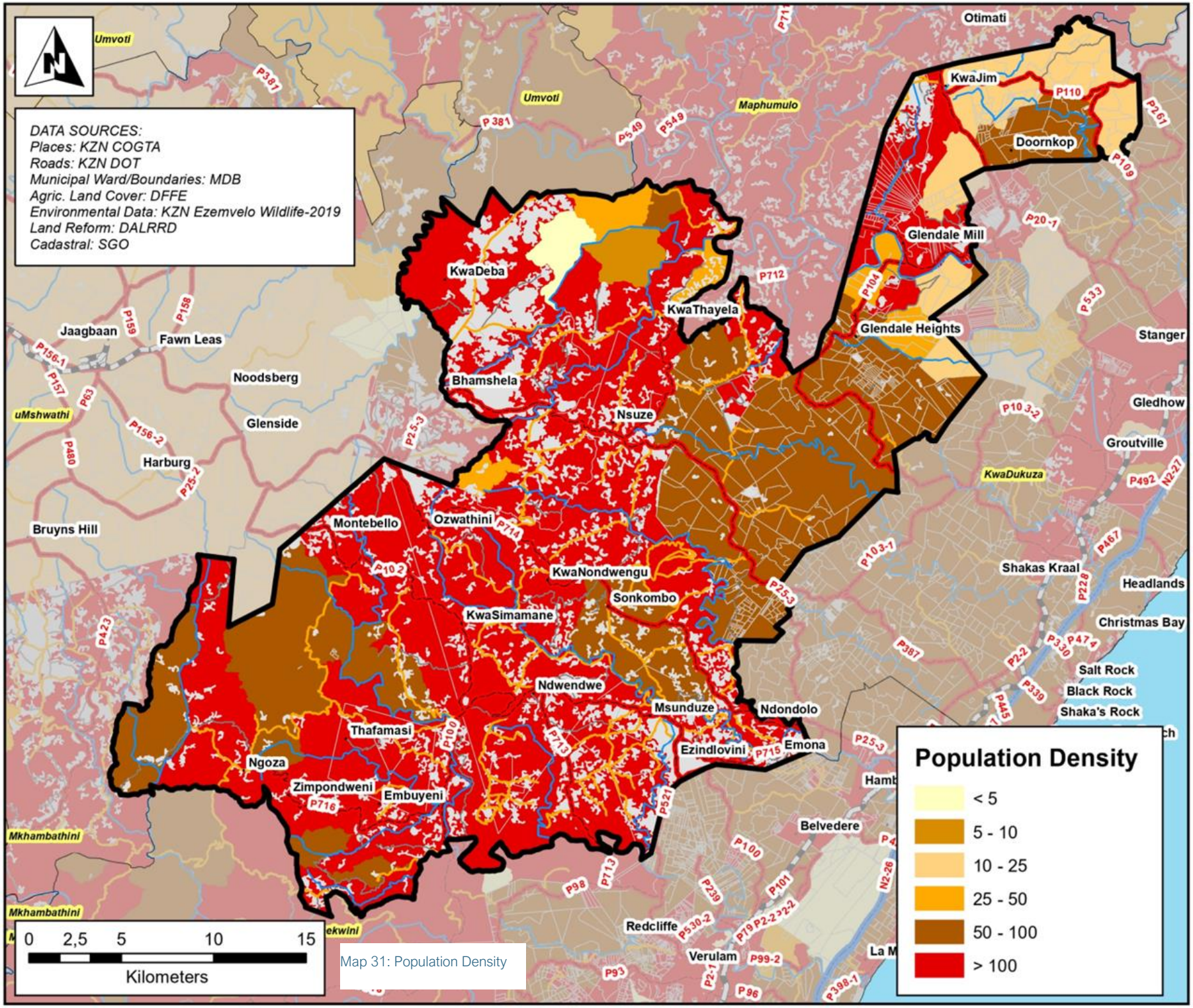
Ndwedwe town serves as the principal rural town situated within the municipal jurisdiction. It is encompassed by sparsely populated rural settlements that have coexisted in its vicinity throughout the years.

10.4.2. RURAL VILLAGES AND SETTLEMENTS

The rural villages and settlements are positioned in proximity to the key nodes within the municipal region. Their distribution occurs in a scattered manner, encompassing the administrative territories of traditional authorities. Within these villages and settlements, numerous health facilities, including clinics, and social amenities such as community halls have been established. Additionally, commercial establishments with limited operations, such as local convenience stores and taverns, coexist alongside small-scale manufacturing endeavours like block-making and personal services like salons. Moreover, modest agricultural activities, such as ploughing fields and food gardens, contribute to the local economy.

10.4.3. AGRICULTURE

Ndwedwe Municipality is largely characterized by agricultural activities, with sugarcane farming encompassing most of the agricultural activities in the municipality. This agricultural sector stands as a primary contributor to the municipality's revenue streams. It's worth noting that while there exists land suitable for commercial development, the population in these commercial farming regions remains sparse. Exploring the value chain linked to agricultural industries presents a promising avenue in Ndwedwe, given the area's inherent agricultural potential. Subsistence agricultural practices, notably small-scale cropping areas associated with traditional family units, predominate land use within the municipality. This includes the cultivation of staple crops such as sweet potatoes, maize, and select vegetables. Ndwedwe showcases significant agricultural promise, evident from the map below, with a crucial emphasis on safeguarding its rich biodiversity resources. Conversely, the valley's steep slopes are characterized by widespread forest cultivation, marking forestry as the second prevailing agricultural pursuit dispersed across the municipality. Given the limited road infrastructure serving the Municipality, the scope for local farmers to cultivate fresh produce, such as fruits and vegetables, for broader markets remains constrained. In this context, it becomes imperative for the municipality to explore the feasibility of establishing access roads to unlock the agricultural potential within specific areas. This strategic endeavour could serve as a catalyst for agricultural activities, addressing poverty and fostering economic growth within the municipality.



Map 31: Population Density

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

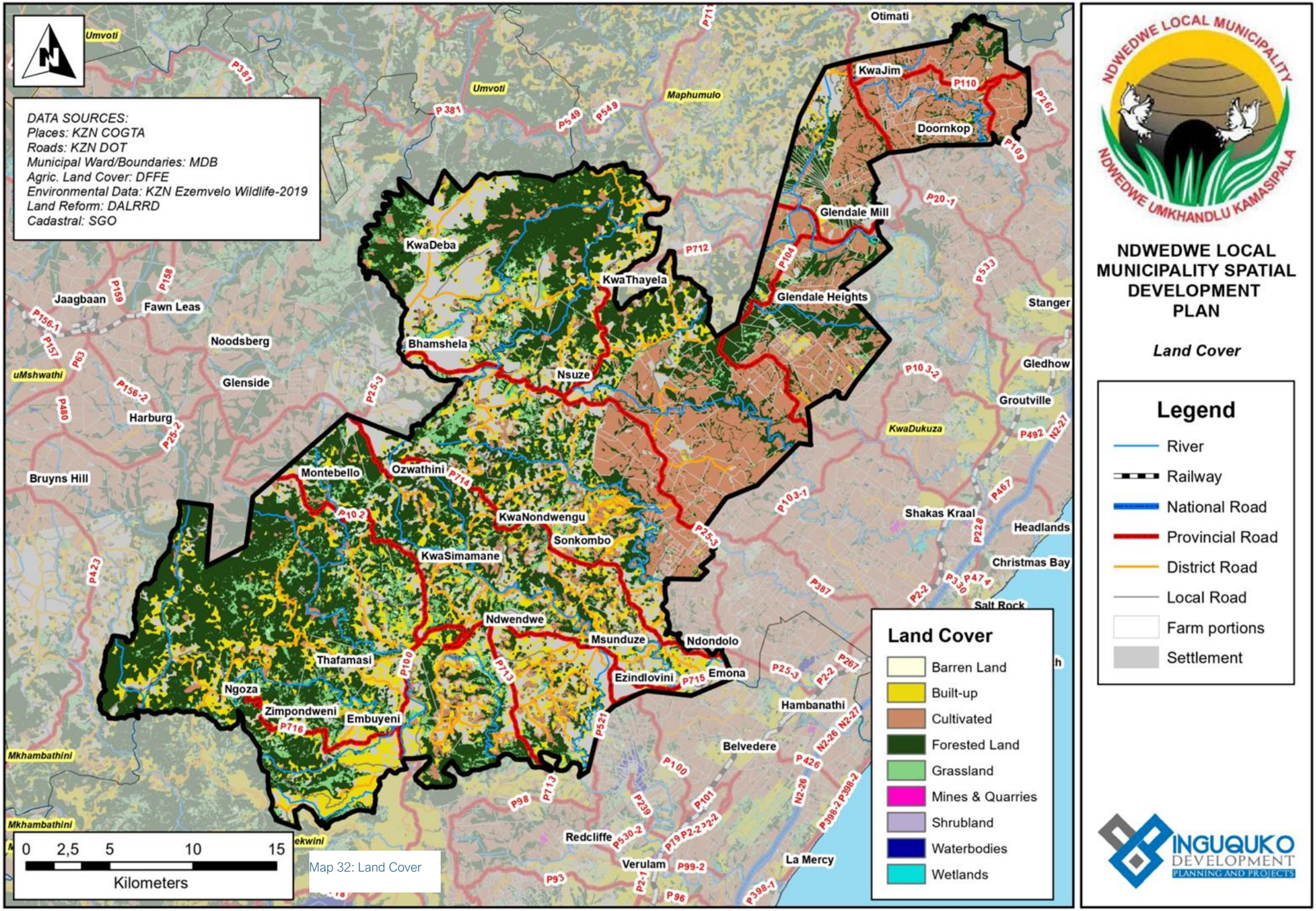
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Population Density

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS



Map 32: Land Cover

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Land Cover

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS

INFRASTRUCTURE ASSESSMENT

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

11. INFRASTRUCTURE ASSESSMENT

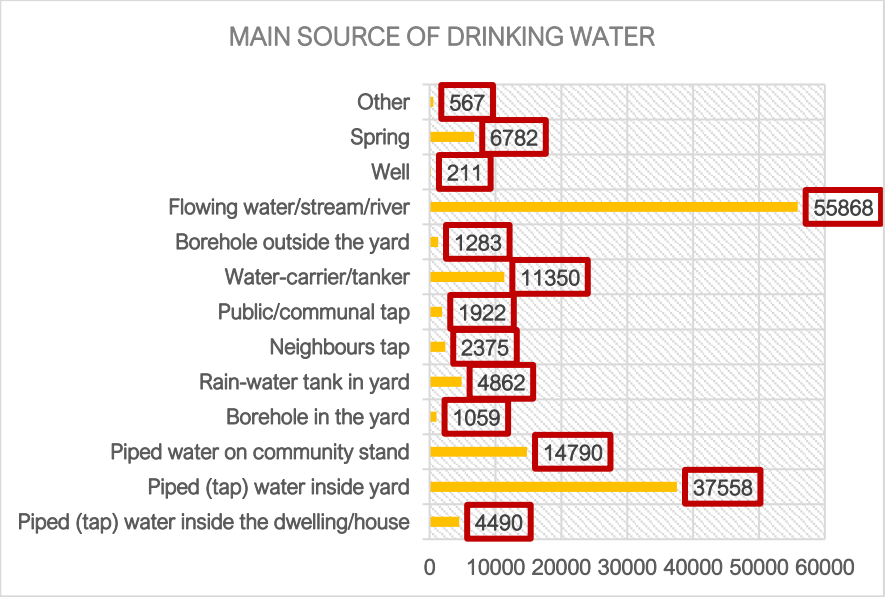
11.1. BULK WATER INFRASTRUCTURE

Umgeni Water sources all of its bulk water supply through the Hazelmere Dam Water Treatment Works. The conveyance of water from Hazelmere to the Avondale reservoir (with a capacity of 15.0 million litres at a Target Water Level of 137.5 meters) is facilitated by a 450/700mm diameter pipeline. This reservoir functions as a crucial balancing storage facility, providing water to sustain the entirety of the SAWW Bulk Water Network and subsequently, the broader water distribution network.

Subsequently, water is conveyed through an extensive bulk supply main system that spans 7.1 kilometres and is composed of a pipeline with diameters of 450mm GRP, 375mm AC, and 350mm steel. This pipeline branches into various off takes, which supply both water reservoirs and the reticulation zones within the SAWW operational area.

The Avondale reservoir and the bulk supply pipeline connecting Avondale to the Honolulu reservoir are managed and operated by Umgeni Water. The entire reservoir and reticulation infrastructure encompassing Ballito and the surrounding regions is administered and maintained by the SAWW under a 30-year concession agreement on behalf of the iLembe District Municipality.

The Avondale reservoir serves a dual purpose: firstly, as a reservoir that balances and stores water for onward distribution within Umgeni Water's bulk supply system downstream of the Avondale reservoir, and secondly, as a storage facility to meet the water requirements of the SAWW's reticulation zone, directly fed from the Avondale Reservoir. It is important to note that ownership of the Avondale reservoir resides with Umgeni Water, and an agreement is in place permitting SAWW's utilization of the storage facility.

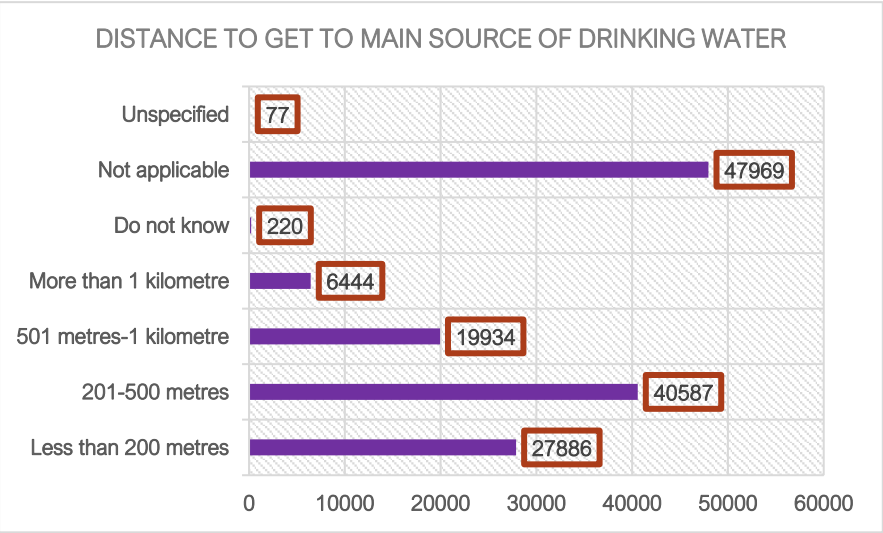


Graph 12: Main Source of Drinking Water

Source: Community Survey, 2016

The graph offers insight into the primary drinking water source for each household. It is evident from the graph that a majority of households obtain their water supply from the municipal system. However, it's important to highlight that a significant portion of the municipality's

population relies on natural sources like springs and rivers for their drinking water. This falls short of the ideal water provisioning standard, and the necessity to use these natural sources leads many households to settle in proximity to them. Consequently, this contributes to the designation of environmentally sensitive and high-risk zones, specifically within river and wetland buffer areas.



Graph 13: Distance to get to main source of drinking water

Source: Community Survey, 2016

The above graph shows the distances that households in the municipality have to travel in order to access their main sources of drinking water. As can be seen, most households are identified as “not applicable”. These households have accessed their drink water from within their dwellings or yard. Some households have to travel 200m to access water and others more than 1km.

11.1.1. IMPLICATIONS ON SPATIAL DEVELOPMENT PLAN

The acceptable levels of service for water delivery are determined by national policy frameworks, with the following definitions being relevant:

- "Survival" level of service: Supplies five (5) to eight (8) litres of water per person per day, requiring a walking distance of 800-1500 meters.
- RDP (Reconstruction and Development Programme) level of service: Ensures twenty-five (25) litres of water per person per day, with a walking distance of 200 meters.
- Enhanced level of service: Provides over twenty-five (25) litres of water per person per day, with a walking distance less than 200 meters. This level encompasses a connection to a yard or house.

According to national laws and minimum norms and standards within South Africa, the maximum permissible distance between a communal standpipe and a residence is 200 meters. This guideline has been acknowledged by the Department of Housing as the basic requirement for subsidized housing provision. As water provision is a fundamental component of housing, it should be a central objective for implementation within the Ndwedwe Local Municipality. The delivery of subsidized housing must not occur in isolation; it should be accompanied by essential infrastructure and service provision initiatives.

Adequate provision of water services plays a pivotal role in the realm of housing delivery due to several compelling reasons. Firstly, the availability of clean and dependable water is indispensable for the health

and overall well-being of residents. It ensures proper sanitation, hygiene, and the prevention of waterborne diseases, thus fostering a secure and inhabitable atmosphere within housing developments.

Secondly, the provisioning of water services is intricately linked to the broader quality of life and societal progress. Access to ample water supports a range of daily activities, encompassing cooking, cleaning, personal hygiene, and the maintenance of a comfortable living environment. Additionally, it facilitates the establishment of community amenities such as educational institutions, healthcare facilities, and recreational spaces, all of which are fundamental components contributing to the vitality of a flourishing housing project.

Furthermore, the availability and reliability of water bear significant importance for economic advancement. Industries, businesses, and agriculture heavily rely on a consistent water supply to operate efficiently, thereby contributing to job generation and overall economic growth. Access to dependable water services has the potential to attract investments, invigorate local economies, and enhance the livelihoods of residents by creating avenues for employment and entrepreneurship.

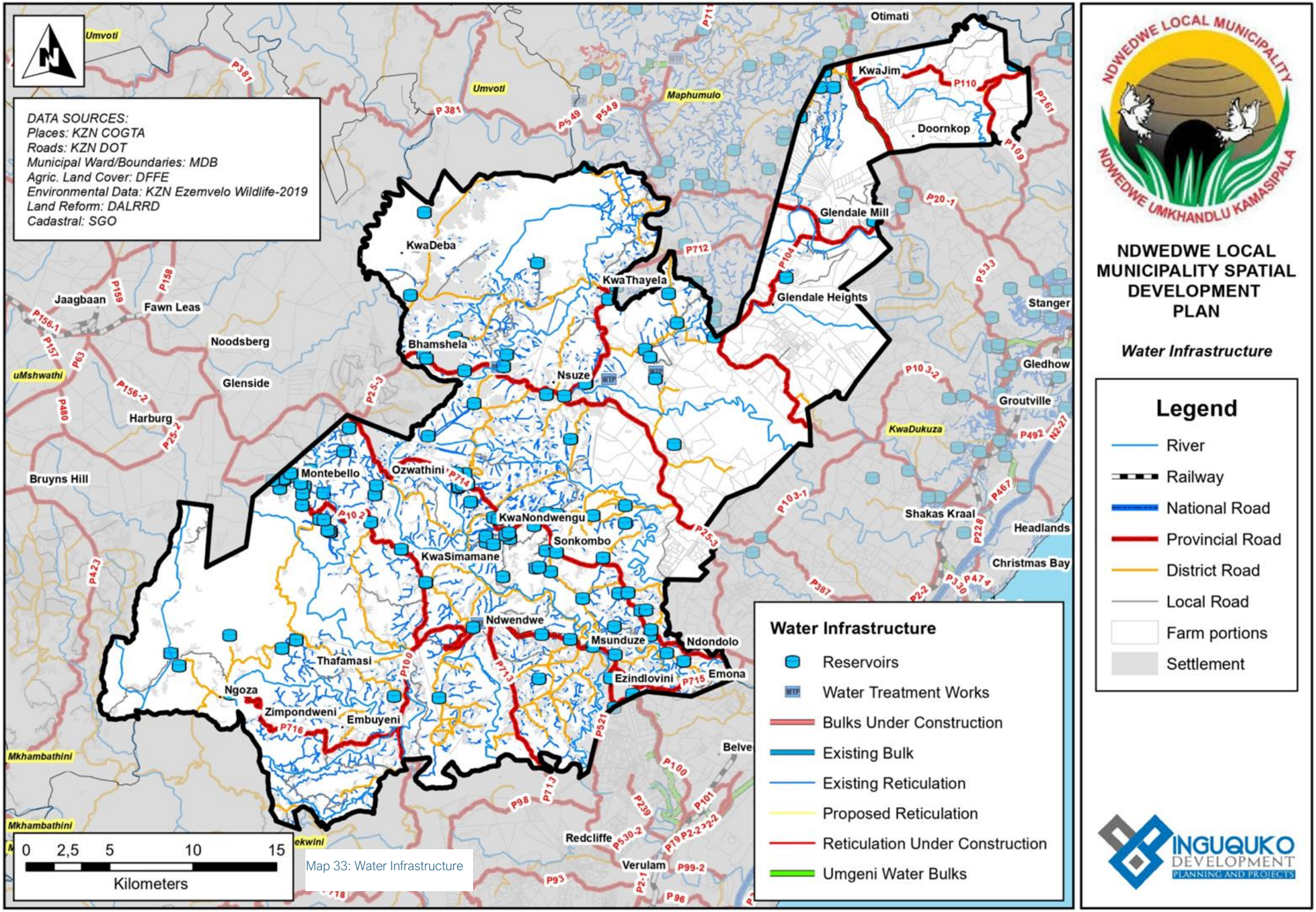
Conversely, inadequate water services within South African municipalities yield noteworthy consequences. Insufficient access to clean water and sanitation facilities disproportionately impacts marginalized communities, perpetuating disparities within society. Unreliable water services can lead to unsanitary conditions, the proliferation of diseases, and a general deterioration of public health.

Moreover, limited water supply inhibits economic development and productivity. Industries may face challenges in maintaining optimal operations, resulting in reduced output, job reductions, and diminished economic prospects. Restricted water access can impede agricultural output, affecting food security and exacerbating levels of poverty and inequality.

Additionally, subpar water services place undue burdens on individuals and communities. The absence of dependable water access often necessitates long journeys to fetch water, impacting time, energy, and overall well-being. This burden is often disproportionately shouldered by women and children, who frequently assume the responsibility of water collection in many households.

Ineffectual water services provision can also strain municipal resources and infrastructure. Insufficient infrastructure, including aging pipelines and inadequate wastewater treatment plants, may contribute to water losses, contamination, and environmental degradation. The financial responsibility for the maintenance and enhancement of water infrastructure often falls on municipalities, which might encounter obstacles in sourcing funding and executing necessary upgrades.

Ultimately, deficient water services provision undermines the objectives of housing delivery, exacerbates social disparities, impedes economic progress, and poses substantial challenges to public health and welfare. Ensuring the adequacy and reliability of water services is imperative for fostering sustainable and inclusive housing environments.



Map 33: Water Infrastructure

11.2. BULK SANITATION INFRASTRUCTURE

The iLembe District Municipality (DM) encompasses a total of 15 Water and Wastewater Works (WWW), including two managed by Siza Water (Frasers and Shakaskraal). All wastewater works are reported to be operational, except for Melville, which is yet to be commissioned. The capacity of these WWWs varies significantly, ranging from relatively small facilities (0.05 Mℓ/day) serving Ntunjambili Hospital to larger operations (12 Mℓ/day) catering to the Sundumbili community.

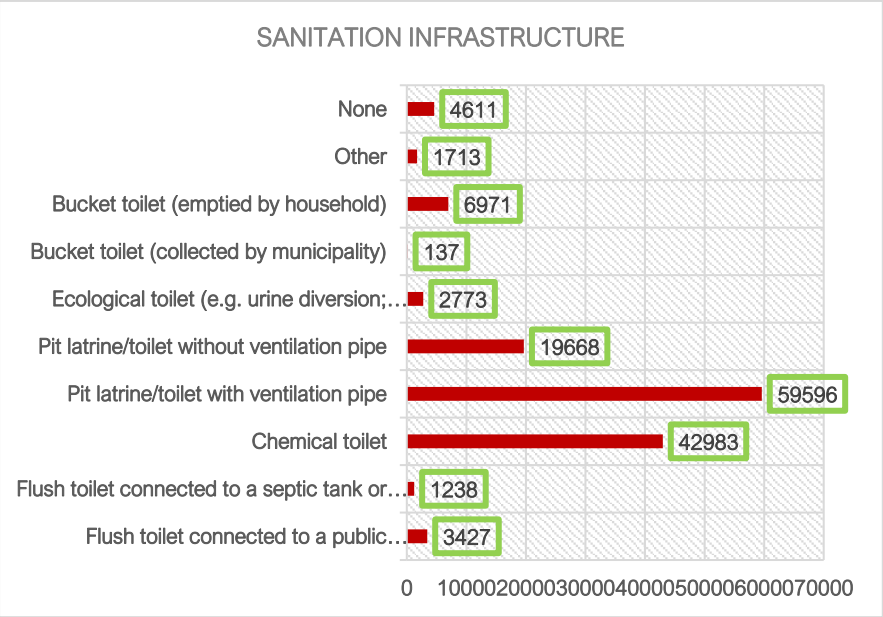
Within the iLembe DM, approximately 19% of the population still lacks access to basic sanitation. While urban areas are equipped with proper waterborne sanitation systems, peri-urban and rural regions rely on pit latrines or lack a sanitation system altogether. Initiatives are currently underway to address these challenges. A regional wastewater scheme is in the planning phase for KwaDukuza, aiming to alleviate existing infrastructure limitations in the area. Additionally, proposed wastewater works are on the agenda for Ndwedwe, Mandeni, Maphumulo, and various sections of KwaDukuza.

Multiple sanitation projects have been implemented, are under construction, or are under consideration in the Municipality. The statistical data provided by Stats SA distinguishes between various categories of sanitation services offered to communities, which are classified as follows:

- Flush toilet with sewer
- Flush toilet with septic tank
- Chemical toilet
- Pit latrine with ventilation
- Pit latrine without ventilation

The ultimate goal is to eventually provide all residents with waterborne sanitation and sewer connections. However, households equipped with any of the sanitation forms listed above are considered as having received service. In cases where Ventilated Improved Pit (VIP) solutions are utilized, the approach involves developing in-line VIP solutions that can be easily converted to waterborne sanitation in the future.

The graph below illustrates that more than 12% of the residents are receiving services that fall below the average service level of the Municipality. Currently, 98% of the municipality's areas have been provided with one of the acceptable sanitation options. Attention is particularly needed for Wards 4 and 8 in terms of improving the provision of sanitation services.



Graph 14: Sanitation Infrastructure

Source: Community Survey, 2016

The above shows the access to sanitation of each household in the municipality. The majority of households access their sanitation via pit latrine (VIP toilets).

11.2.1. IMPLICATIONS ON SPATIAL DEVELOPMENT PLAN

The levels of service delivery derived from accepted national policy frameworks, pertinent to sanitation services, encompass the following definitions:

VENTILATED IMPROVED PIT LATRINE (VIP) LEVEL OF SERVICE: This interim level of service encompasses on-site sanitation, which may include on-site dry systems like single or double pits, organic systems such as the Enviroloo, or on-site wet systems like low-flush toilets or septic tanks with French drains. Additionally, a waterborne level of service involves sewage treatment through a Sewage Treatment Works.

The established national legislated minimum norms and standards for sanitation service provision in South Africa are centred around the ventilated improved pit toilet (VIP). This standard has gained acceptance from the Department of Human Settlements as the baseline for all housing instruments, particularly for subsidized housing provision. As sanitation provision falls under the scope of housing purposes according to the Housing Board/Department of Human Settlements explanation of subsidies, achieving at least the minimum RDP level of sanitation service should be a fundamental objective for implementation within the Ndwedwe Local Municipality.

The presence of sound sanitation infrastructure, particularly water-borne sewage systems, holds significant importance in housing delivery for various reasons:

Firstly, it ensures the safe and hygienic disposal of human waste, mitigating the transmission of diseases and cultivating a healthful living environment within housing developments. Water-borne sewage systems facilitate the efficient conveyance and treatment of wastewater, diminishing the likelihood of contamination and enhancing overall sanitation standards.

Secondly, the accessibility to adequate sanitation infrastructure is intrinsically linked to the dignity and quality of life for residents. Functional toilets and sewage systems promote privacy, convenience, and comfort, enriching the overall liveability of housing units. This infrastructure also underpins fundamental hygiene practices such as handwashing and personal cleanliness, pivotal for health and well-being.

Furthermore, robust sanitation infrastructure assumes a crucial role in environmental sustainability. Water-borne sewage systems facilitate the effective treatment and disposal of wastewater, curtailing water bodies and soil pollution. This contributes to the preservation of natural resources, safeguards ecosystems, and bolsters the overall environmental well-being of the surrounding areas.

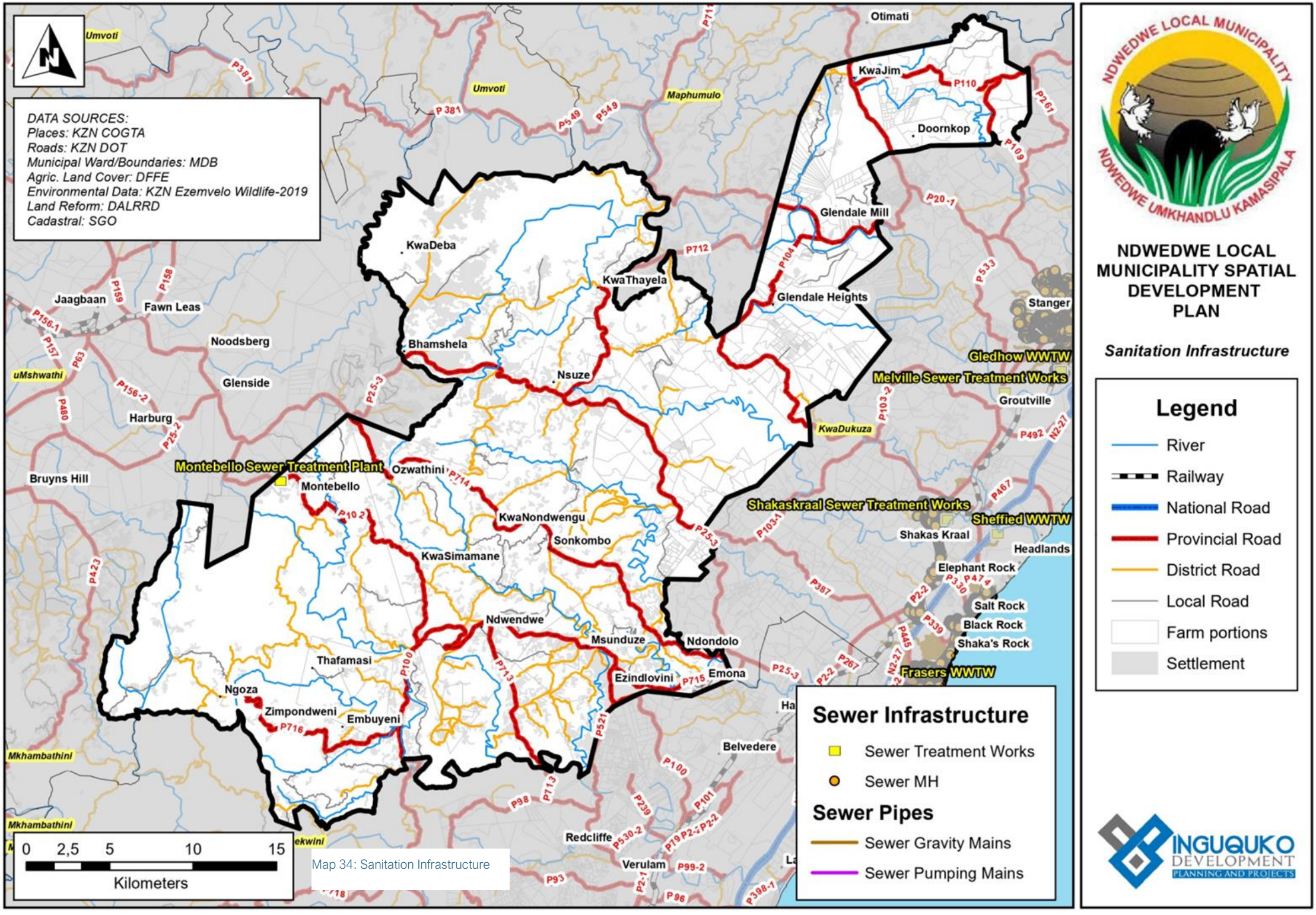
Conversely, deficient sanitation infrastructure during housing delivery yields substantial repercussions. Inadequate access to proper sanitation facilities, such as functional flush toilets and sewage systems, can lead to unsanitary conditions and health hazards. Improper waste disposal can taint water sources, heightening the risk of waterborne diseases and undermining public health.

Moreover, subpar sanitation infrastructure perpetuates social disparities and disproportionately affects vulnerable communities. Marginalized groups often bear the brunt of insufficient sanitation services, facing heightened health risks and diminished quality of life. Women and girls, in particular, may encounter challenges in maintaining personal hygiene and safety when sanitation facilities are inadequate or inaccessible.

Additionally, inadequate sanitation infrastructure can contribute to environmental degradation. Improper disposal of untreated wastewater and sewage can pollute water bodies, soil, and the surrounding ecosystems, triggering ecological imbalances and pollution. This can have enduring repercussions for biodiversity, water resources, and the overall environmental sustainability.

Furthermore, the absence of proper sanitation infrastructure imposes economic burdens. The expenses linked to treating waterborne illnesses, productivity losses due to sickness, and environmental remediation can strain households, communities, and healthcare systems. It can also deter investments and economic progress in regions lacking adequate sanitation, impeding overall development and well-being.

In essence, adequate sanitation infrastructure, particularly through water-borne sewage systems, stands as a critical cornerstone of housing delivery. It safeguards public health, enhances dignity and quality of life, and fosters environmental sustainability. In contrast, inadequate sanitation infrastructure generates far-reaching consequences, including health vulnerabilities, social inequalities, environmental deterioration, and economic hardships. Guaranteeing access to suitable and operational sanitation facilities is pivotal for establishing sustainable and all-encompassing housing environments.



Map 34: Sanitation Infrastructure

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Sanitation Infrastructure

Legend

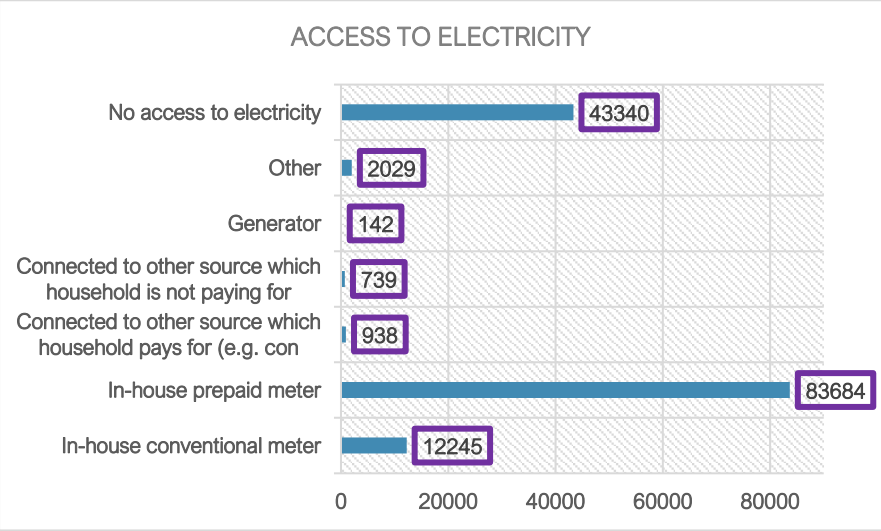
- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

11.3. BULK ELECTRICITY INFRASTRUCTURE

The NLM functions as the executing entity on behalf of Eskom. The municipality is tasked with overseeing the project's construction and delivery to Eskom, while Eskom assumes responsibility for managing outages. Following project completion, Eskom records the accomplished work in their asset registry. Additionally, Eskom bears the responsibility of formulating and adopting an Electricity Plan tailored for the Ndwedwe Local Municipality.

The graph below delineates the energy sources utilized by households in the municipality. Notably, the provision of electricity falls under the jurisdiction of both Local Municipalities and Eskom. Approximately 148,078 out of 191,369 households are estimated to possess an electricity supply designated for cooking purposes.

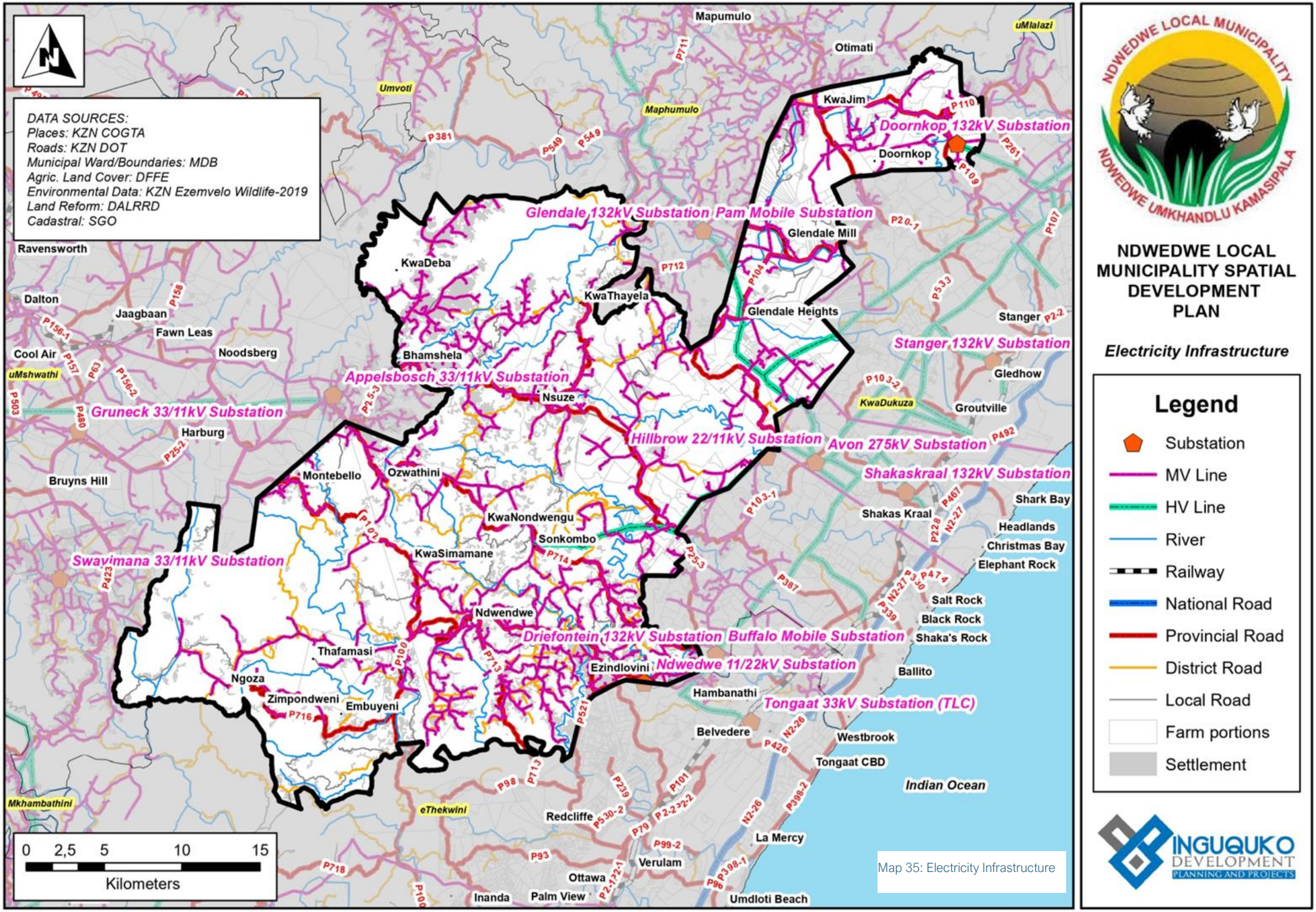


Graph 15: Access to Electricity

The municipality is supplied by the following:

- Hillbrow substation which has a capacity of 11kV.
- Doornkop Substation which has a capacity of 132kV.
- Ndwedwe Substation which has a capacity of 22kV





Map 35: Electricity Infrastructure

11.4. ROAD AND TRANSPORTATION INFRASTRUCTURE

The current and anticipated Transportation Infrastructure entails the condition of essential elements like roads, railways, and airfields/airports. These details are presented on clear maps, encompassing municipal, provincial, and national road networks. The Local Municipality is positioned approximately 30 kilometres to the west of two significant national assets: the N2 highway and the King Shaka Airport. Despite this advantageous proximity to the King Shaka Airport and the coastal area, substantial job creation and economic benefits have not yet materialized for the communities within the municipality's jurisdiction. While the King Shaka Airport and Dube Trade Port present opportunities for exporting locally generated products, including those subjects to beneficiation processes, the anticipated economic gains for nearby communities have not been fully realized. Adjacent to the airport, the Dube Trade Port (DTP) introduces extensive economic prospects for those in close proximity. The aerotropolis, representing the geographical region surrounding the airport, holds prime land status in alignment with the Dube Aerotropolis Development Framework of 2011. Key road arteries serving the airport comprise the N2, M4, R102, R74, and R614.

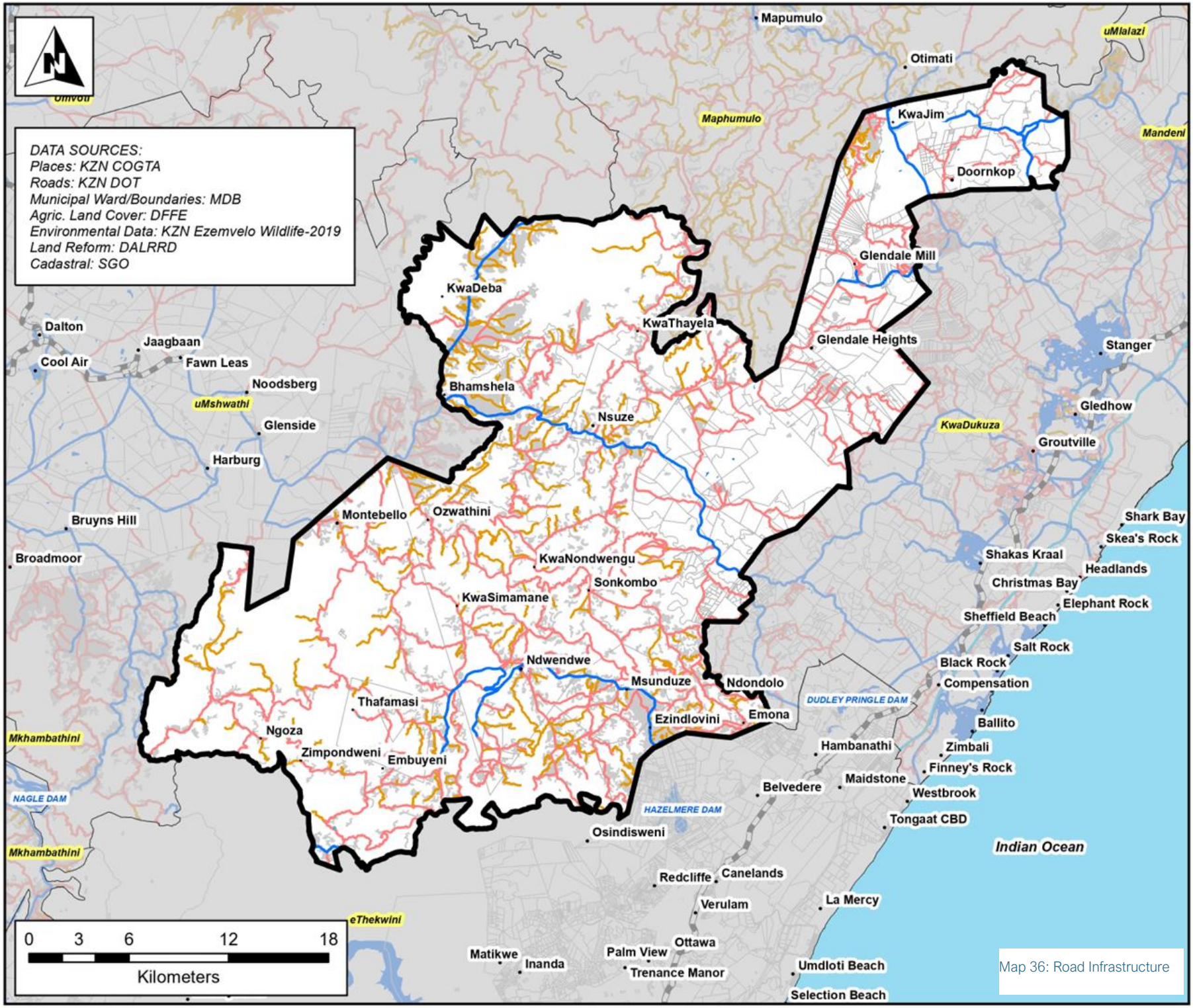
11.4.1. ROAD INFRASTRUCTURE

A variety of Provincial Routes traverse the Municipality's expanse. Unfortunately, connectivity within the municipality remains constrained, as more convenient and swifter routes lying outside the municipal boundaries are utilized to access different parts of the area. The primary entry routes to the municipality are as follows, and they also constitute the sole paved surfaces:

- The existing R74 stretching from Stanger, through Ashville, to Kranskop.
- The existing R614 spanning from Tongaat, via Qinisani and Bhamshela, to Wartburg.
- The P100 route linking Verulam to the Village and looping back to Inanda.

While the majority of households within the vicinity enjoy road access within a radius of 2.5 kilometres or less, this situation does not provide a comprehensive understanding of transport availability. This is due to many of these roads being inadequately maintained or designed, causing difficulties in vehicle access to nearby areas. The presence of gravel roads predominates, and these become treacherous during the rainy season, especially in locales featuring pronounced topographical attributes within the Municipality. Analysing the statistical breakdown of the primary modes of transportation preferred by residents, it becomes evident that the largest segment of the population (comprising 74%) relies on walking as their primary means of travel. Consequently, they have limited or no access to affordable public transportation. This underscores two key aspects: firstly, a lack of financial means to utilize public transport, or secondly, the absence of a well-developed public transportation system. Additionally, this situation is exacerbated by the remoteness of certain areas, where limited road infrastructure hinders the reach of taxis or buses to these outlying regions. This confluence of factors collectively signals the area's prevalent poverty levels. Given the substantial dependence on less advanced transportation options, the establishment of adequate transport infrastructure is imperative.

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NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Road Infrastructure

Map 36: Road Infrastructure

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS

11.5. WASTE REMOVAL AND MANAGEMENT

The Municipality bears the responsibility for managing solid waste within its designated area. In adherence to the stipulations of the National Environmental Management Waste Act (59 of 2008), as amended, commonly referred to as the Waste Act, the municipality has formulated an Integrated Waste Management Plan (IWMP) to enhance and sustain waste management practices within its jurisdiction. A copy of this IWMP is included in Annexure I. The Council officially ratified and embraced the IWMP on March 31, 2022. As an integral component of the Integrated Development Plan (IDP), the IWMP must harmonize with the Municipality's overarching IDP.

Throughout the fiscal year 2022/2023, the Department is actively engaged in reassessing the existing IWMP in light of recent developments across key focal areas within the Municipality. These developments have contributed to an increase in waste generation volumes, notably in the central nodes of the Municipality such as Central and Bhamshela, and to a lesser extent in Montebello and Glendale.

The municipality comprises 19 wards, encompassing around 29,200 households. Presently, waste management services are being provided to approximately 28,152 households. However, roughly 27,123 households within the municipality are yet to benefit from waste services. There exists a pressing necessity for the municipality to swiftly expand waste services to encompass all residents, particularly those residing in rural regions and historically marginalized communities.

The current responsibility for waste management within the Municipality lies under the Community Services Department. The Municipality has designated a Waste Management Officer (WMO). As a component of its waste management function, the collection from skip bins and disposal to the landfill site has been outsourced to Liana Consulting for a three-year term, commencing from April 2020 until March 2023.

The Municipality has a vision of establishing a Buy-Back Station Center or a Recycling Centre within the Town-village. However, the realization of this plan hinges on land acquisition, as there is ambiguity regarding ownership between the Municipality and the Ingonyama Trust Board (ITB). The allocation for this Center is planned in the upcoming financial year of 2021/2022.

The establishment of the aforementioned Center, which is currently in its preliminary stages following a conducted feasibility study, will effectively embody the Waste Management 3R's concept: reduce, reuse, and recycle. This initiative holds the potential to generate employment opportunities for local communities interested in waste recycling. Thus, the Department aligns with government initiatives aimed at alleviating hunger and reducing unemployment among disadvantaged populations.

11.5.1. CURRENT WASTE DISPOSAL STATUS QUO

Presently, the Municipality utilizes the eThekwini Municipality landfill site, facilitated through a waste disposal service provider. Notably, there is currently no publicly accessible landfill site within the Municipality or the broader iLembe District, except for a solitary privately owned landfill site within the district. Paradoxically, the Waste

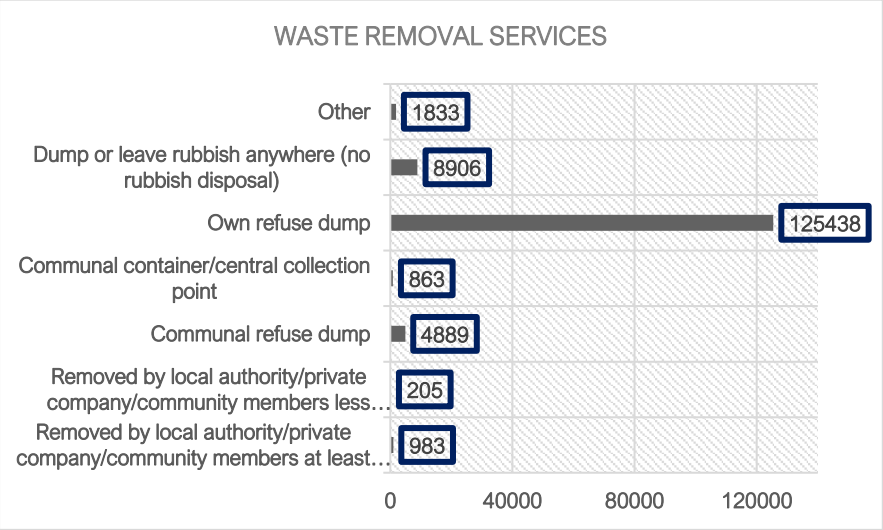
Management Act advocates for a reduction in the proliferation of landfill sites within a specific region. In light of this, there arises a necessity for the Municipality to explore the establishment of its own landfill site or to endorse the development of a regional landfill site that can be jointly utilized by all Local Municipalities under the iLembe District Municipality. Given the circumstances, the latter option is preferred over the former.



At present, waste management in the Municipality operates via a system of strategically positioned skips, which community members are expected to use for waste disposal. Liana Consulting Waste Management company then undertakes the collection of these skips, transferring the waste to one of the landfill sites within the eThekwini Metro. The Municipality averages the collection of around twenty-six skips per month, but lacks internal waste disposal facilities, relying instead on eThekwini for waste disposal.

To facilitate waste collection, the Municipality provides receptacle tanks in the form of skip bins, wheelie bins, and refuse bags to households and strategic locations for waste generation. A municipal truck operator conducts daily waste collection across the 19 wards from Monday to Friday. Additionally, Liana Consulting undertakes the weekly collection of skip bins from all key points, transporting them to the main landfill site in the eThekwini Metro.

Waste management services for collection, clearing, and cleansing of the municipal area are executed by 14 EPWP beneficiaries and 22 green deeds beneficiaries, working collaboratively. Among these, seven individuals engage as door-to-door campaigners, educating the community about the significance of waste collection, minimization, reduction, and recycling. The Municipality extends its services to include shopping complexes like Boxer Cash and Carry, as well as various other departments within its purview.



Graph 16: Waste Removal Services

Source: Community Survey, 2016

The above graph shows the access to waste removal services for all households in the municipality. Evident from the information presented above is the majority of people in the municipality (125 438) use their own refuse dump. This means burning of rubbish is highly prevalent as that is the conventional method of disposing of rubbish. This has adverse implications for the air quality in the municipality.

11.5.2. CHALLENGES IN WASTE MANAGEMENT

The Municipality is grappling with the issue of unauthorized waste disposal, which presents an additional challenge. The Municipality aims to locate all sites utilized for illegal dumping, meticulously document them, and implement appropriate signage in these areas. Equally crucial is the formulation of a strategy to address existing unauthorized dumping and establish measures to deter future occurrences. The Municipality's focus should be directed towards prioritizing initiatives for the restoration of illegal dumping sites and the establishment of a waste management information system.

11.5.3. IMPLICATIONS ON THE SPATIAL DEVELOPMENT PLAN

Waste removal and waste management services play a crucial role in spatial planning, particularly in Ndwedwe Local Municipality. Effective waste management is essential for maintaining a clean and healthy environment, promoting sustainable development, and improving the overall quality of life for residents. Here's how waste removal and management intersect with spatial planning in rural areas:

Environmental Protection: Proper waste removal and management prevent the accumulation of waste in open spaces, water bodies, and natural habitats. This helps safeguard the local ecosystem and prevents pollution, which can have detrimental effects on soil, water, and air quality. In spatial planning, waste management strategies are designed to minimize the negative environmental impacts of waste disposal.

Public Health: Inadequate waste management can lead to the spread of diseases and pose health risks to residents. By incorporating waste removal and disposal plans into spatial planning, municipalities can reduce the potential for disease transmission and maintain a healthier living environment.

Aesthetic and Liveability: Clean and well-managed environments enhance the aesthetics of an area, making it more attractive for

residents, tourists, and potential investors. Effective waste removal contributes to the overall liveability and visual appeal of rural municipalities, which can positively influence local development and property values.

Tourism and Economic Development: Many rural areas in South Africa rely on tourism as a source of income. Proper waste management helps preserve the natural beauty of the landscape, making it more appealing to tourists. By incorporating waste management practices into spatial planning, municipalities can support sustainable tourism and economic development.

Infrastructure Planning: Spatial planning involves designing infrastructure such as roads, buildings, and utilities. Waste management infrastructure, including collection points, recycling facilities, and waste treatment plants, needs to be integrated into these plans to ensure proper waste disposal without negatively impacting other development goals.

Resource Conservation: Waste management is not just about disposal; it also involves resource recovery and recycling. Incorporating recycling programs and waste-to-energy initiatives into spatial planning can contribute to resource conservation and reduce the strain on natural resources.

Community Engagement and Education: Effective waste management requires active community participation and education. Spatial planning can include provisions for public awareness campaigns, workshops, and educational initiatives to promote responsible waste disposal and recycling practices among residents.

Regulatory Compliance: Waste management is subject to regulatory and legal requirements. By including waste management strategies in spatial plans, rural municipalities can ensure compliance with national and local waste management regulations.

Climate Change Mitigation: Proper waste management can contribute to climate change mitigation efforts. For instance, waste-to-energy projects can help reduce greenhouse gas emissions by utilizing organic waste for energy generation.

Waste removal and waste management service provision are integral components of spatial planning in rural municipalities in South Africa. Integrating these services into spatial plans helps protect the environment, promote public health, enhance the quality of life, support economic development, and ensure the sustainable growth of these areas.



11.6. SOCIAL INFRASTRUCTURE (PUBLIC FACILITIES)

11.6.1. HEALTH FACILITIES

The Ndwedwe Local Municipality has 7 health facilities which are in the form of Community Health Centres, Clinics and Satellite. One of the major issues in the municipality is accessing the health facilities due to the topography and settlement pattern thereof which poses a challenge in provision emergency medical services and general healthcare access. Health facilities in the municipality include the following:

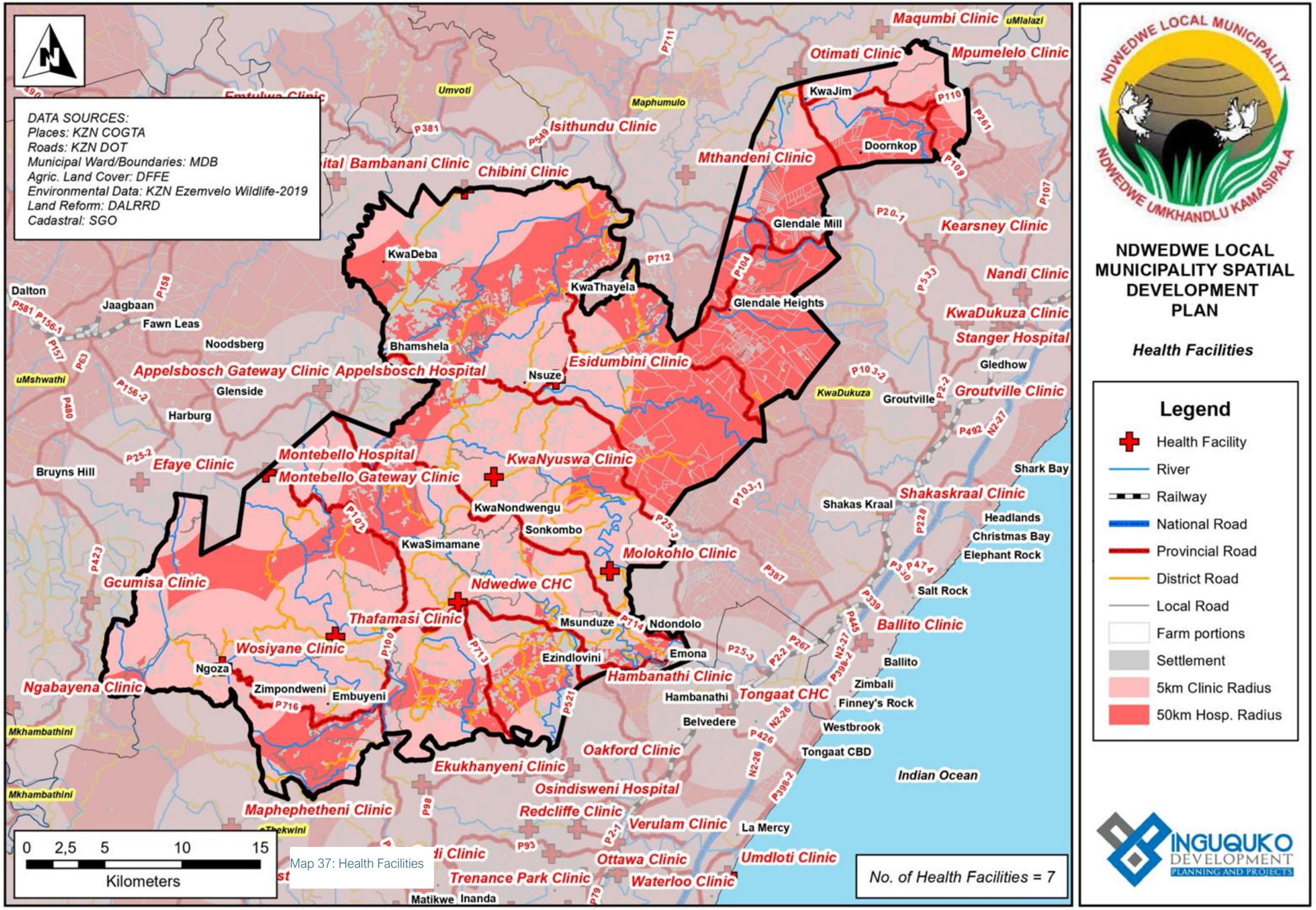
- Ndwedwe Community Health Centre (CHC)
- KwaNyuswa Clinic
- Montebello Gateway Clinic
- Montebello Hospital
- Woyisane Clinic
- Thafamasi Clinic
- Esidumbini Clinic
- Molokkohlo Clinic

It must also be noted that there exist some health facilities in the neighbouring municipalities to which households in Ndwedwe LM have access to. These include:

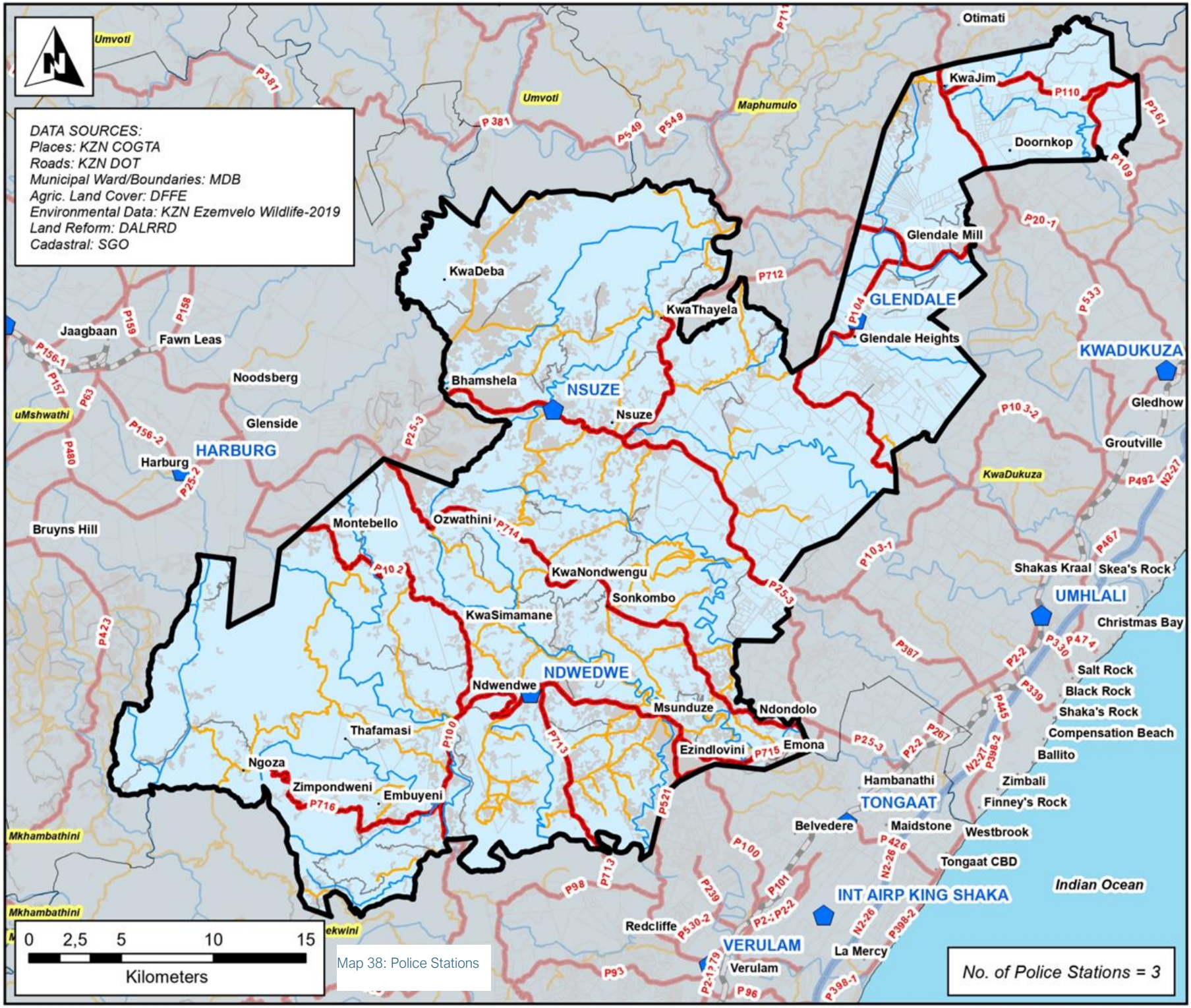
- Hambanathi Clinic
- Ekukhanyeni Clinic
- Oakford Clinic
- Ngabeyane Clinic
- Gcumisa Clinic
- Appelsbosch Hospital
- Mthandeni Clinic
- Chibini Clinic
- Maqumbi Clinic
- Mpumelelo Clinic

11.6.2. SAFETY AND SECUITY FACILITIES

The municipal region is covered by three police stations, situated to the south of Bhamshela Node, in the northwest of Ozwathini, and within its borders. Most households are situated more than 10km away from a police station. The areas with higher population density are located within a 20km radius of a police station. Additionally, mobile/satellite police stations are available to serve the regions near the Montebello node and the far western areas of the Emalangenilanga Area.



Map 37: Health Facilities


DATA SOURCES:
Places: KZN COGTA
Roads: KZN DOT
Municipal Ward/Boundaries: MDB
Agric. Land Cover: DFFE
Environmental Data: KZN Ezemvelo Wildlife-2019
Land Reform: DALRRD
Cadastral: SGO
Otimati
KwaJim
Doornkop
Glendale Mill
GLENDALE
Glendale Heights
KwaDeba
KwaThayela
Bhamshela
NSUZE
Nsuze
KWADUKUZA
Gledhow
Groutville
KwaDukuza
Jaagbaan
Fawn Leas
Noodsberg
Glenside
HARBURG
Harburg
Bruyns Hill
Montebello
Ozwathini
KwaNondwengu
Sonkombo
KwaSimamane
NDWEDWE
Ndwendwe
Msunduze
Ndondolo
Thafamasi
Ngoza
Zimpondweni
Embuyeni
Ezindlovini
Emona
UMHLALI
Shakas Kraal
Skea's Rock
Christmas Bay
Salt Rock
Black Rock
Shaka's Rock
Compensation Beach
Ballito
Zimbali
Finney's Rock
Hambanathi
TONGAAT
Belvedere
Maidstone
Westbrook
Tongaat CBD
Indian Ocean
INT AIRP KING SHAKA
Redcliffe
VERULAM
Verulam
La Mercy
Umvoti
Maphumulo
uMshwathi
Mkhambathini
0 2,5 5 10 15
Kilometers
Map 38: Police Stations
No. of Police Stations = 3
NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN
Police Stations
Legend
Police Station
River
Railway
National Road
Provincial Road
District Road
Local Road
Farm portions
Settlement
24km Radius
INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS

11.6.3. LIBRARIES

While the land use budget adheres to the former planning commission's standards for library provision, the KZN Librarian Services have expressed that achieving these specified levels is not feasible and lacks cost-effectiveness. While these benchmarks may be attainable in densely populated urban areas like Durban, the challenge arises in rural KZN where it's difficult to establish a number of economically viable libraries within the constrained budget. The situation is under continuous evaluation, leading to the establishment of libraries in close proximity to schools and urban centres, optimizing accessibility and outreach to the largest population. According to information obtained from the Provincial Library Services, the Local Municipality now boasts a singular recently constructed library in the Village, supplemented by a mobile library catering to the Bhamshela Node. Furthermore, the library's infrastructure should encompass an internet café facility, facilitating supervised internet access for children's school projects and general research purposes.





11.6.4. EDUCATION FACILITIES

SCHOOLS: The NLM has 158 schools in the form of:

- 5 combined schools
- 112 primary schools
- 41 secondary schools.

These schools are all located within a 12km radius from each household in the municipality which is the standard set by the Council for Scientific and Industrial Research (CSIR) Guidelines for the Provision of Social Facilities in South Africa, 2015.

Table 5: Ndwedwe Local Municipality Schools

SCHOOL NAME	STATUS	NO. OF LEARNERS	NO. OF EDUCATION
A.M. MOOLLA SECONDARY SCHOOL	OPEN	160	6
AMABUTHO PRIMARY SCHOOL	OPEN	140	4
BHEKAMAFA PRIMARY SCHOOL	OPEN	150	6
BHIDAKHONA PRIMARY SCHOOL	OPEN	220	7
BHOVUNGANE SENIOR PRIMARY SCHOOL	OPEN	80	3
CHIBINI PRIMARY SCHOOL	OPEN	459	15
DALIBO PRIMARY SCHOOL	OPEN	607	19
DEDA PRIMARY SCHOOL	OPEN	622	20
DIKWAYO PRIMARY SCHOOL	OPEN	87	4
DLABAZANA SENIOR PRIMARY SCHOOL	OPEN	58	3
DUMEZWENI JUNIOR PRIMARY SCHOOL	OPEN	141	6
EGWENI PRIMARY SCHOOL	OPEN	84	2
EMAKHASINI PRIMARY SCHOOL	OPEN	206	6
EMAKHENI PRIMRY SCHOOL	OPEN	421	11
EMANYONINI PRIMARY SCHOOL	OPEN	127	3
EMBUYENI PRIMARY SCHOOL	OPEN	92	4
EMKHAMBENI PRIMARY SCHOOL	OPEN	413	14
EMLANDELENI PRIMARY SCHOOL	OPEN	439	15
EMSENGENI PRIMARY SCHOOL	OPEN	110	5
ENKUMBENI HIGHER PRIMARY SCHOOL	OPEN	277	10
ENKWAMBASE PRIMARY SCHOOL	OPEN	570	21
ESIDUMBINI PRIMARY SCHOOL	OPEN	556	20
EZIMPONDWENI PRIMARY SCHOOL	OPEN	136	5

SCHOOL NAME	STATUS	NO. OF LEARNERS	NO. OF EDUCATION
EZINDLOVINI PRIMARY SCHOOL	OPEN	1262	33
GASELA PRIMARY SCHOOL	OPEN	421	13
GCINIMFUNDO SECONDARY SCHOOL	OPEN	362	12
GEM PRIMARY SCHOOL	OPEN	194	9
GLENDALE STATE AIDED FARM SCHOOL	OPEN	160	5
GOGOVUMA PRIMARY SCHOOL	OPEN	91	6
HAWA PRIMARY SCHOOL	OPEN	33	2
HLALAKAHLE PRIMARY SCHOOL	OPEN	692	16
HLONIPHANI SECONDARY SCHOOL	OPEN	473	14
HULETT COMBINED SCHOOL	OPEN	455	15
IKHOHLWA PRIMARY SCHOOL	OPEN	292	8
INDUKWENTSHA SECONDARY SCHOOL	OPEN	229	7
INHLANGANISO PRIMARY SCHOOL	OPEN	204	8
INSUZE-GCWENSA PRIMARY SCHOOL	OPEN	307	9
INTAPHUKA PRIMARY SCHOOL	OPEN	835	27
INYANGANYE PRIMARY SCHOOL	OPEN	22	3
ISAVIYO PRIMARY SCHOOL	OPEN	68	5
ISIFISOSETHU HIGH SCHOOL	OPEN	281	12
ISIGUDU PRIMARY SCHOOL	OPEN	69	3
ISNEMBE SECONDARY SCHOOL	OPEN	573	19
IGUGULAMANYONI PRIMARY SCHOOL	OPEN	179	6
KHANYISA SECONDARY SCHOOL	OPEN	288	8
KHETHIMFUNDO SECONDARY SCHOOL	OPEN	266	9
KRUISFONTEIN PRIMARY SCHOOL	OPEN	108	5

SCHOOL NAME	STATUS	NO. OF LEARNERS	NO. OF EDUCATION
KWAJESSOP PRIMARY SCHOOL	OPEN	224	8
KWA-MKHUMBUZI PRIMARY SCHOOL	OPEN	76	4
KWANOKUSHO PRIMARY SCHOOL	OPEN	289	9
KWANOMPANDA PRIMARY SCHOOL	OPEN	139	6
KWASHANGASE P SCHOOL	OPEN	147	6
KWASIMAMANE J.P SCHOOL	OPEN	259	7
LIHLITHEMBA TECHNICAL HIGH SCHOOL	OPEN	1399	55
LUKHASA SECONDARY SCHOOL	OPEN	508	12
M L SULTAN KRANTZKLOOF PRIMARY SCHOOL	OPEN	37	2
MABAYANA SECONDARY SCHOOL	OPEN	517	12
MADLOKOVU HIGHER PRIMARY SCHOOL	OPEN	167	5
MADUNA PRIMARY SCHOOL	OPEN	285	10
MAGONGOLO PRIMARY SCHOOL	OPEN	432	13
MAGUDWINI JUNIOR SECONDARY SCHOOL	OPEN	164	7
MAHLUBE SECONDARY SCHOOL	OPEN	220	8
MAKHAWULA PRIMARY SCHOOL	OPEN	165	6
MANQONDO PRIMARY SCHOOL	OPEN	155	5
MANTIGWANE PRIMARY SCHOOL	OPEN	51	5
MAPHOLOBA PRIMARY SCHOOL	OPEN	471	13
MAQOKOMELA PRIMARY SCHOOL	OPEN	246	9
MARY GRAY PRIMARY SCHOOL	OPEN	156	6
MASHIYAMAHLE H. SCHOOL	OPEN	1584	54
MASHIZA PRIMARY SCHOOL	OPEN	51	4
MATHABATHA PRIMARY SCHOOL	OPEN	23	1

SCHOOL NAME	STATUS	NO. OF LEARNERS	NO. OF EDUCATION
MAYELESWENI PRIMARY SCHOOL	OPEN	76	5
MAYIKA PRIMARY SCHOOL	OPEN	171	6
MCATHU PRIMARY SCHOOL	OPEN	134	6
MEME PRIMARY SCHOOL	OPEN	77	3
MEPHO PRIMARY SCHOOL	OPEN	165	5
MEYIWA PRIMARY SCHOOL	OPEN	64	4
M.I. PARUK JUNIOR PRIMARY SCHOOL	OPEN	57	2
MONTEBELLO PRIMARY SCHOOL	OPEN	744	21
MQEDI SENIOR PRIMARY SCHOOL	OPEN	65	3
MSHIYANE SECONDARY SCHOOL	OPEN	207	6
MSHWATHI MEMORIAL PRIMARY SCHOOL	OPEN	213	9
MTHUKUTHELI PRIMARY SCHOOL	OPEN	208	6
MZINGEZWI SECONDARY SCHOOL	OPEN	599	20
NDODEMBI PRIMARY SCHOOL	OPEN	95	3
NDWEDWE PRIMARY SCHOOL	OPEN	346	13
NGAYIPHI PRIMARY SCHOOL	OPEN	317	11
NGCONGANGCONGA SECONDARY SCHOOL	OPEN	324	12
NGUNGWINI S.S. SCHOOL	OPEN	473	14
NHLANGAKAZI PRIMARY SCHOOL	OPEN	44	3
NJUBANJUBA SECONDARY SCHOOL	OPEN	464	16
NOBANTU PRIMARY SCHOOL	OPEN	201	8
NOMBIKA SECONDARY SCHOOL	OPEN	1101	31
NONDABULA PRIMARY SCHOOL	OPEN	839	27
NOODSBERG PRIMARY SCHOOL	OPEN	811	27

SCHOOL NAME	STATUS	NO. OF LEARNERS	NO. OF EDUCATION
NOVIMBA PRIMARY SCHOOL	OPEN	74	4
NQAKATHELA SECONDARY SCHOOL	OPEN	682	24
NSONONO COMBINED PRIMARY SCHOOL	OPEN	103	4
NTABASKOP PRIMARY SCHOOL	OPEN	67	3
NTABINAMAFUTHA SECONDARY SCHOOL	OPEN	99	7
NTATHAKUSA PRIMARY SCHOOL	OPEN	231	7
NTENDENI PRIMARY SCHOOL	OPEN	41	3
OUR LADY OF THE ROSARY SECONDARY SCHOOL	OPEN	603	16
OZWATHINI PRIMARY SCHOOL	OPEN	324	10
PARUKABAD PRIMARY SCHOOL	OPEN	466	13
PHAMBELA PRIMARY SCHOOL	OPEN	84	4
QALAKAHLE SECONDARY SCHOOL	OPEN	707	26
QALIMFUNDO PRIMARY SCHOOL	OPEN	198	7
QHUBAKAHLE PRIMARY SCHOOL	OPEN	239	8
QILI PRIMARY SCHOOL	OPEN	79	4
QINISANI SECONDARY SCHOOL	OPEN	1358	42
SAKHUMUZI PRIMARY SCHOOL	OPEN	401	13
SANELE PRIMARY SCHOOL	OPEN	365	10
SIGEDLENI PRIMARY SCHOOL	OPEN	188	7
SIMUNYE HIGH SCHOOL	OPEN	215	8
SION PRIMARY SCHOOL	OPEN	483	17
SIPHIWE SECONDARY SCHOOL	OPEN	121	5
SIQONDOKUHLE PRIMARY SCHOOL	OPEN	114	7
SISEBENZILE SECONDARY SCHOOL	OPEN	881	26

SCHOOL NAME	STATUS	NO. OF LEARNERS	NO. OF EDUCATION
SITHELOSETHU PRIMARY SCHOOL	OPEN	70	3
SIYAPHUMULA SECONDARY SCHOOL	OPEN	453	17
SOGIDI PRIMARY SCHOOL	OPEN	178	7
SONTSHENGE PRIMARY SCHOOL	OPEN	192	6
SOTOBE SECONDARY SCHOOL	OPEN	300	8
THAFAMASI PRIMARY SCHOOL	OPEN	171	6
THOLUMUSA PRIMARY SCHOOL	OPEN	128	5
UBUHLEBEMFUNDO PRIMARY SCHOOL	OPEN	210	7
UBUHLEBESIZWE SECONDARY SCHOOL	OPEN	663	19
UMSUNDUZE SENIOR PRIMARY SCHOOL	OPEN	390	8
UMZOKHULAYO PRIMARY SCHOOL	OPEN	399	14
UYIKHULU SECONDARY SCHOOL	OPEN	174	6
VULELA PRIMARY SCHOOL	OPEN	80	4
WATERFALL COMBINED SCHOOL	OPEN	105	8
WEWE PRIMARY SCHOOL	OPEN	187	7
WOSIYANE SECONDARY SCHOOL	OPEN	102	6
MANZINI SECONDARY SCHOOL	OPEN	3	3
PHUZULWAZI SECONDARY SCHOOL	OPEN	110	6
DUBEYANE PRIMARY SCHOOL	OPEN	54	2
ZUBANE JUNIOR PRIMARY SCHOOL	OPEN	312	10
ZAKHELE PRIMARY SCHOOL	OPEN	219	9
MANZAMHLOPHE PRIMARY SCHOOL	OPEN	98	4
GIJIMANI SECONDARY SCHOOL	OPEN	224	6
SINENHLANHLA SECONDARY SCHOOL	OPEN	616	22

SCHOOL NAME	STATUS	NO. OF LEARNERS	NO. OF EDUCATION
MLAMULANKUNZI PRIMARY SCHOOL	OPEN	40	2
DUMANE COMMERCIAL HIGH SCHOOL	OPEN	70	4
MANABA SECONDARY SCHOOL	OPEN	126	4
CHIEF NGONYAMA TECHNICAL SCHOOL	OPEN	230	11
NDABENHLE PRIMARY SCHOOL	OPEN	98	5
UKUZAMAKWETHU SECONDARY SCHOOL	OPEN	105	3
MGEZENGWANE PRIMARY SCHOOL	OPEN	411	12
MASIMDUMISE PRIMARY SCHOOL	OPEN	175	5
UBUHLEBEPHUPHO PRIMARY SCHOOL	OPEN	89	4
DULINI PRIMARY SCHOOL	OPEN	61	4
SICELIMFUNDO PRIMARY SCHOOL	OPEN	269	7
NTABAKHATHAZA PRIMARY SCHOOL	OPEN	108	3
UNYAZI PRIMARY SCHOOL	OPEN	278	8
ITSHELENCWADI PRIMARY SCHOOL	OPEN	80	5
KWANGOZA SECONDARY SCHOOL	OPEN	208	8

11.6.5. EARLY CHILDHOOD DEVELOPMENT

The Municipality has approximately 175 early childhood development centres (ECD). Some of these ECD centres are registered, not registered and in the process of registration with the Department of Education.

The Local Municipality recognizes that Early Childhood Development (ECD) falls under the jurisdiction of Local, Provincial, and National Governments. Nonetheless, it aims to synchronize its efforts with national and provincial legislative guidelines.

In accordance with the Constitution of the Republic of South Africa, the Municipal Systems Act No. 32 of 2000, and the Children's Act No. 38 of 2005, local government assumes responsibility for the following:

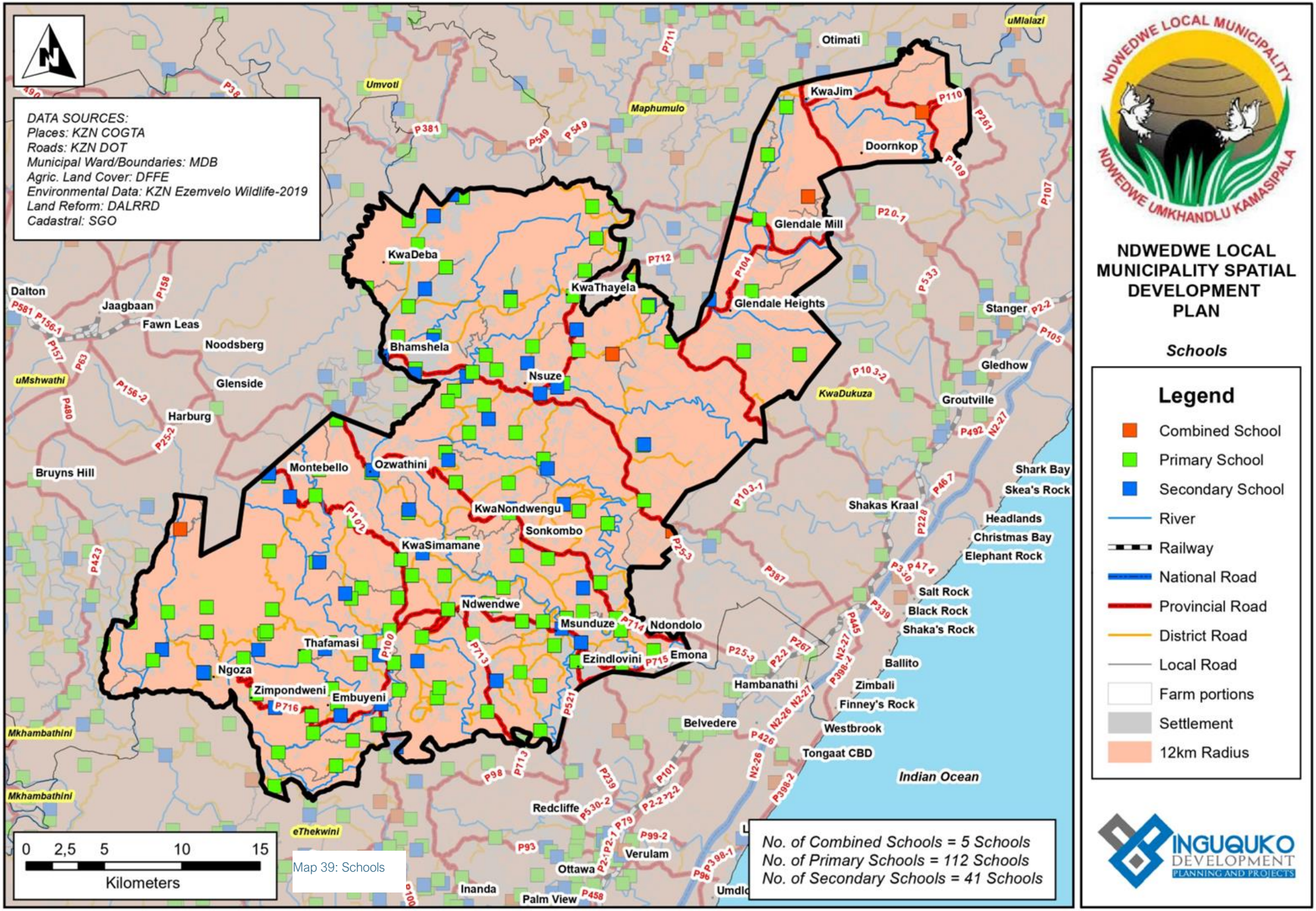
- Providing essential services, such as water and sanitation, to communities.
- Contributing to the realization of rights outlined in the Constitution, encompassing healthcare services, nourishment and water, and social security.
- Formulating policies and regulations governing childcare facilities, including child-minding services.
- Engaging in municipal planning and spatial development, encompassing the provision and regulation of land for childcare facilities and the establishment of secure and adequate play and recreation areas.

In instances where the provincial Department of Social Development designates municipalities with the responsibility for offering partial care services as outlined in section 88 of the Children's Act No. 38 of 2005, municipalities are then tasked with the provision (including registration, regulation, monitoring, and compliance evaluation with established norms and standards) of partial care and early childhood development programs, catering to more than six children on behalf of their parents or caregivers for a specific duration.

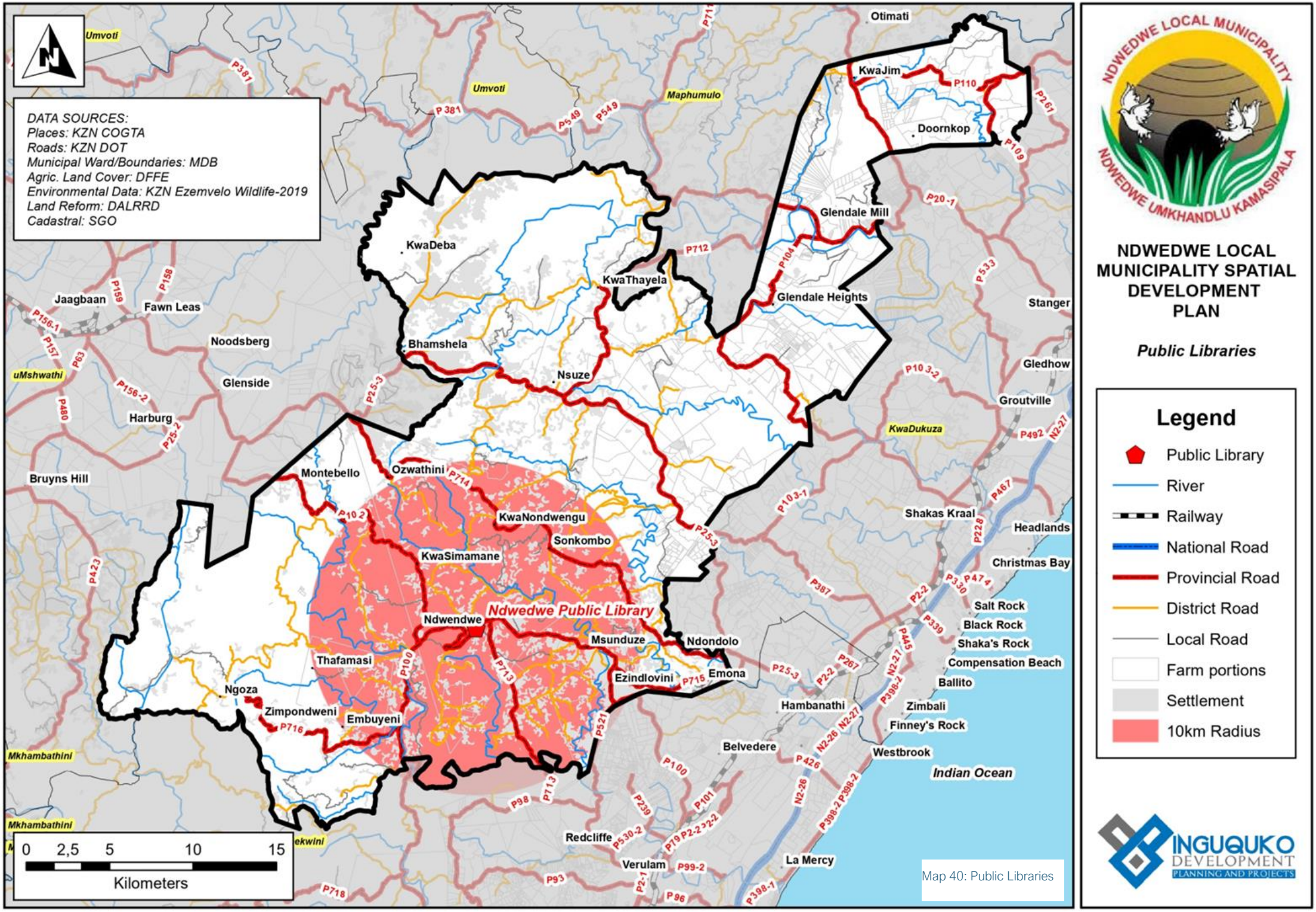
11.6.6. COMMUNITY HALLS

The municipality currently has 2 community halls located in Ozwathini and Ndwedwe. The municipality is currently constructing additional community halls to service the municipality. These include:

- Hlalakahle Community Development Centre in Ward 7
- Msengeni Community Development Centre in Ward 8
- EmaKhawula Community Hall in Ward 13.



Map 39: Schools



NDWEDWE LOCAL MUNICIPALITY

NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

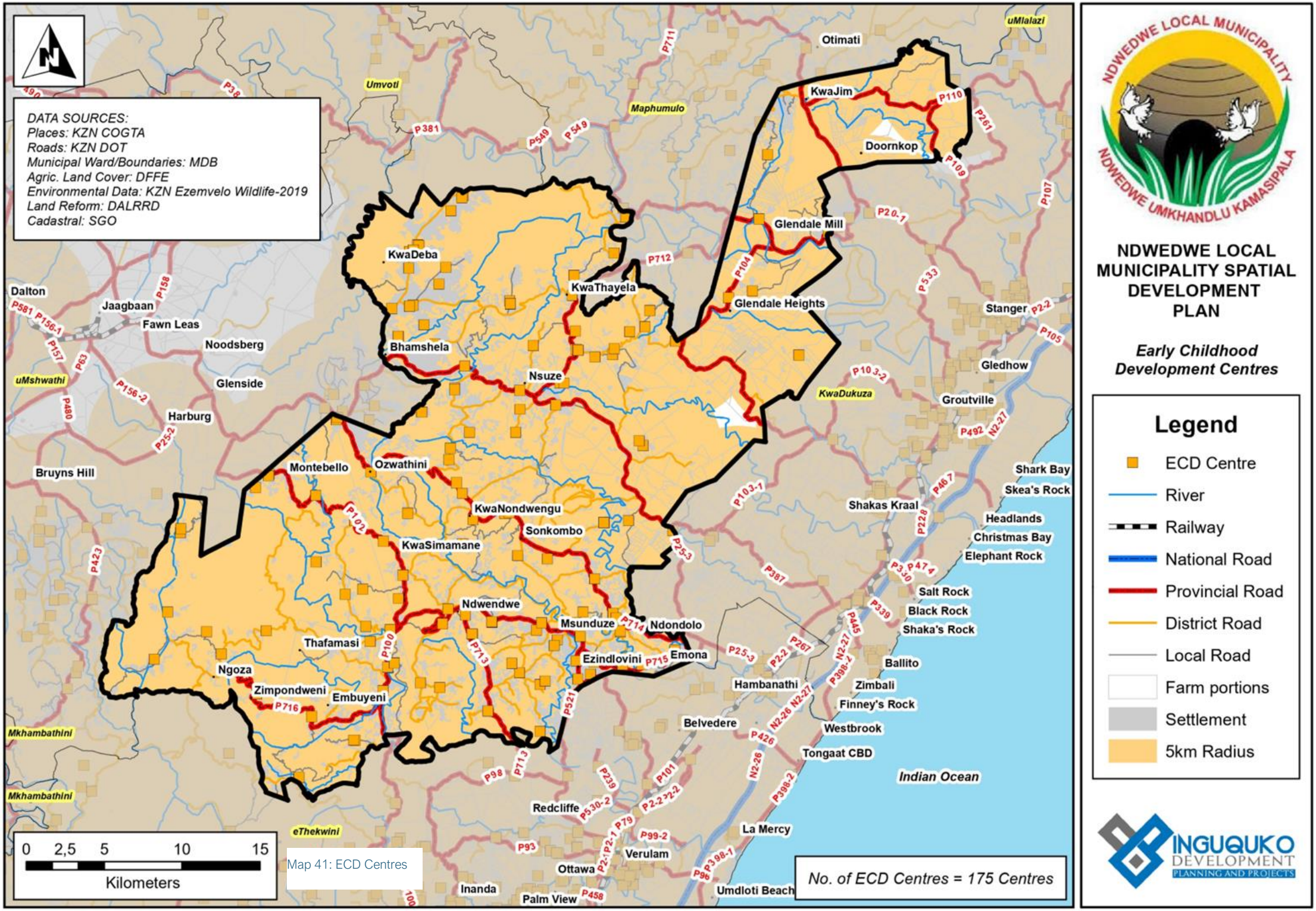
Public Libraries

Legend

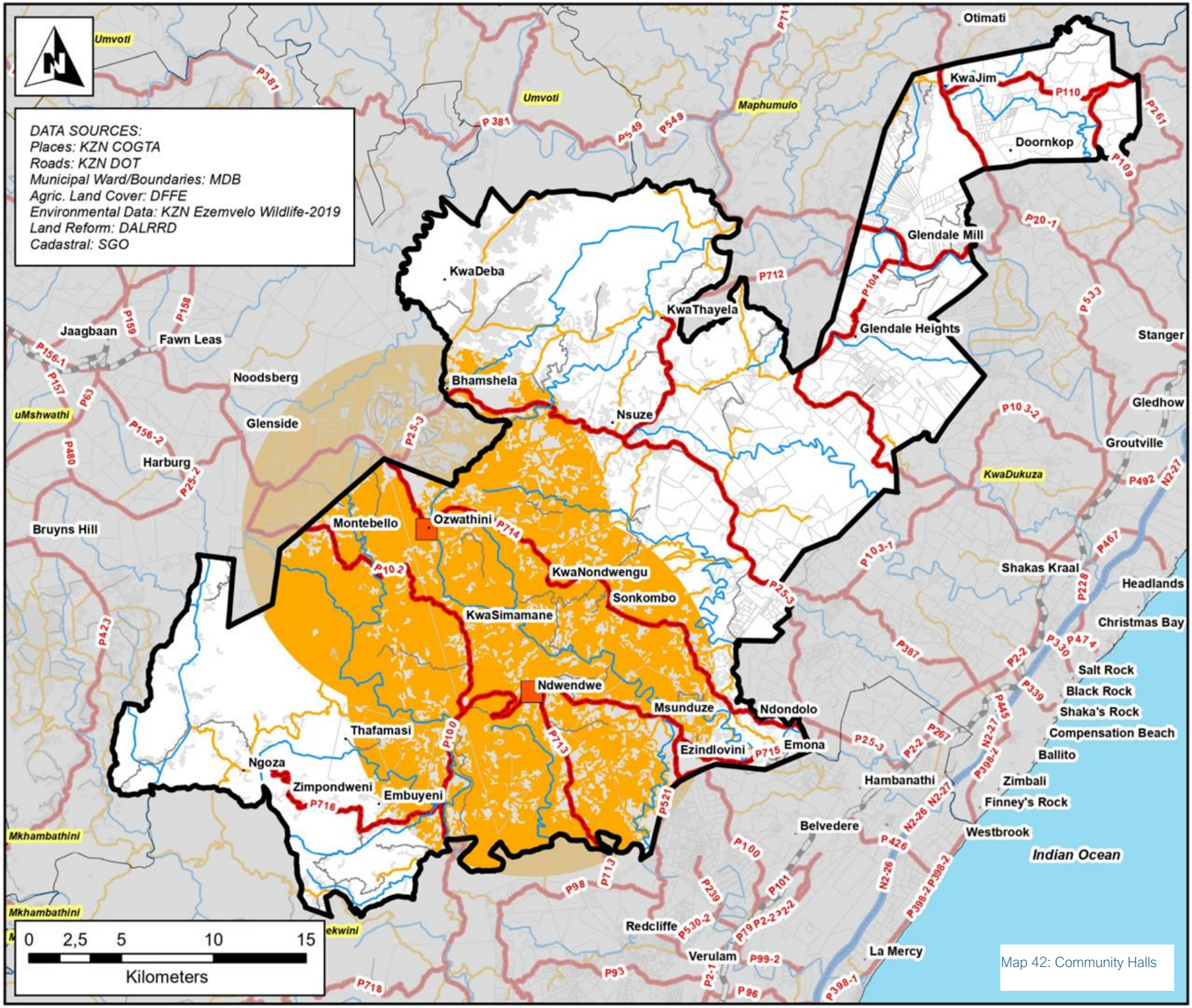
- Public Library
- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- 10km Radius

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS

Map 40: Public Libraries



Map 41: ECD Centres



NDWEDWE LOCAL MUNICIPALITY

NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Community Halls

Legend

- Community Hall
- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- 10km Radius

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS

11.6.7. CEMETERIES

On March 31, 2022, the municipal administration formulated and ratified a comprehensive Cemeteries/Crematoria Feasibility Study. In addition, a separate study focused on Cemetery Feasibility was undertaken, aiming to identify appropriate land for cemeteries and crematoria facilities. At present, the municipality is grappling with a challenge concerning the unavailability of land suitable for establishing municipal cemeteries, an animal pound, and the expansion of the Bhamshela Thusong Centre. Ongoing deliberations are being held with the Department of Land Affairs and local traditional leaders (Amakhosi) to secure suitable land for the municipality's purposes.

The municipality lacks an adequate number of approved cemetery sites. It is in the process of acquiring land for the establishment of new cemetery sites. A Cemetery Feasibility Study has been conducted and is now finalized, although it has not yet been presented to relevant stakeholders in workshops. Following engagement meetings and workshops, the policy will receive approval from the Council. The map below depicts regions presently serving as informal burial sites. These sites are currently utilized by the community, including churches, residents' residences, and homesteads.

11.6.8. SPORTS AND RECREATION

Numerous sports facilities are currently present within Ndwedwe Local Municipality, primarily in the form of sports fields. In the recent fiscal year, the municipality has constructed and is in the process of constructing sports field. These include:

1. Construction of Waterfall Sports field Ward 3 – COMPLETED
2. Construction of Nhlangwini Sports-field Ward 10 – COMPLETED
3. Construction of Madlakazi Sports field in Ward 4 internal Funded Portion – COMPLETED
4. Construction of Nhlangwini Sports-field in Ward 4 – COMPLETED
5. KwaDeda sports field Refurbishment in Ward 5 - ON-GOING

11.6.9. SOCIAL INFRASTRUCTURE NEEDS ANALYSIS

NB.: It should be acknowledged that the following undertaking is strictly of a scientific nature. There is a strong likelihood that real-world conditions may necessitate a higher number of social facilities than the calculated requirement, owing to factors such as topographical challenges, the presence of elderly individuals, and other pertinent considerations.

MUNICIPAL POPULATION	FACILITY	CURRENT	REQUIRED	BACKLOG	SUPLUS	COMMENTS
HEALTH FACILITIES						
143 117	Hospital	1	4	3	N/A	Ndwedwe Town requires the construction of a hospital central to the surrounding settlements.
	Clinic	6	1	0	5[1]	Existing clinics need to be upgraded and mobile clinics provided due to access issues.
	Community Health Centre (CHC)	1	1	N/A	N/A	Existing CHC requires upgrading over the short to medium term.
SAFETY AND SECURITY						
143 117	Police Station	3	1	0	2	Existing police stations need to be upgraded over the medium to long term and mobile police stations provided in areas that are relatively inaccessible.
	Fire Station	0	1	1	N/A	Development of a Fire Station in the Ndwedwe town.
EDUCATION FACILITIES						
143 117	Primary Schools[2]	112	20	N/A	92	Existing schools require upgrading and maintenance over the short to medium term.
	Secondary Schools	41	11	N/A	30	

[1] Access poses a major challenge due to the municipality's topography and settlement pattern.
[2] Municipality has 5 combined schools which offer both primary and secondary education. These schools also require urgent upgrading and maintenance.

MUNICIPAL POPULATION	FACILITY	CURRENT	REQUIRED	BACKLOG	SUPLUS	COMMENTS
	Early Childhood Development Centers (ECD)	175	53	N/A	122	Unregistered ECD centres need support in order to be registered with DOE. Land use rights need to be relaxed in order to streamline the establishment of ECD centres.
CIVIC AND SOCIAL FACILITIES						
143 117	Community Halls	5	2	N/A	3	Existing community halls need to be refurnished and upgraded over the short to medium term. Municipality is currently undertaking the aforementioned.

BIOPHYSICAL AND ENVIRONMENTAL ASSESSMENT

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

12. BIOPHYSICAL AND ENVIRONMENTAL ASSESSMENT

12.1. GEOLOGICAL CHARACTERISTICS

The municipality is characterised by 2 types of stone namely:

ARENITE: This covers the eastern part and some of the northern [art of the municipality. Arenite is a type of sedimentary rock that is primarily composed of sand-sized grains. Arenite is a subtype of sandstone, which is a broader term encompassing all rocks composed primarily of sand-sized grains.

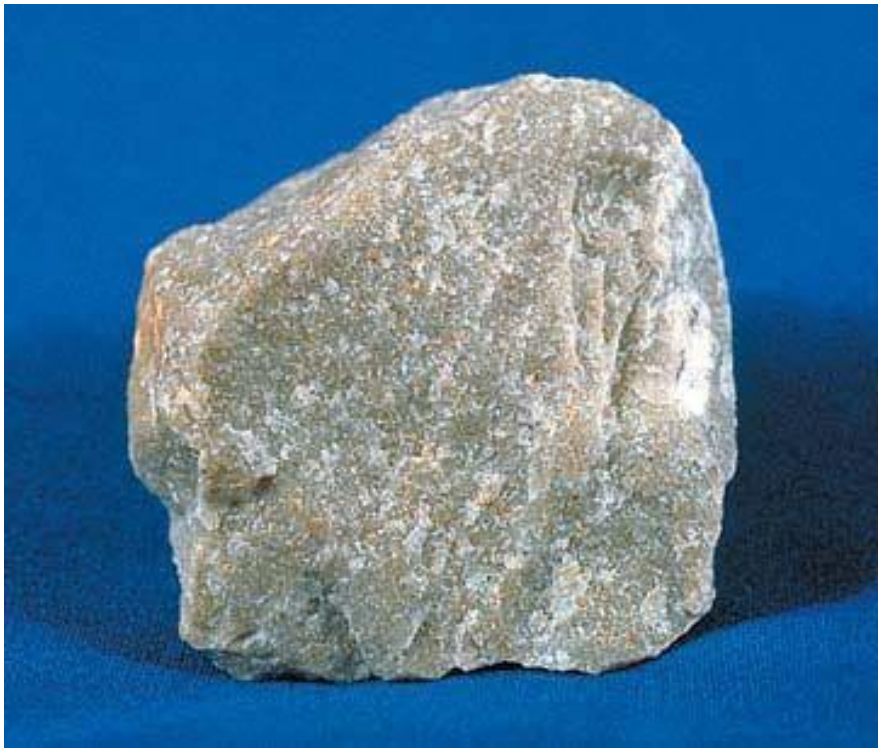


Figure 12: Arenite Rock

Arenite is characterized by its grain size, typically ranging from 0.0625 to 2 millimetres in diameter. These sand-sized grains are usually composed of minerals like quartz, feldspar, and other silicate minerals. The grains are held together by a natural cement, which can be minerals like silica, calcite, or iron oxides.

The term "arenite" is often used by geologists to emphasize the dominance of sand-sized particles in a sandstone rock. Sandstone can be further categorized based on its composition, texture, and mineralogy. For example, if a sandstone has a significant amount of feldspar grains, it might be called an "arkose." If it has abundant clay minerals in addition to the sand-sized grains, it could be termed a "wacke."

GNEISS: Gneiss covers the central, southern and northern parts of the municipality. Gneiss is a type of metamorphic rock characterized by its distinct banding or layering of mineral grains. It forms when pre-existing rocks, such as granite or shale, undergo intense heat and pressure within the Earth's crust, causing their minerals to recrystallize and reorganize. This process leads to the development of alternating light and dark layers of minerals, giving gneiss its characteristic appearance.

Gneiss typically contains minerals like quartz, feldspar, mica, and amphibole, which can align themselves into bands or foliations during the metamorphic process. The layers can vary in thickness and composition, creating a visually striking rock with contrasting colours and textures.

Gneiss has various uses in construction, sculpture, and architecture due to its durability and appealing appearance. It can also provide geologists with valuable insights into the geological history and processes that have shaped the Earth's crust over time.



Figure 13: Gneiss Rock

12.2. SLOPE ANALYSIS

Slope analysis is a geographical and spatial analysis technique used to assess and analyse the steepness or gradient of terrain surfaces. It involves measuring and mapping the angles of slopes across a landscape, which provides valuable information about the topography and the physical characteristics of an area.

In the context of spatial planning, slope analysis is important for several reasons:

Land Use Planning: Slope analysis helps planners identify suitable areas for different types of land use, such as residential, commercial, agricultural, or industrial zones. Steeper slopes may be less suitable for certain types of development due to challenges in construction, stability, and infrastructure.

Natural Hazard Assessment: Areas with steep slopes are often more prone to natural hazards like landslides, rockfalls, and erosion. Slope analysis can help identify areas at risk and guide decisions about where to prohibit or restrict development to ensure public safety and minimize potential damage.

Environmental Protection: Sensitivity to slope gradients can indicate environmentally sensitive areas, such as riparian zones or habitats with unique ecosystems. Proper spatial planning can help protect these areas from degradation or inappropriate development.

Infrastructure Planning: Understanding slope gradients is crucial for planning infrastructure projects such as roads, highways, and pipelines. Steep slopes may require special engineering considerations to ensure stability and safety.

Aesthetic and Visual Considerations: Slope analysis can influence the visual impact of development. For example, developments on steep slopes may be more visible from certain viewpoints, affecting the overall aesthetic quality of the landscape.

Economic Efficiency: Careful analysis of slope gradients can contribute to cost-effective development. Avoiding or minimizing construction on excessively steep slopes can reduce construction costs and potential future maintenance expenses.

Erosion Control and Watershed Management: Slope analysis aids in identifying areas vulnerable to erosion, allowing planners to implement erosion control measures and design effective watershed management strategies.

Resilience and Climate Change: As climate change impacts become more pronounced, understanding slope analysis can aid in planning resilient communities by avoiding vulnerable areas and considering potential changes in precipitation and runoff patterns.

The map below illustrates the slopes within the municipality. It is noticeable from the map that the municipality's steepest sections are primarily situated along its edges or periphery, particularly in Thafamasi, Ngoza, Sonkomo, KwaNondwengu, Zimpondweni, KwaThayela, Glendale, and KwaDeba.

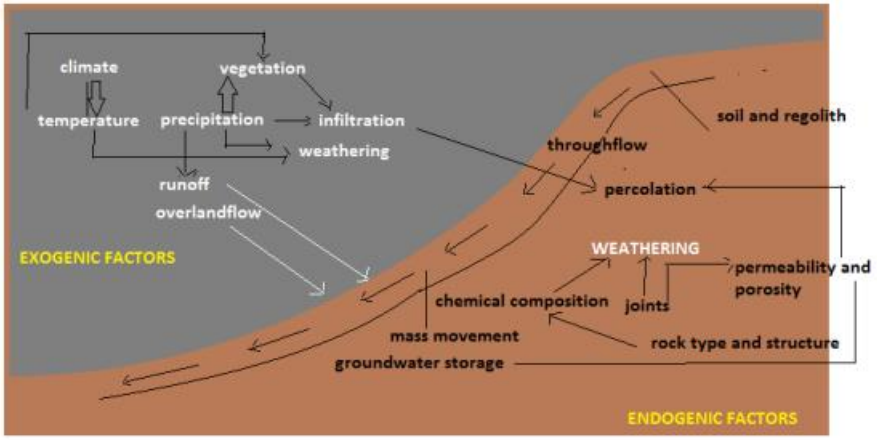
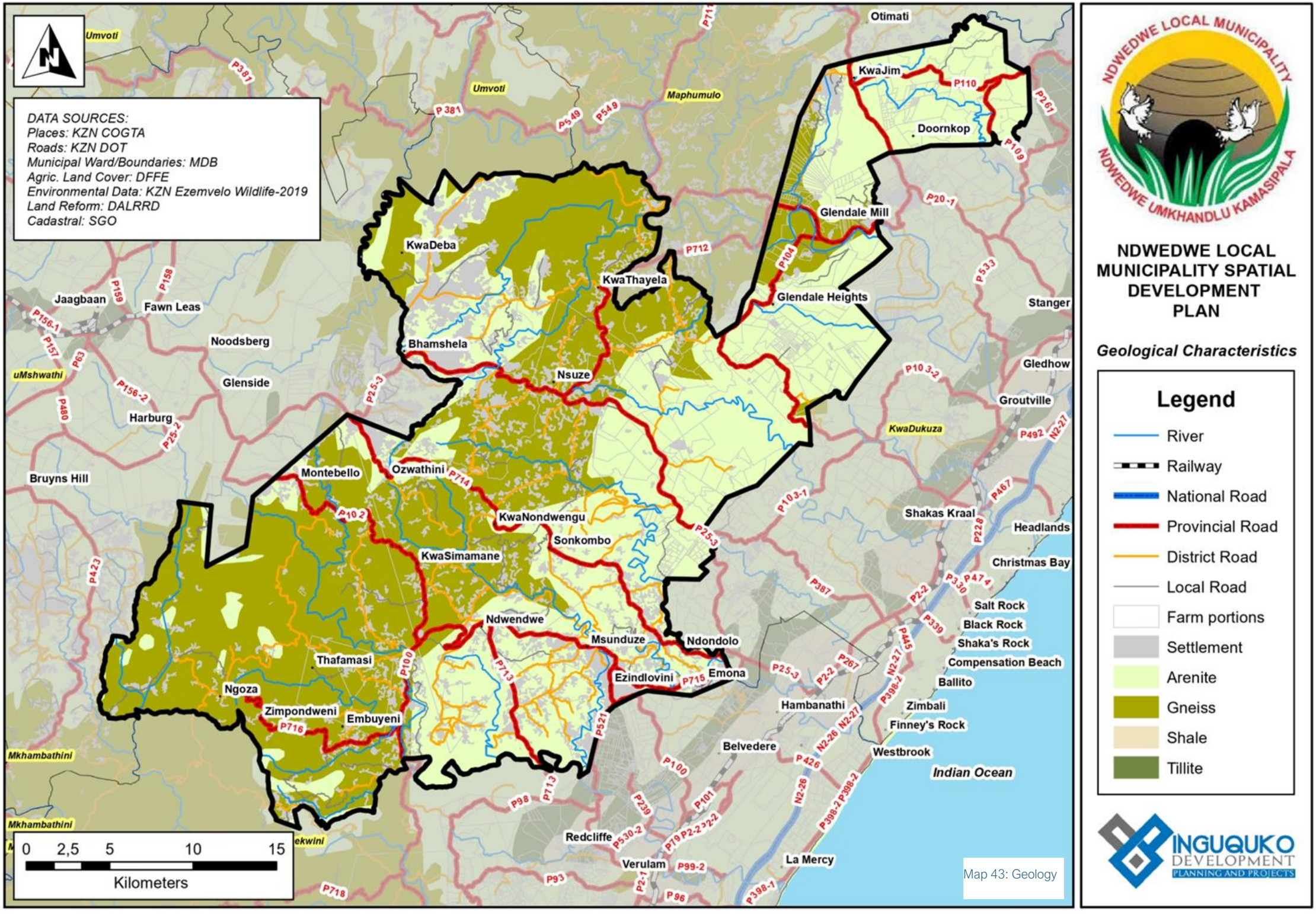
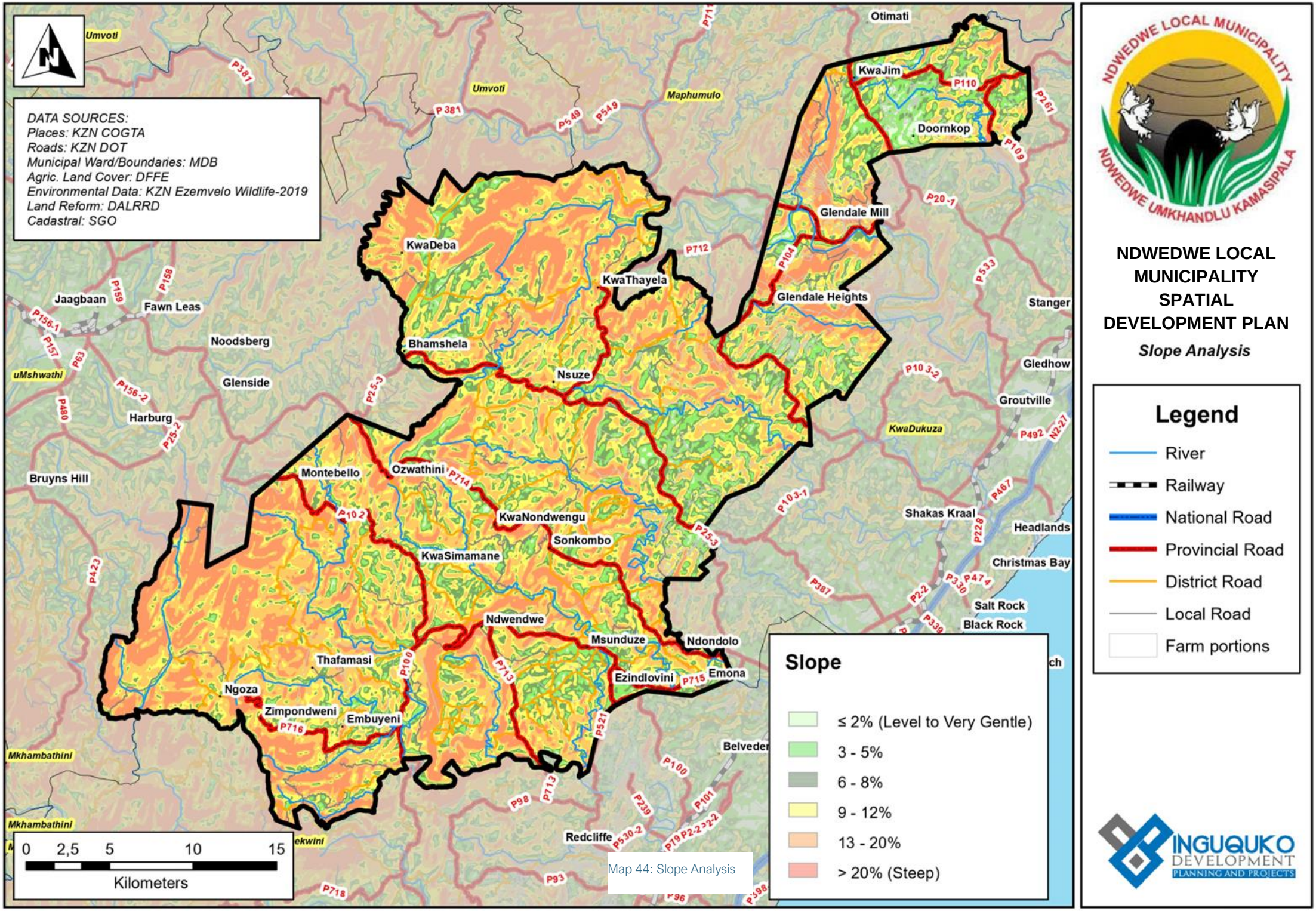


Figure 14: Factors Affecting Slope Form and Geo-form


DATA SOURCES:
Places: KZN COGTA
Roads: KZN DOT
Municipal Ward/Boundaries: MDB
Agric. Land Cover: DFFE
Environmental Data: KZN Ezemvelo Wildlife-2019
Land Reform: DALRRD
Cadastral: SGO
0 2,5 5 10 15
Kilometers
Otimati
KwaJim
Doornkop
Glendale Mill
Glendale Heights
KwaDeba
KwaThayela
Bhamshela
Nsuze
Jaagbaan
Fawn Leas
Noodsberg
Glenside
Harburg
Bruyns Hill
Montebello
Ozwathini
KwaNondwengu
Sonkombo
KwaSimamane
Ndwendwe
Msunduze
Ndondolo
Thafamasi
Ngoza
Zimpondweni
Embuyeni
Ezindlovini
Emona
Stanger
Gledhow
Groutville
KwaDukuza
Shakas Kraal
Headlands
Christmas Bay
Salt Rock
Black Rock
Shaka's Rock
Compensation Beach
Ballito
Zimbali
Finney's Rock
Westbrook
Hambanathi
Belvedere
Indian Ocean
Redcliffe
Verulam
La Mercy
uMshwathi
Mkhambathini
Umvoti
Maphumulo
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Geological Characteristics
Legend
River
Railway
National Road
Provincial Road
District Road
Local Road
Farm portions
Settlement
Arenite
Gneiss
Shale
Tillite
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Map 43: Geology



Map 44: Slope Analysis

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Slope Analysis

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions

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12.3. HYDROLOGICAL CHARACTERISTICS

The Municipality is characterised by several hydrological features which include wetlands, rivers, and floodlines. Rivers in the municipality include the following:

1. Dangwane River
2. Msunduze River
3. KwaMvena River
4. Mqeku River
5. Honothi River
6. Nyenzane River
7. Pambela River
8. Sikoto River
9. Mombeni River Mvangela River
10. Mhlali River
11. Ncemaneni River
12. Mona River
13. Tongati River
14. Nsuze River
15. Zinsimba River
16. Msiwela River
17. Malazi River
18. Nonoti River
19. Sani River

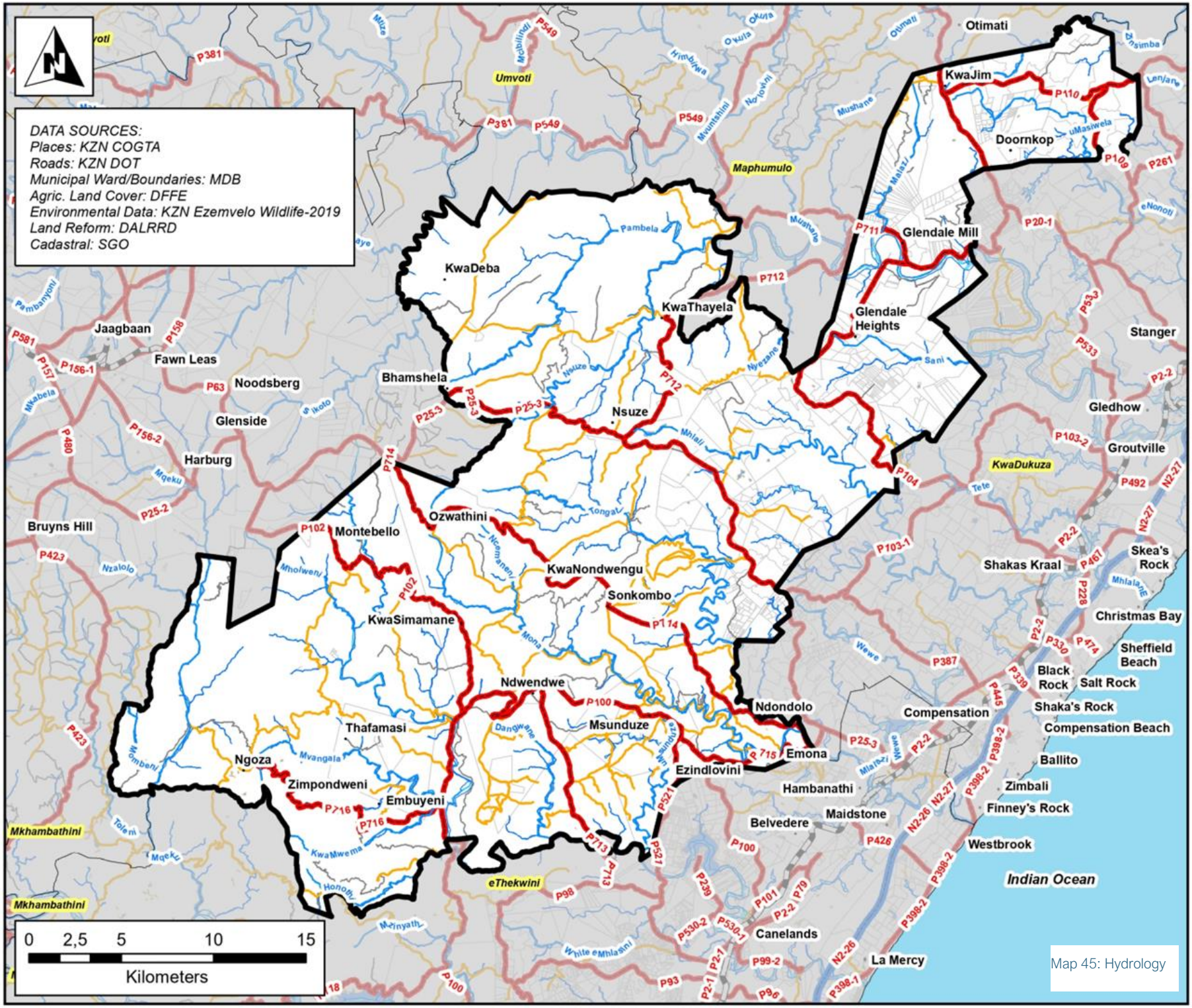
The above rivers are earmarked as having various conservation statuses which require protection and rehabilitation in other areas.





Table 6: River Conservation Status

NAME	LENGTH (KM)	TYPE	CLASS	CONSERVATION STATUS
Mvoti	8223,38284	Perennial	CLASS B: LARGELY NATURAL	Vulnerable
Nsuze	2869,98324	Perennial	CLASS B: LARGELY NATURAL	Vulnerable
Nonoti	48403,51478	Perennial	CLASS C: MODERATELY MODIFIED	Vulnerable
Mvoti	63068,69384	Perennial	CLASS C: MODERATELY MODIFIED	Vulnerable
Mhlali	10211,47027	Perennial	CLASS C: MODERATELY MODIFIED	Vulnerable
Nsuze	25992,37296	Perennial	CLASS B: LARGELY NATURAL	Vulnerable
Mhlali	40431,67701	Perennial	CLASS C: MODERATELY MODIFIED	Vulnerable
Tongati	41952,24382	Perennial	CLASS C: MODERATELY MODIFIED	Vulnerable
Mdloti	32649,01467	Perennial	CLASS B: LARGELY NATURAL	Vulnerable
Mwangala	16515,18526	Perennial	CLASS B: LARGELY NATURAL	Vulnerable
Tongati	14571,45747	Perennial	CLASS C: MODERATELY MODIFIED	Vulnerable
Mqeku	29729,88093	Perennial	CLASS B: LARGELY NATURAL	Vulnerable
Mdloti	36801,49507	Perennial	CLASS B: LARGELY NATURAL	Vulnerable



Map 45: Hydrology

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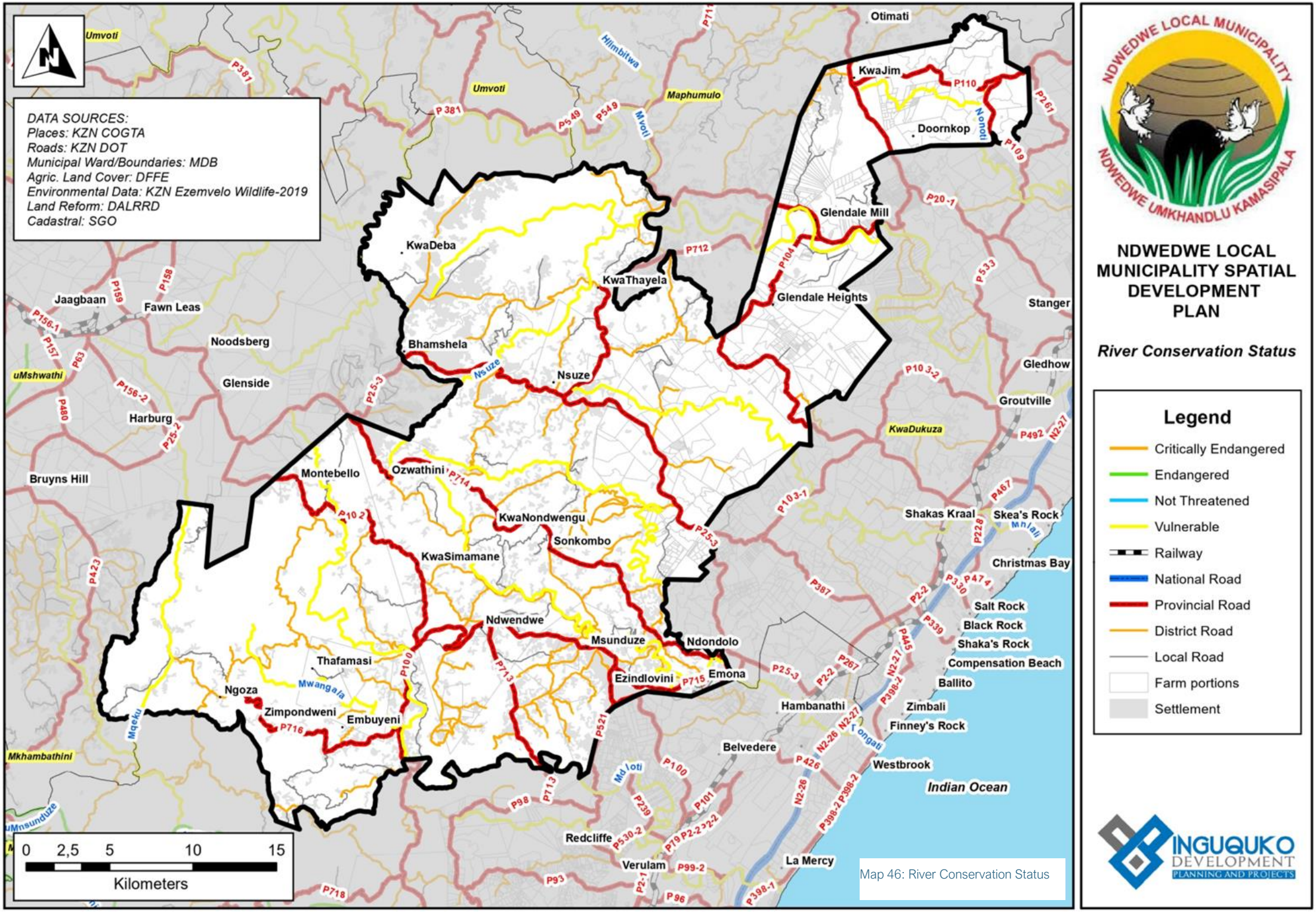
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Hydrological Characteristics

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- 20yr Floodline
- Wetland
- 32m Wetland Buffer
- 32m River Buffer
- Farm portions

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Map 46: River Conservation Status

12.4. BIODIVERSITY AND CONSERVATION AREAS

While the NLM may not feature an extensive array of protected regions the ILembe District Municipality the Meycol Nature Reserve, under the stewardship programme, is managed by a private landowner. Additionally, the management authority for the Red Hill, Amatikulu, and Harold Johnson Nature Reserves is Ezemvelo. Furthermore, the uThukela Marine Protected Area stretches from the marine expanse to encompass the Thukela estuary. Two primary classifications, namely Critical Biodiversity Areas (CBAs) and Ecological Support Areas, serve to identify and oversee pivotal biodiversity. CBAs represent particularly delicate regions, often lacking formal protection, where alterations in land usage could yield harmful effects on biodiversity. In contrast, Ecological Support Areas function as pillars sustaining the ecological vitality of core biodiversity zones, encompassing protected areas as well as CBAs.

12.4.1. CONSERVATION STATUS OF FLORA AND FAUNA

The conservation status of the ULM's flora and fauna is evaluated using the standards set by the International Union for Conservation of Nature (IUCN, 2012), which assess the relative risk of species extinction. These assessments result in the creation of red lists that classify species as Critically Endangered (CR), Endangered (EN), or Vulnerable (VU). Activities involving the clearing or harvesting of natural vegetation within these regions could potentially lead to the destruction or loss of plant and animal species of conservation importance. The degree of impact depends on the presence of these species in the affected areas.

To address this, mitigation measures might involve relocating plants to suitable grassland habitats to minimize the impact on local populations.

Within the grassland ecosystem, numerous Hypoxis hemerocallidea (Starflower, African potato) plants thrive, but their presence could adversely affect the local population of this provincially protected species, classified as "Declining" due to excessive harvesting for medicinal purposes and grassland habitat development. Translocating these plants to adjacent suitable grassland areas can help mitigate losses and significantly reduce the impact on the local species population.

Critical biodiversity areas are situated in the Thafamasi, Montebello, Ngoza, Zimpondweni, parts of Glendale, Msunduze, Ezindlovini, and Ndwedwe. Extensive agricultural practices can be harmonized with the objectives of Critical Biodiversity Areas and Environmental Sensitivity Areas.

Table 7: Conservation Status Implications

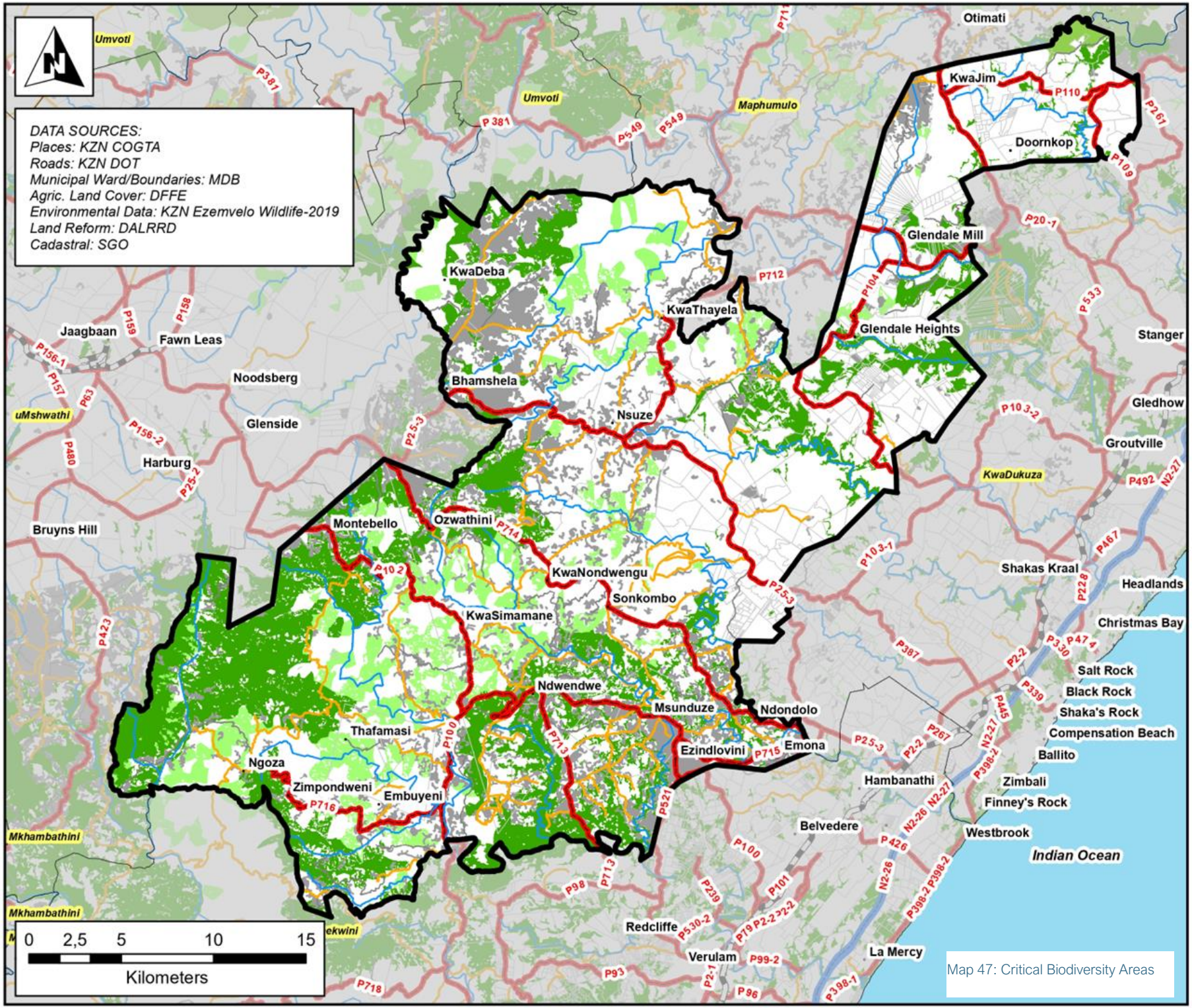
CONSERVATION CATEGORY	CATEGORY DETERMINANT	IMPLICATIONS
Critically Endangered	Remaining unmodified vegetation has an area less than or equal to the required conservation target,	Any further loss will result in the conservation target not being met & persistence of vegetation type uncertain.
Endangered	Remaining unmodified vegetation has an area less than or equal to the required conservation target plus 15%,	Further loss will result in the category being upgraded to CR and may result in the conservation target not being met & persistence of vegetation type uncertain.
Vulnerable	60% or less of the original extent of the ecosystem remains	Caution required.
Least Threatened	More than 60% of the original extent of the ecosystem remains	Sustainable development approach to be in place

12.4.2. CRITICAL BIODIVERSITY AREA IMPLICATIONS AND LAND USE GUIDELINES

Table 8: Critical Biodiversity Areas

CATEGORY	COMPATIBLE LAND USES	LAND USE GUIDELINES
CBA Irreplaceable: Areas which are required to meet biodiversity conservation targets, and where there are no alternative sites available. (Category driven by species and feature presence)	• Open space • Low impact ecotourism or recreation	Maintain in a natural state with limited to no biodiversity loss.
CBA Optimal: Areas that are the most optimal solution to meet the required biodiversity conservation targets while avoiding high-cost areas as much as possible (Category driven primarily by process).	• Open space • Low impact ecotourism or recreation	Maintain in a natural state with limited to no biodiversity loss
CBA Optimal:	• Open space	Maintain in a natural state with limited to no biodiversity loss

CATEGORY	COMPATIBLE LAND USES	LAND USE GUIDELINES
Areas that are the most optimal solution to meet the required biodiversity conservation targets while avoiding high-cost areas as much as possible (Category driven primarily by process).	• Low impact ecotourism or recreation	
ESA: Areas that support the ecological functioning of protected areas or CBAs. These areas are identified as influencing land-use management that is not derived based on biodiversity priorities alone but also address other legislation/agreements which the biodiversity sector is mandated to address, for example triggers for EIA Regulations.	• Low impact ecotourism or recreation • Sustainably managed rangelands • Certain forms of low-density housing	Further intensification of land use is discouraged. Influencing land-use management that is not only derived based on biodiversity priorities alone, but also address other legislation / agreements which the biodiversity the sector is mandated to address, e.g., WHS Convention, triggers for EIA Regulations, etc.



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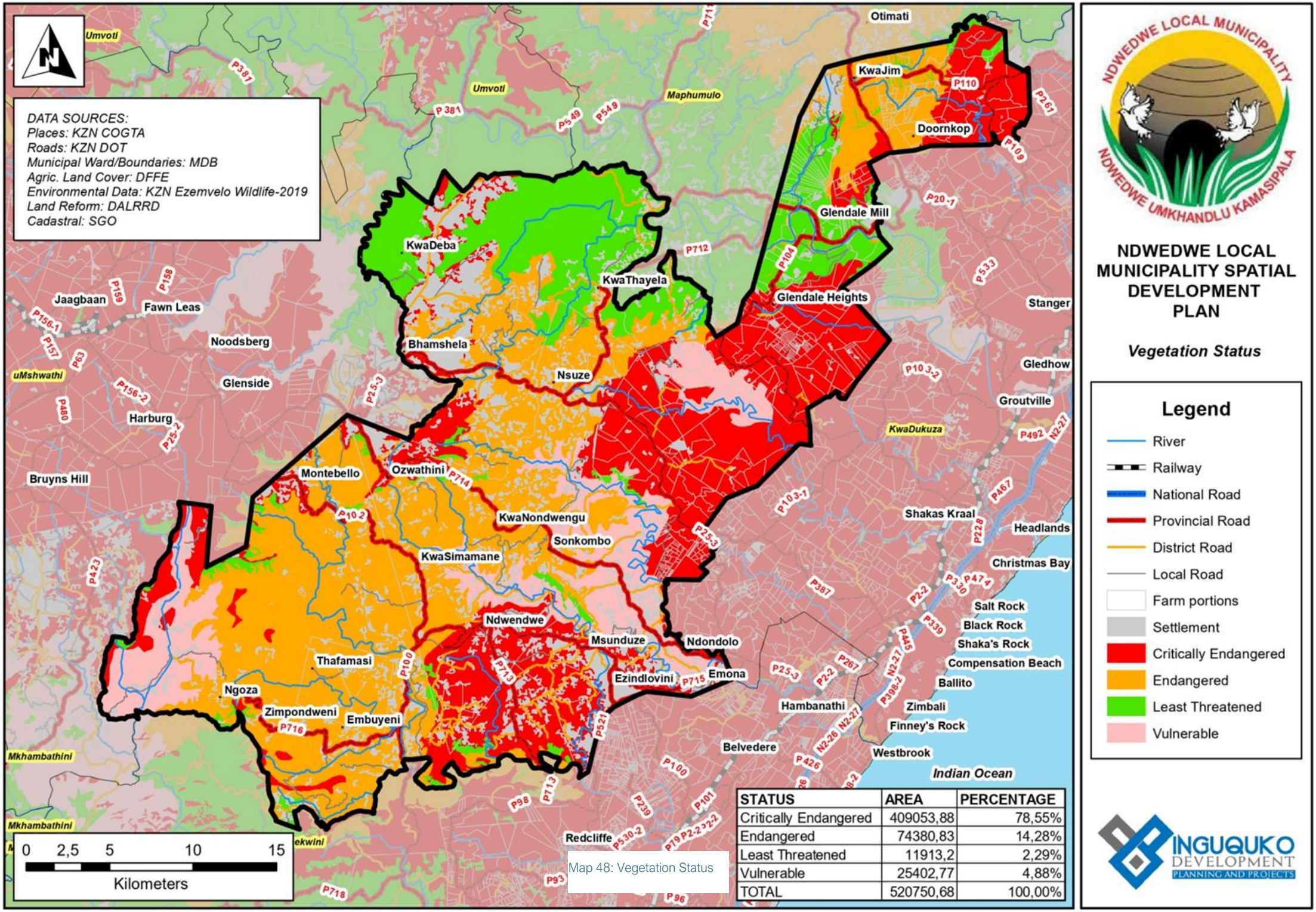
Critical Biodiversity Areas

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- CBA: Irreplaceable
- CBA:Optimal
- ESA
- ESA Species Specific

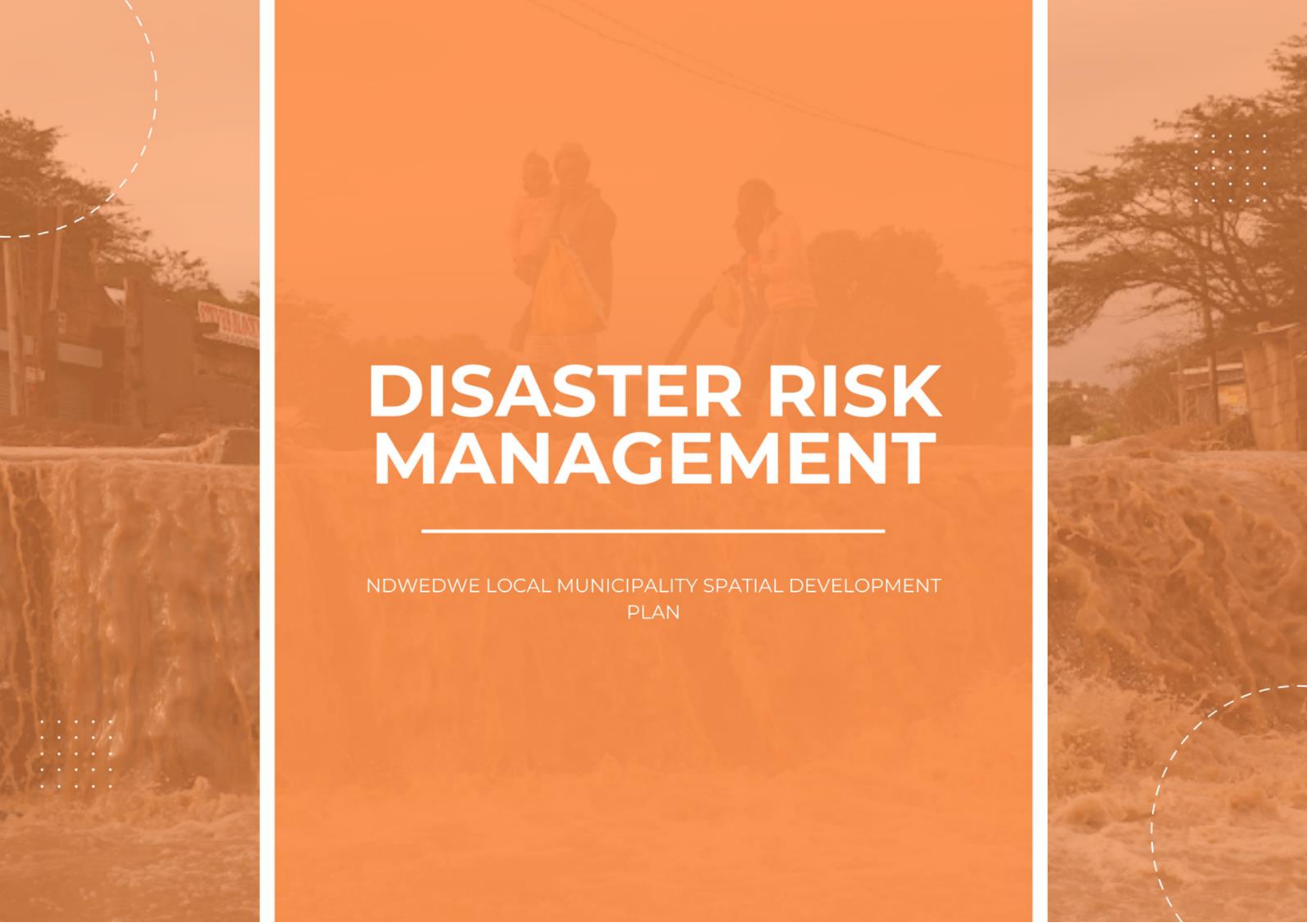
Map 47: Critical Biodiversity Areas

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STATUS	AREA	PERCENTAGE
Critically Endangered	409053,88	78,55%
Endangered	74380,83	14,28%
Least Threatened	11913,2	2,29%
Vulnerable	25402,77	4,88%
TOTAL	520750,68	100,00%

Map 48: Vegetation Status



DISASTER RISK MANAGEMENT

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

13. DISASTER RISK MANAGEMENT AND ASSESSMENT

Comprehending the topography of Ndwedwe Municipality is of utmost importance due to its influence on settlement patterns, land utilization, and the expenses involved in establishing crucial services. The municipality's topography displays significant variation across different zones, characterized by rolling and uneven terrain. As a result, specific areas exhibit more pronounced slopes than others. These topographical attributes are closely intertwined with geological and geomorphological factors that must be considered during the region's development. Ndwedwe Municipality encompasses rugged landscapes and undulating topography, marked by steep inclines, which carry certain implications for the Spatial Development Plan.

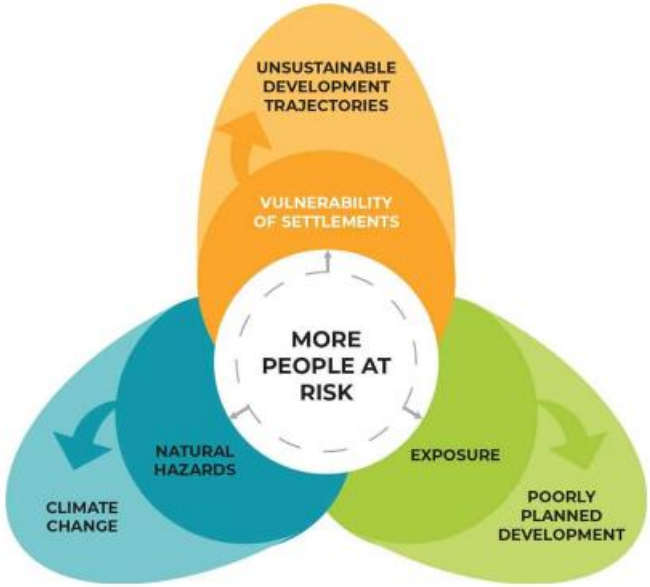


Figure 15: Disaster Risk Management

13.1. HOUSEHOLDS IN UNSUITABLE TOPOGRAPHY

Following principles of development and spatial planning best practices, it is advised that construction should not take place on slopes with a gradient of 1:3 or steeper. This approach avoids not only the heightened expenses associated with engineering services like excavation, filling, and utility provision, but also mitigates risks related to soil saturation. The map displayed below illustrates the presence of around 4 862 households situated on steep slopes. The existence of such households on these inclines carries multiple implications:

Safety Concerns: Steep slopes elevate the susceptibility to landslides, soil erosion, and slope failures, posing substantial dangers to the residents. Unstable slopes can result in property damage, infrastructure loss, and even endanger lives.

Development Limitations: Building on steep slopes often encounters limitations due to the inherent challenges. Establishing structures, roadways, and other infrastructure on such terrain can involve intricate engineering and higher costs. Specialized measures like retaining walls or slope stabilization techniques may be necessary for structural integrity.

Elevated Construction and Upkeep Expenses: Constructing and maintaining residences on steep slopes tends to be more financially demanding. The unique landscape may demand specific construction methods and materials for stability and safety. Furthermore, the increased susceptibility to erosion and slope instability can escalate maintenance and repair costs.

Access Constraints: Steep slopes can impede access to households in these areas. The rugged terrain may hinder the efficient reach of emergency services, utilities, and transportation networks. This can impact essential service delivery and extend response times during emergencies.

Environmental Impact: Developing housing on steep slopes can yield unfavourable environmental consequences. Clearing vegetation and altering natural topography may lead to heightened soil erosion, sediment buildup in water bodies, and habitat destruction. These activities can disrupt ecosystems, degrade water quality, and contribute to environmental deterioration.

Heightened Natural Disaster Vulnerability: Residences positioned on steep slopes face heightened vulnerability to natural disasters like floods and mudslides. Steep terrain can intensify water runoff during heavy rainfall, escalating flood risks. Landslides are also more probable on such slopes, particularly in regions with unstable soil conditions.

13.2. FLOOD RISK AREAS

Ndwedwe Municipality is notably responsive to hydrological attributes. The provided map underscores that within Ndwedwe, a multitude of water features, including perennial and non-perennial rivers, catchments, dams, and wetland systems, traverse various terrains, landscapes, and elevational variations. Moreover, the Hydrological Map presents the following information:

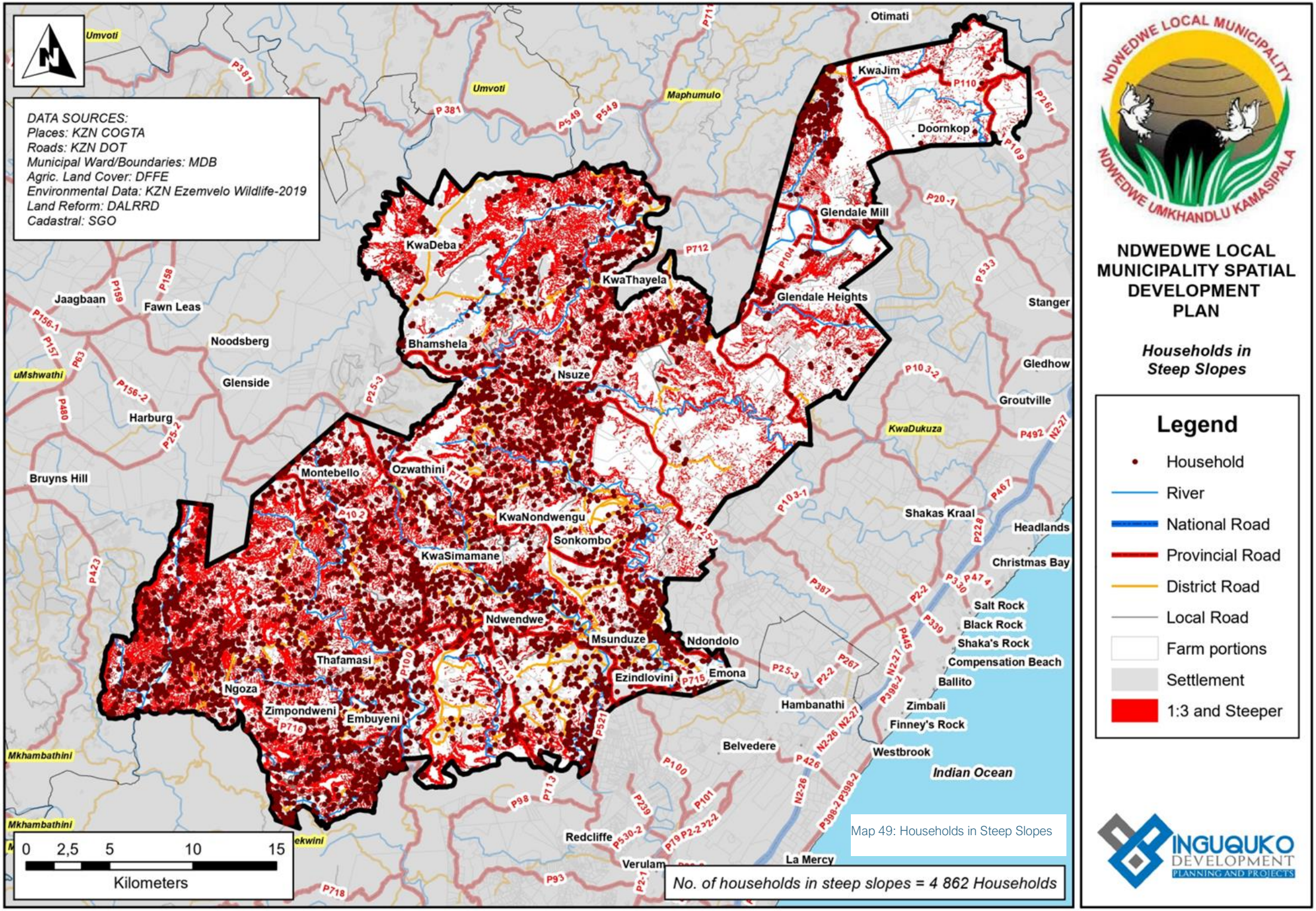
Table 9: Households in Hydrological Areas

HYDROLOGICAL CHARACTERISTICS	NO. OF HOUSEHOLDS
Wetlands	17 Households
Wetland 32m Buffers	41 Households
River 32m Buffers	156 Households
2yr Floodline	146 Households
TOTAL	220 Households

As demonstrated in the table provided, there are around 258 households situated within various hydrological zones, including:

- Wetlands
- 32-meter buffers along rivers
- Areas encompassing 20-year floodlines

This situation gives rise to serious apprehensions concerning public health, safety, and the overall environmental condition. Safeguarding water resources in Ndwedwe Municipality holds paramount importance, and South Africa provides a toolkit comprising legal frameworks and regulations specifically designed for environmental protection and management. With the recent escalation of climate change-related incidents leading to intensified heavy rainfall and floods, the imperative to avert such scenarios has become increasingly crucial. The heightened occurrence of severe flooding presents a substantial and potentially life-threatening hazard within the context of climate change and global warming.



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Households in Steep Slopes

Legend

- Household
- River
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- 1:3 and Steeper

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13.2.1. ANNUAL MEDIAN RAINFALL

The annual median rainfall has significant implications for spatial planning. It directly influences various aspects of land use, infrastructure development, and environmental management. Here are some key implications:

Land Use Allocation: Areas with higher annual median rainfall are more suitable for certain land uses, such as agriculture and forestry. Spatial planners need to consider the water availability when designating zones for different purposes. Land with lower rainfall might be better suited for urban development or industrial zones where water demands are relatively lower.

Water Management: Adequate drainage and stormwater management systems are crucial in areas with high annual median rainfall to prevent flooding and waterlogging. Spatial planners need to incorporate effective water management strategies to ensure that developments are resilient to heavy rainfall events.

Natural Habitat Preservation: Higher rainfall areas often support diverse ecosystems, including wetlands and forests. Spatial planning should prioritize the preservation of these natural habitats, as they contribute to biodiversity, flood control, and overall environmental health.

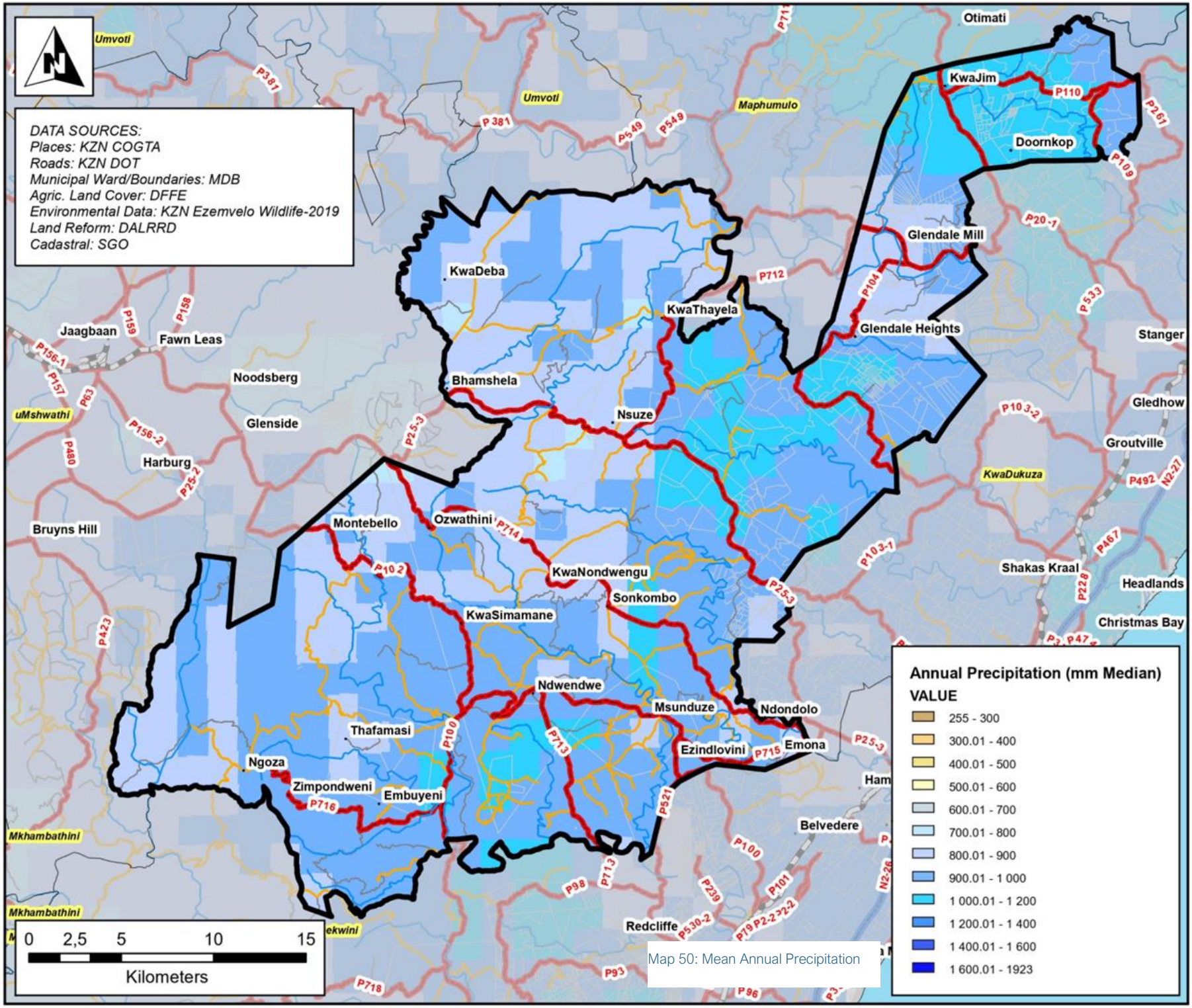
Infrastructure Resilience: Areas with significant annual rainfall require more robust infrastructure design to withstand potential damage from heavy rains. Roads, bridges, and buildings must be constructed to handle increased runoff and potential erosion caused by intense rainfall events.

Urban Design: In regions with ample annual median rainfall, urban design should incorporate green spaces, permeable surfaces, and efficient stormwater management to mitigate flooding and water runoff issues in urban areas.

Water Supply and Management: In areas with lower annual median rainfall, careful water supply planning is necessary. Spatial planners need to consider water scarcity issues and plan for efficient water use, conservation, and potential alternative sources.

Disaster Preparedness: High annual rainfall can contribute to landslides and mudslides, especially in areas with steep terrain. Spatial planners should identify and restrict development in hazard-prone zones to enhance disaster preparedness and minimize risks.

Climate Change Adaptation: Given the changing climate patterns, spatial planners should anticipate potential shifts in annual median rainfall and plan for adaptation measures to address evolving water availability and distribution. The map below shows the Annual Median Rainfall in the Ndwedwe Local Municipality.



Map 50: Mean Annual Precipitation

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Annual Precipitation

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions

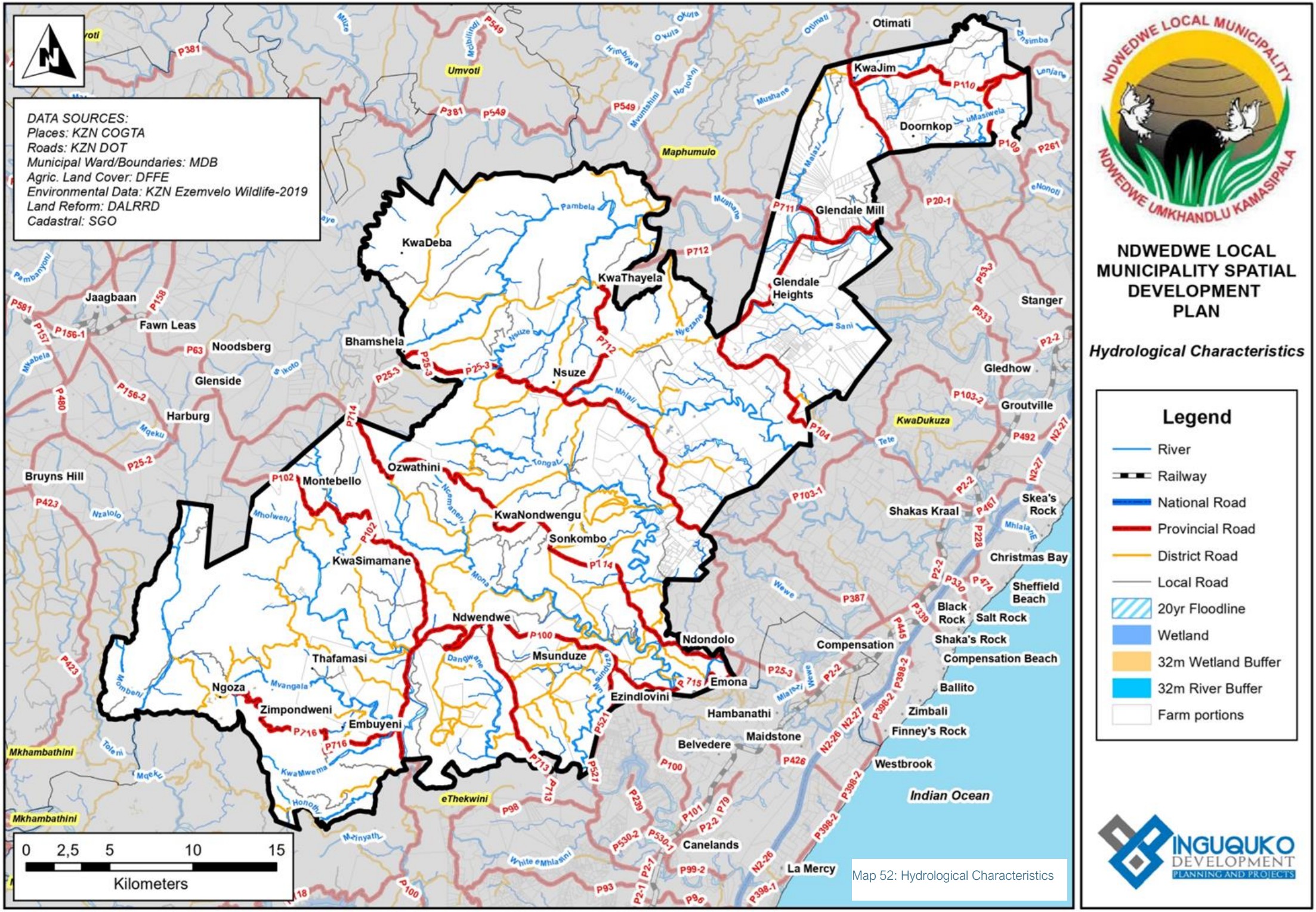
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PLANNING AND PROJECTS

13.2.2. FLOOD RISK AREAS

Recognizing and evaluating the potential for flooding and flood-prone regions during the housing delivery planning process holds paramount significance. The occurrence of floods presents a substantial menace to the safety, welfare, and lasting viability of communities. By comprehending and appraising flood risks, local administrations can make well-informed choices aimed at safeguarding residents and minimizing possible harm. The identification of flood-prone zones facilitates prudent land-use planning, ensuring that housing developments are sited within safer locales, thus curtailing risks for inhabitants. The evaluation of flood risks further empowers the implementation of effective flood management strategies, encompassing enhanced drainage systems, infrastructure resilient to flooding, and prompt alert mechanisms. Through the integration of flood risk assessments into the blueprint of housing delivery planning, municipalities can cultivate resilient and sustainable communities that are better equipped to withstand and recuperate from flooding incidents. This approach serves to protect lives, properties, and invaluable natural assets, promoting the overall well-being and long-term stability of these areas.







NDWEDWE LOCAL MUNICIPALITY

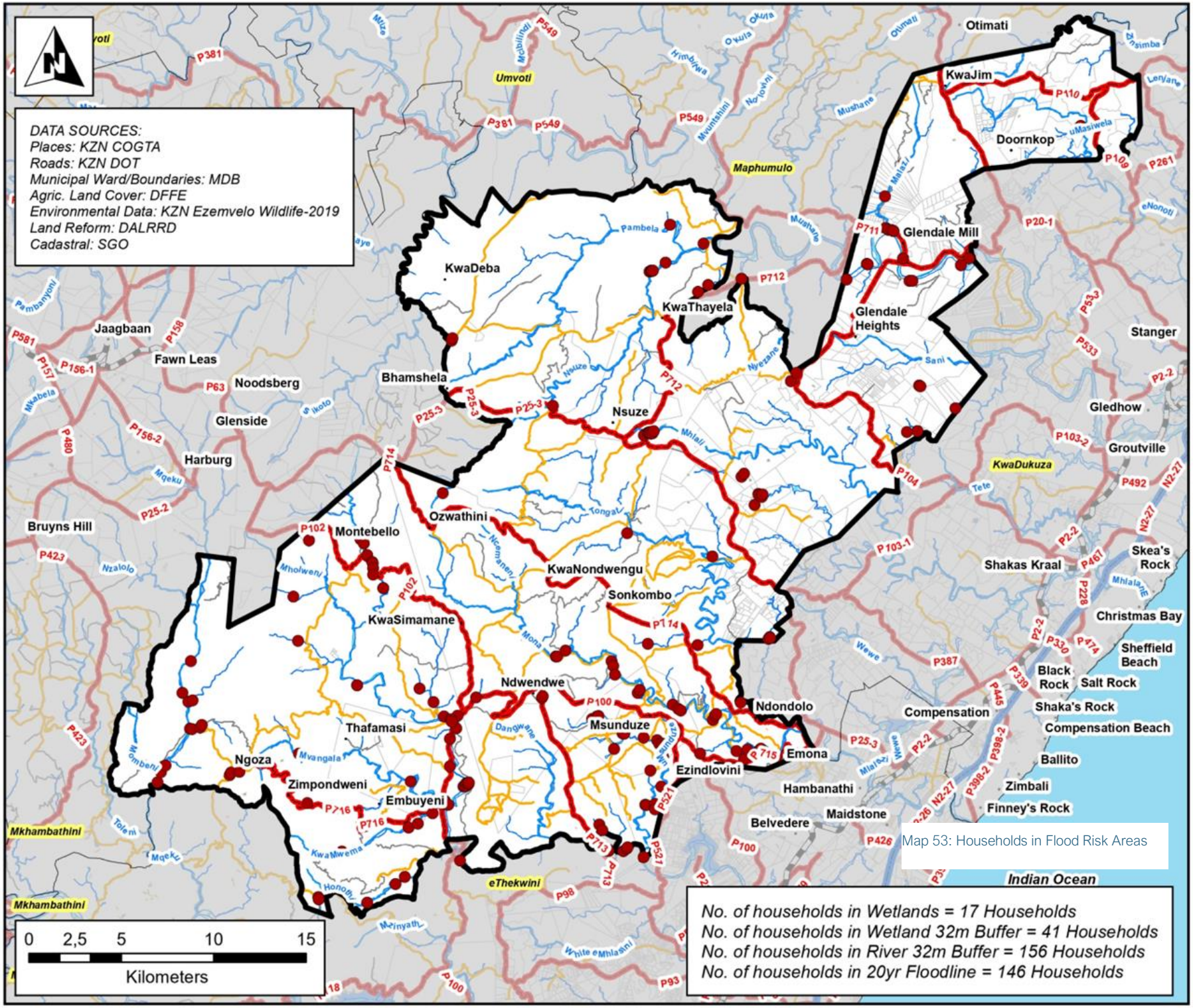
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NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Hydrological Characteristics

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

Map 52: Hydrological Characteristics



Map 53: Households in Flood Risk Areas

No. of households in Wetlands = 17 Households
No. of households in Wetland 32m Buffer = 41 Households
No. of households in River 32m Buffer = 156 Households
No. of households in 20yr Floodline = 146 Households

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

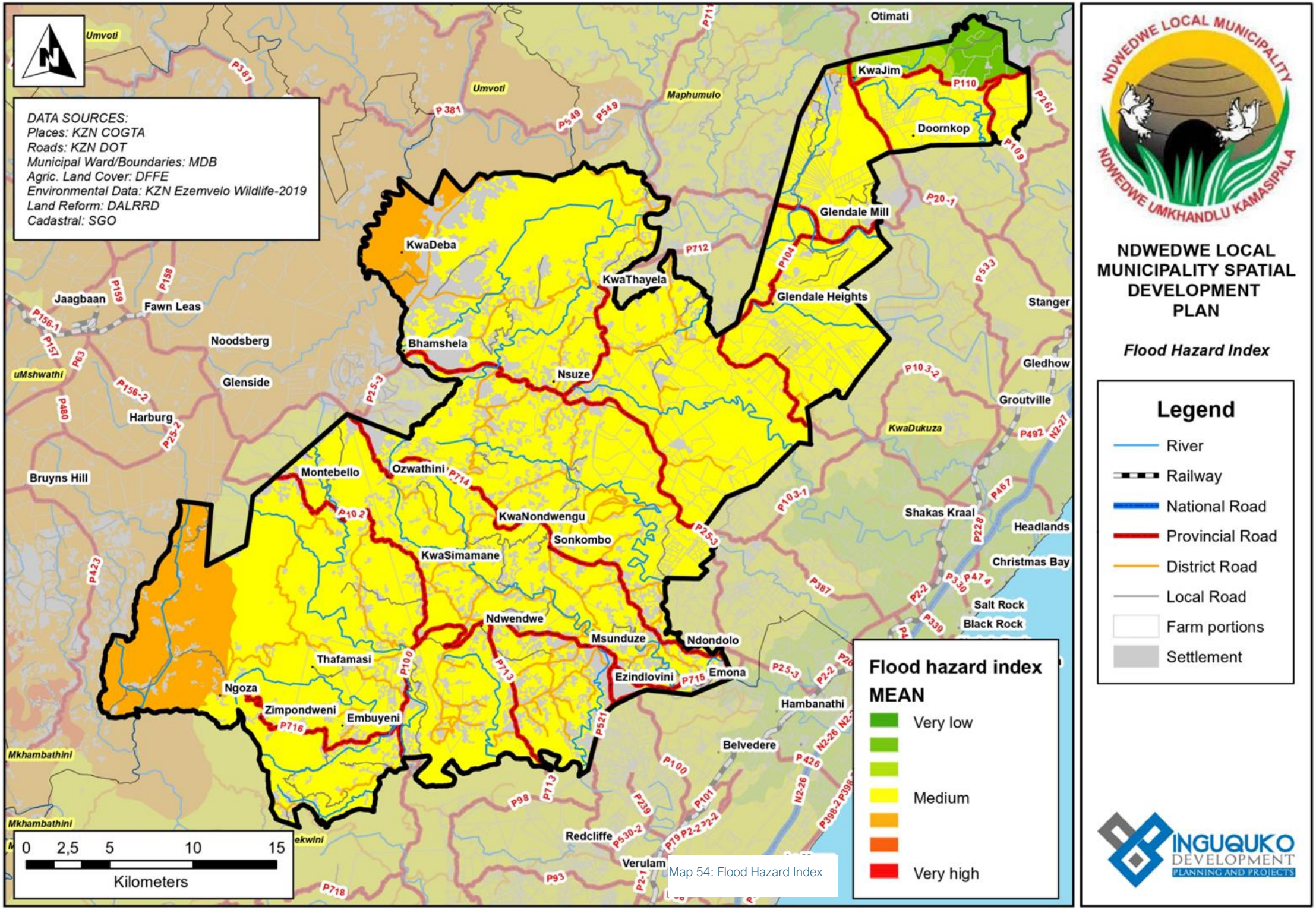
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Hydrological Characteristics (Households)

Legend

- Risk Households
- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- 20yr Floodline
- Wetland
- 32m Wetland Buffer
- 32m River Buffer
- Farm portions

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Map 54: Flood Hazard Index

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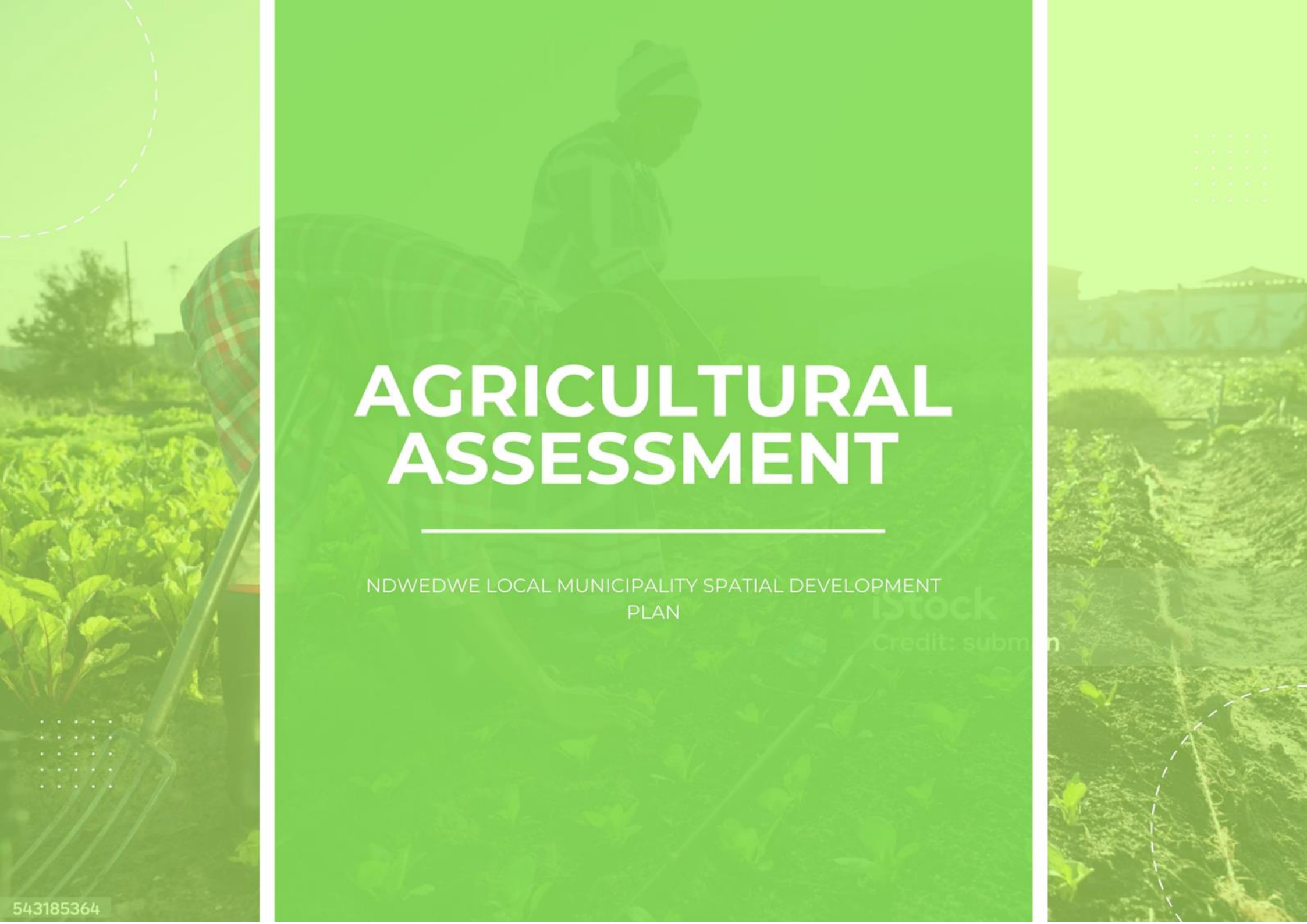
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Flood Hazard Index

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement

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AGRICULTURAL ASSESSMENT

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

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14. AGRICULTURAL ASSESSMENT

Following extensive research, it has come to our attention that a significant portion of the land within the jurisdiction of Ndwedwe Local Municipality is subject to the Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970), commonly known as "SALA." Given this situation, agriculture must remain a fundamental consideration in our resource management efforts. SALA, which has not been superseded by SPLUMA (Spatial Planning and Land Use Management Act), holds specific importance in shaping the development of the Housing Sector Plan.

Situated in the northern region of the KwaZulu-Natal province, Ndwedwe Local Municipality is renowned for its abundant agricultural potential and the production of high-value agricultural products, providing it with a competitive advantage both provincially and nationally. Agriculture encompasses a wide array of land uses and structures associated with farming activities, including crop cultivation, livestock farming, forestry, and horticulture. The municipality boasts a well-established primary agricultural sector, with a focus on industries such as forestry and sugarcane cultivation. Additionally, traces of subsistence farming can be identified, particularly in rural areas, though it currently lacks a cohesive approach and operates sporadically.

Ndwedwe Local Municipality is a compact rural municipality that has traditionally depended on the agricultural sector as the cornerstone of its economy. Agriculture takes precedence in the municipality, serving as the primary economic driver and main source of income. Consequently, Ndwedwe bears the responsibility of safeguarding and managing valuable agricultural land, and to fulfil this role, the municipality has devised an agricultural potential map.

The majority of agricultural land within the municipality falls within the categories of "Very High Potential, Arable" to "Moderate Potential Arable Land." Non-arable land is predominantly located on the outskirts of the municipality within traditional authority areas.

Preserving high-potential agricultural land offers several advantages, including:

- Ensuring opportunities for food production.
- Facilitating the growth of commercial agricultural endeavours that contribute to local economic development (LED), such as agri-industry, transportation services, and the provision of agricultural equipment.

Moreover, the protection of quality agricultural land should adhere to the following policy principles:

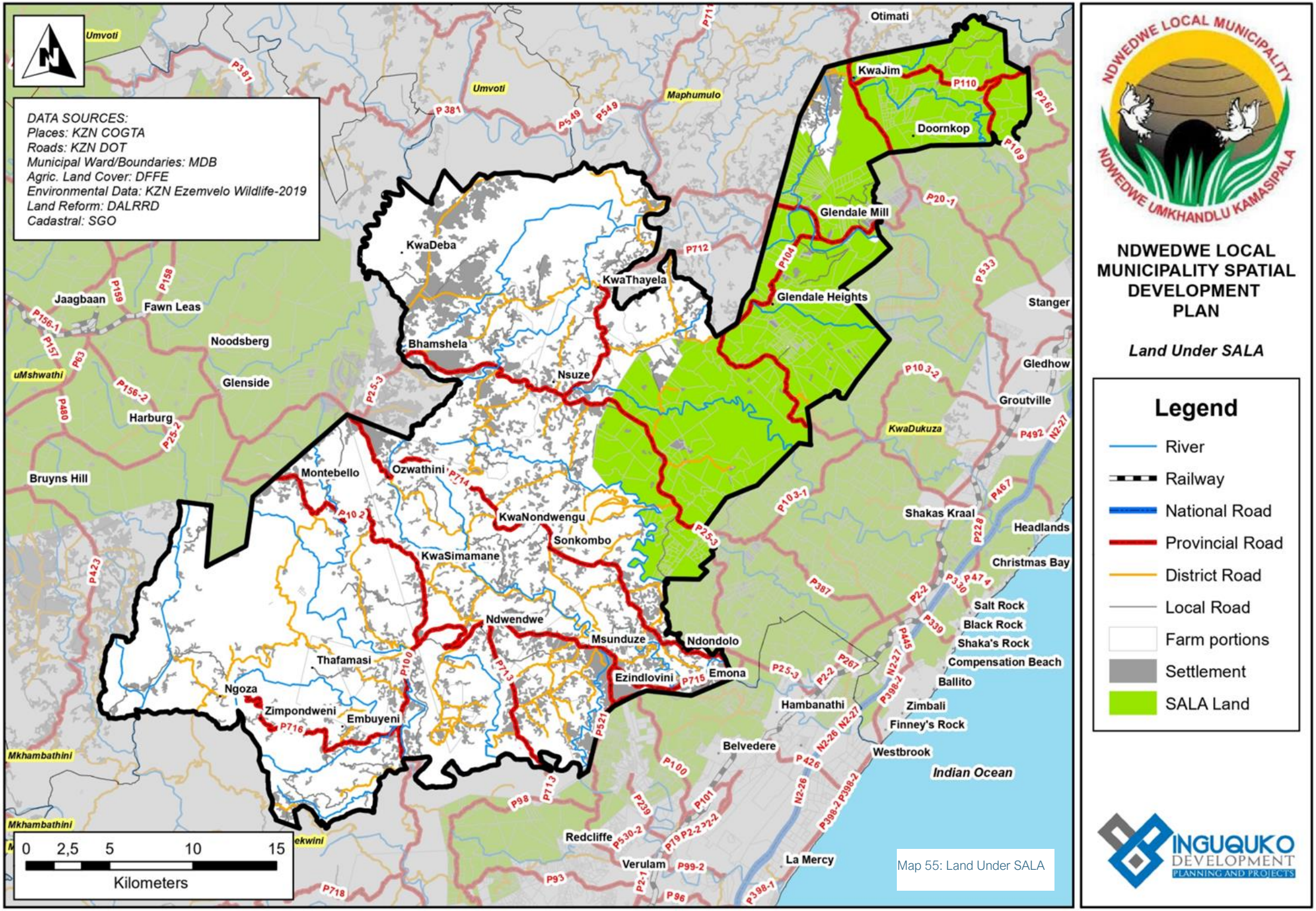
- Prime agricultural land is of exceptional significance and should not be developed unless there is a compelling need supported by public benefit, and no other suitable site is available for the intended purpose.
- During the formulation, revision, or amendment of planning schemes, the municipality must incorporate provisions for the preservation of prime agricultural land, regardless of market fluctuations that might affect its viability.

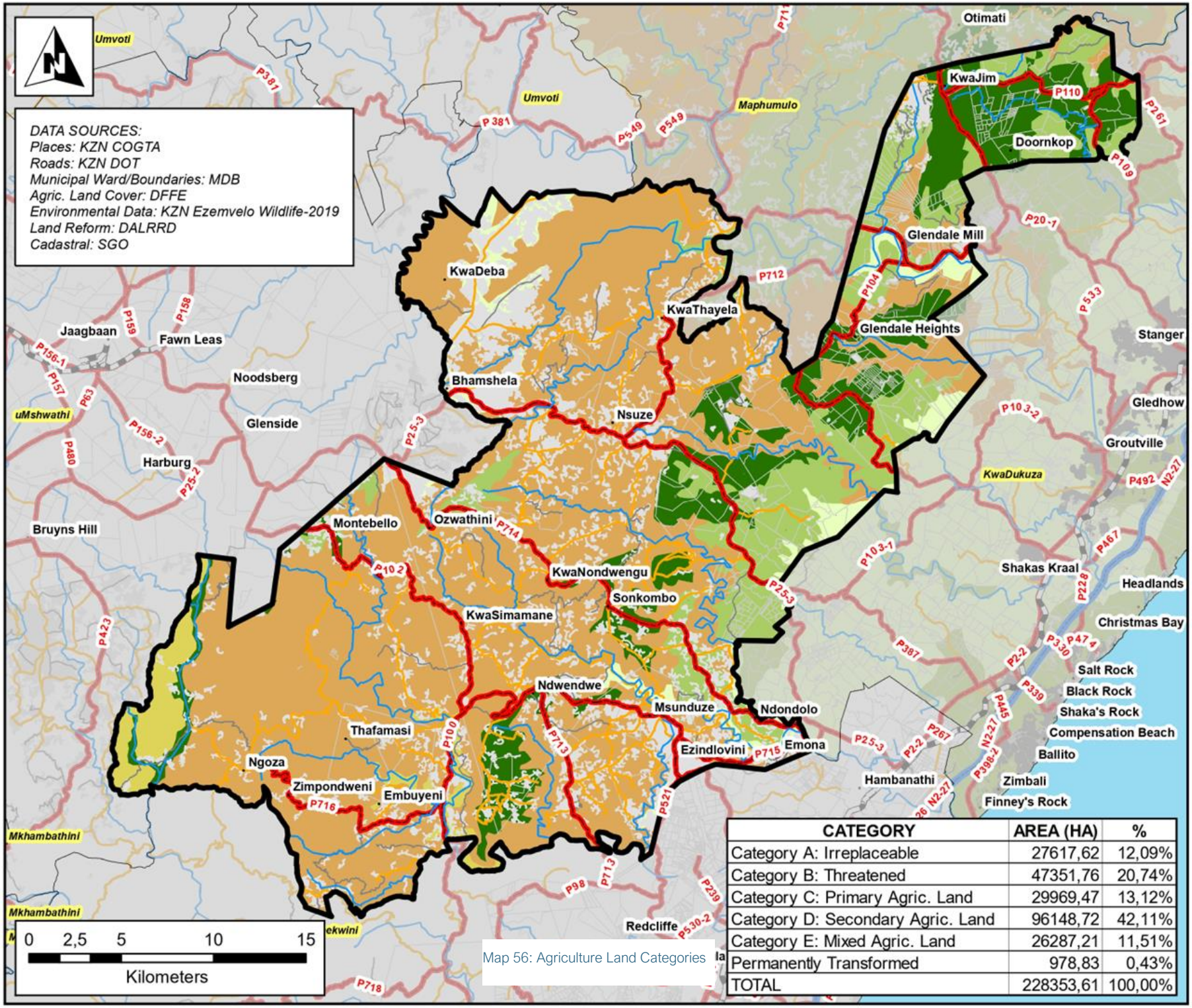
- The development of planning schemes should involve a comprehensive assessment of alternative development options, with a strong emphasis on strategies that minimize adverse effects on prime agricultural land.
- Instances where incompatible land uses are situated in close proximity to agricultural operations, potentially disrupting normal farming activities, should be minimized. In cases where such conflicts arise, measures to mitigate potential issues should be developed.








DATA SOURCES:
Places: KZN COGTA
Roads: KZN DOT
Municipal Ward/Boundaries: MDB
Agric. Land Cover: DFFE
Environmental Data: KZN Ezemvelo Wildlife-2019
Land Reform: DALRRD
Cadastral: SGO
NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN
Land Under SALA
Legend
River
Railway
National Road
Provincial Road
District Road
Local Road
Farm portions
Settlement
SALA Land
Otimati
KwaJim
Doornkop
Glendale Mill
Glendale Heights
KwaDeba
KwaThayela
Bhamshela
Nsuze
Stanger
Gledhow
Groutville
KwaDukuza
Jaagbaan
Fawn Leas
Noodsberg
Glenside
Harburg
uMshwathi
Bruyns Hill
Montebello
Ozwathini
KwaNondwengu
Sonkombo
KwaSimamane
Ndwendwe
Msunduze
Ndondolo
Emona
Ezindlovini
Thafamasi
Ngoza
Zimpondweni
Embuyeni
Shakas Kraal
Headlands
Christmas Bay
Salt Rock
Black Rock
Shaka's Rock
Compensation Beach
Ballito
Zimbali
Finney's Rock
Westbrook
Hambanathi
Belvedere
Indian Ocean
Redcliffe
Verulam
La Mercy
Mkhambathini
0 2,5 5 10 15
Kilometers
Map 55: Land Under SALA
INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS



CATEGORY	AREA (HA)	%
Category A: Irreplaceable	27617,62	12,09%
Category B: Threatened	47351,76	20,74%
Category C: Primary Agric. Land	29969,47	13,12%
Category D: Secondary Agric. Land	96148,72	42,11%
Category E: Mixed Agric. Land	26287,21	11,51%
Permanently Transformed	978,83	0,43%
TOTAL	228353,61	100,00%

Map 56: Agriculture Land Categories

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

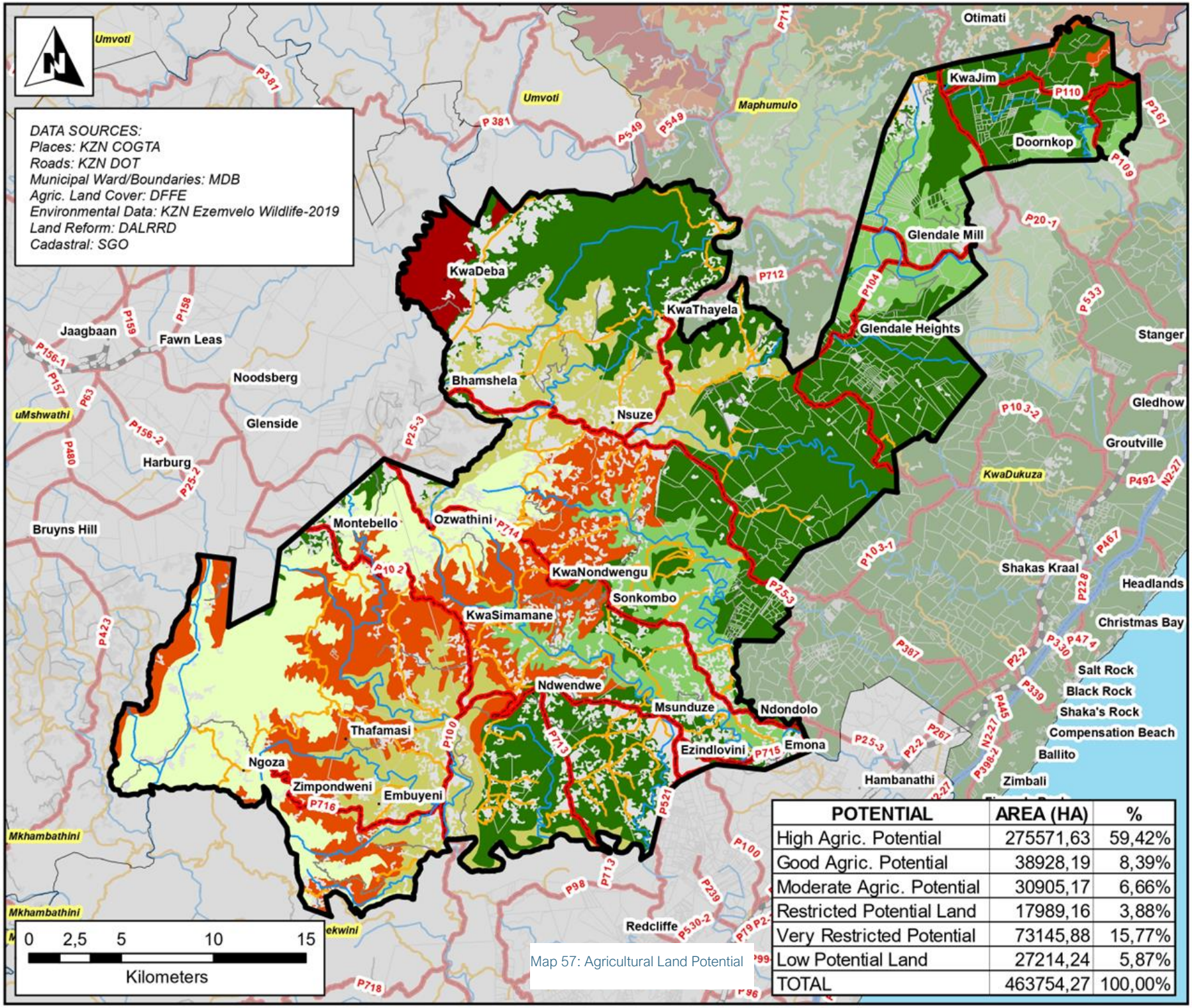
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Agricultural Land Categories

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- A: Irreplaceable
- B: Threatened
- C: Primary Agric. Land
- D: Secondary Agric. Land
- E: Mixed Agric. Land
- Permanently Transformed

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS



Map 57: Agricultural Land Potential

POTENTIAL	AREA (HA)	%
High Agric. Potential	275571,63	59,42%
Good Agric. Potential	38928,19	8,39%
Moderate Agric. Potential	30905,17	6,66%
Restricted Potential Land	17989,16	3,88%
Very Restricted Potential	73145,88	15,77%
Low Potential Land	27214,24	5,87%
TOTAL	463754,27	100,00%

NDWEDWE LOCAL MUNICIPALITY

NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Agricultural Land Potential

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- High Potential Land
- Good Potential Land
- Moderate Potential Land
- Restricted Potential Land
- Very Restricted Potential
- Low Potential Land

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS



ECONOMIC ASSESSMENT

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

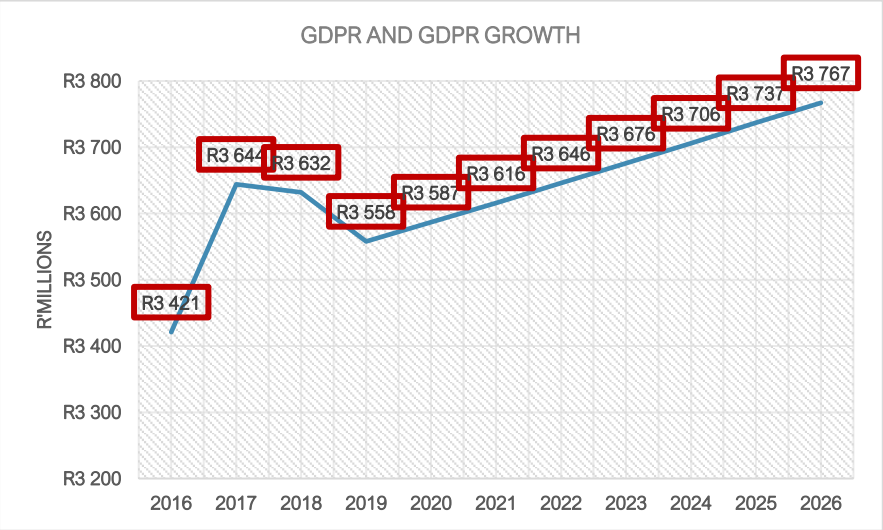


15. ECONOMIC ASSESSMENT

This section of the report will examine the economic performance of Ndwedwe Municipality, as the size and vitality of a municipal economy have a direct impact on the welfare of its residents, and the implications the current local economic climate has for the short to medium term (5-year horizon). Within this section, we will delve into various indicators such as municipal GDP growth, employment rates, the skill levels of the workforce, gross fixed capital formation as a percentage of GDP, and trade-related metrics.

15.1. GROSS DOMESTIC PRODUCTION REGION (GPDR)

The graph below depicts the scale of Ndwedwe local municipality's economy within the iLembe District, along with the projected economic growth from 2016 to 2026.



Graph 17: GDPR and GDPR Growth

Source: MSEP, 2021

In 2019, the Ndwedwe Municipality's economy produced approximately R 3.6 billion in GDP. Between 2012 and 2019, the economy experienced an average annual growth rate of 0.98%. This growth rate was slightly lower than that of the iLembe District, which stood at 1%. Projections suggest that the economy's value is expected to reach roughly R 3.8 billion by the year 2026.

Tabulated below is the sectoral GDPR for the Ndwedwe Municipality in 2019. Additionally, the table outlines the percentage share of each sector as well as the average GDPR growth between 2016 and 2019.

Table 10: Sector GDPR 2019

	R'Million 2019	% Share	Ave. GDPR Growth Rate 2016-2019
Agriculture, forestry and fishing	R986	28%	0,5%
Mining and quarrying	R7	0%	6,0%
Manufacturing	R528	15%	0,6%
Electricity, gas and water	R80	2%	0,5%
Construction	R297	8%	3,2%
Wholesale and retail trade, catering and accommodation	R248	7%	1,2%
Transport, storag and communication	R332	9%	1,9%
Finance, insurance, real estate and business services	R296	8%	1,2%
General government	R526	15%	1,5%

	R'Million 2019	% Share	Ave. GDPR Growth Rate 2016-2019
Community, social and personal services	R258	7%	3,4%

Source: MSEP, 2021

In light of the above, the following definitions must be noted:

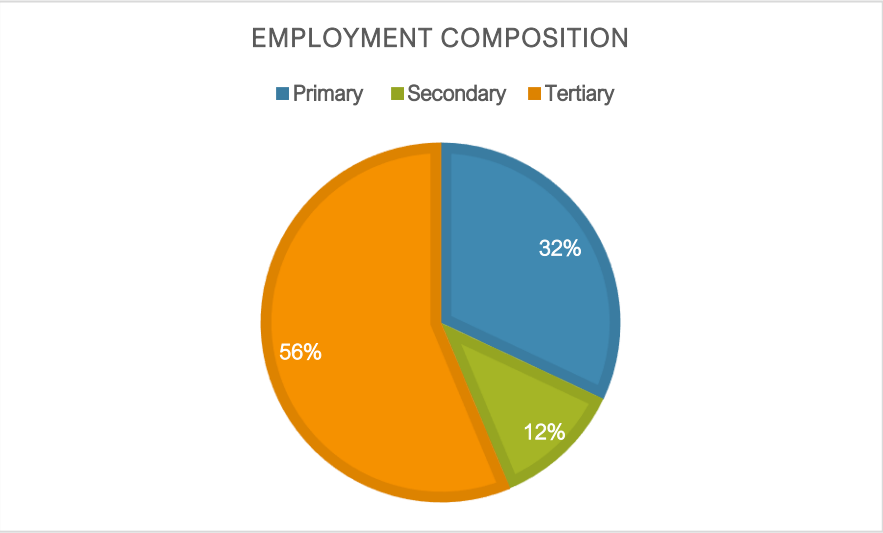
- **Agriculture, Forestry & Fishing:** This sector involves activities related to the cultivation of crops, raising of livestock, forestry (including timber production), and fishing.
- **Mining & Quarrying:** This sector encompasses the extraction of minerals, ores, and other natural resources from the Earth, including activities like mining and quarrying.
- **Manufacturing:** Manufacturing involves the production of goods through various industrial processes, typically transforming raw materials into finished products.
- **Electricity, Gas & Water:** This sector deals with the generation, distribution, and supply of electricity, gas, and water resources to households, businesses, and industries.
- **Construction:** The construction sector focuses on the building of infrastructure, residential, and commercial structures, as well as civil engineering projects.
- **Wholesale & Retail Trade, Catering & Accommodation:** This sector includes activities related to the sale of goods and services, both in wholesale and retail, as well as businesses involved in the food and accommodation industries.
- **Transport, Storage & Communication:** This sector encompasses transportation of goods and people, storage of goods, and communication services, including telecommunications and postal services.
- **Finance, Insurance, Real Estate & Business Services:** This sector involves financial institutions, insurance companies, real estate services, and various business support services like legal and accounting services.
- **General Government:** This sector represents government activities that are not directly linked to the provision of specific goods or services, including administrative and regulatory functions.
- **Community, Social & Personal Services:** This sector covers a wide range of activities, including education, healthcare, social services, cultural and recreational services, and personal services such as hairdressing and wellness.

Evident from the information presented in the table is that the primary economic sectors in Ndwedwe Municipality comprise Agriculture, Forestry & Fishing, Manufacturing, and the General Government sector. However, it's worth noting that the economy of Ndwedwe Municipality exhibited a weaker performance in 2019 when compared to the previous three years.

15.2. EMPLOYMENT

15.2.1. EMPLOYMENT COMPOSITION

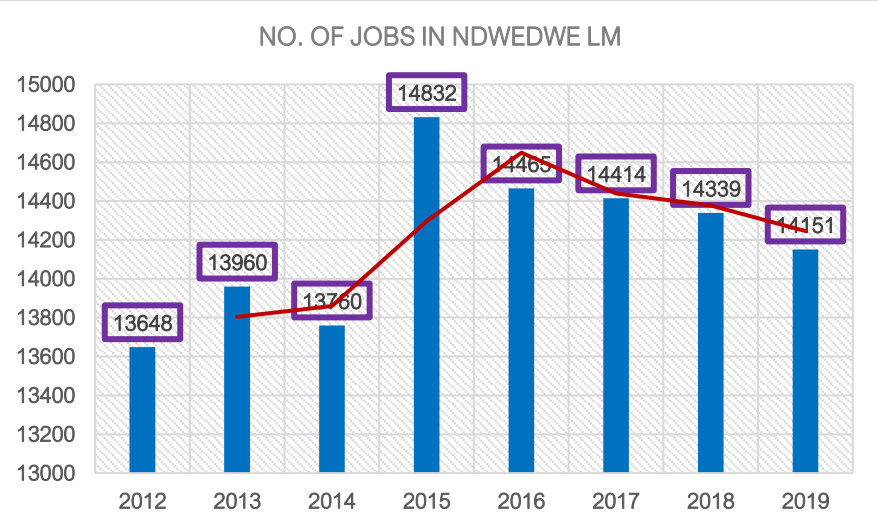
The graph below shows the composition of jobs in the Ndwedwe Municipality, according to primary, secondary and tertiary sector employment.



Graph 18: Employment Composition

Source: MSEP, 2021

In 2019, the distribution of employment in the Ndwedwe Municipality was as follows: 31.98% of the working population was engaged in the primary sector, 11.76% in the secondary sector, and the majority, 56.26%, were employed in the tertiary sector.



Graph 19: No. of Jobs in Ndwedwe LM

Source: MSEP, 2021

In 2019, the Ndwedwe Municipal area had a workforce of 14,151 people, which was 188 fewer than the preceding year. However, over the span of 2016 to 2019, Ndwedwe experienced a net loss of 314 jobs.

15.2.2. UNEMPLOYMENT PROFILE

Tabulated below is data on the unemployment rate, labour force participation rate, and labour absorption rate in the Ndwedwe Municipality in 2019, and it offers a comparison to the corresponding figures for South Africa. As per Statistics SA's narrow definition, the unemployment rate signifies the percentage of the labour force that is without employment. The labour force participation rate represents the portion of the working-age population (aged 15 to 64) that is engaged

in economic activities, while the labour absorption rate signifies the proportion of working-age individuals who are gainfully employed.

Table 11: Unemployment Profile

UNEMPLOYMENT RATE	LABOUT FORCE PARTICIPATION RATE	LABOUR ABSPORPTION RATE
48,6%	31,58%	16,17%

Source: MSEP, 2021

The unemployment rate in the Ndwedwe Municipality stands at 48.6%, surpassing that of the district. Additionally, 31.58% of individuals in the working-age bracket are participating in economic activities, and 16.17% of working-age individuals are currently employed.

15.2.3. SECTORAL EMPLOYMENT

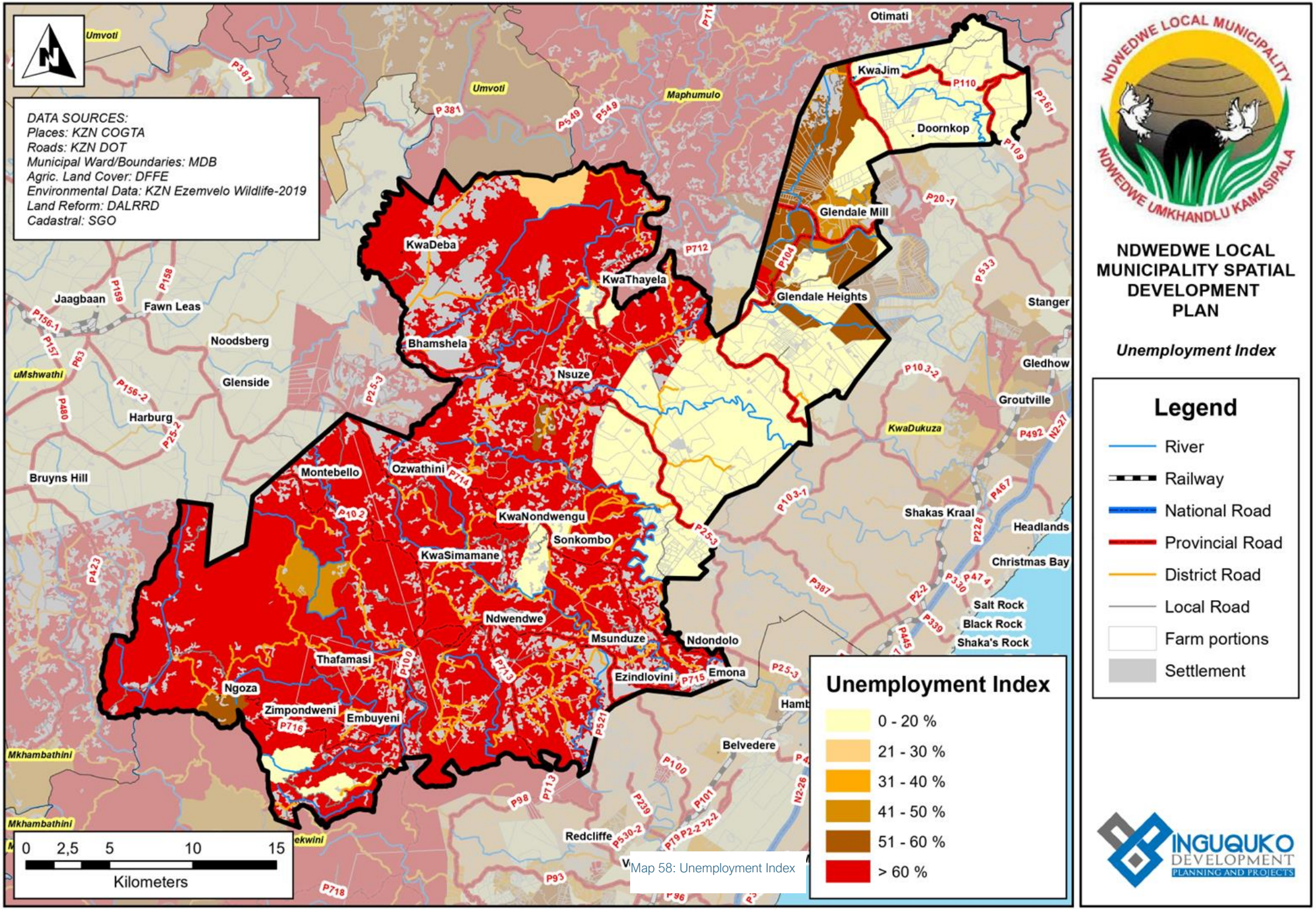
Tabulated below is the employment per sector in 2019, together with the changes in employment in each sector.

Table 12: Sectoral Employment

	NO. OF JOBS 2018	% SHARE	AVE. EMPLOYMENT GROWTH 2016-2019	EMPLOYMENT GROWTH 2019
Agriculture, forestry and fishing	4522	32,0%	-272	-1
Mining and quarrying	4	0,0%	0	0
Manufacturing	820	5,8%	28	-17
Electricity, gas and water	48	0,3%	1	1
Construction	796	5,6%	-20	-70
Wholesale and retail trade, catering and accommodation	1806	12,8%	6	-11
Transport, storage and communication	512	3,6%	-1	5
Finance, insurance, real estate and business services	1612	11,4%	11	-54
General government	2087	14,7%	-13	28
Community, social and personal services	1944	13,7%	-54	-69
TOTAL	14151	100%	-314	-188

Source: MSEP, 2021

The primary sources of employment in the Ndwedwe Municipality are the Agriculture, Forestry & Fishing sector, General Government, and Community, Social & Personal Services sector. In 2019, there was an estimated decline of 188 jobs in the Ndwedwe municipal area.



Map 58: Unemployment Index

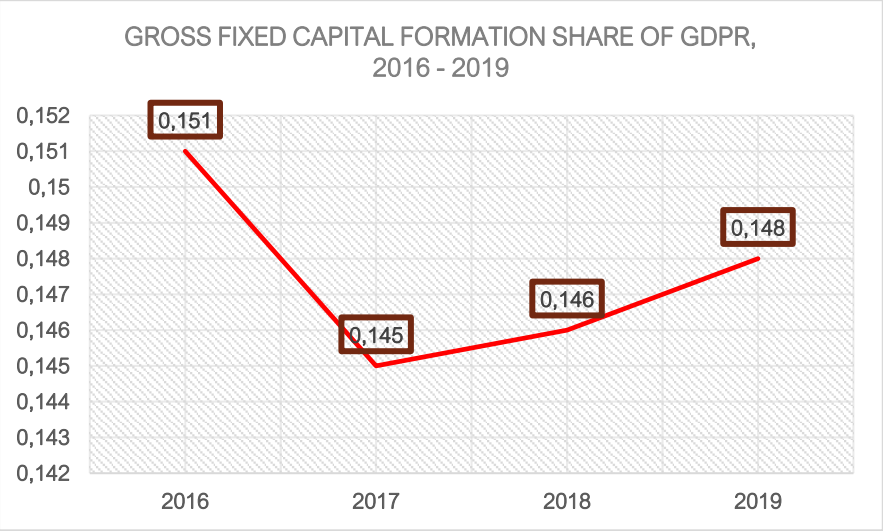
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Unemployment Index

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

15.3. INVESTMENT

Gross Fixed Capital Formation (GFCF) serves as an indicator of investment within an economy. It encompasses the acquisition of various assets, encompassing activities such as construction, machinery and equipment procurement, and investments in information and communication technology.



Graph 20: Gross Fixed Capital Formation (2016-2019)

Source: MSEP, 2021

From 2016 to 2019, there was a decline in the GFCF's portion of the GDP, decreasing from 15.1% to 14.8% within the Ndwedwe Municipality.

15.4. SUMMARY OF KEY ECONOMIC FINDINGS

Between 2016 and 2019, the Ndwedwe Municipality achieved an average annual growth rate of 0.98% and produced a cumulative GDP of R 3.6 billion. The municipality provided employment to 14,151 individuals, with the Agriculture, Forestry & Fishing sector serving as the largest employer. Furthermore, this sector demonstrated the highest comparative advantage. In the realm of trade, the Ndwedwe municipality experienced a negative trade balance throughout the 2016-2019 period.

16. DEVELOPMENT NODES

An activity node is a highly accessible location where both public and private investments tend to concentrate. Ndwedwe serves as such a hub, offering the opportunity to host a variety of activities, ranging from small to large enterprises, often associated with mixed-use development. These nodes are typically situated along development corridors or at their intersections. Activity nodes possess the potential to become crucial components of sub-regional structuring, acting as focal points within the spatial framework where access to a diverse range of opportunities is maximized. They foster networks of associations, promote diversity, and cater to a wide array of daily needs. These nodes play a pivotal role in terms of economic, social, and infrastructure investments, as well as maintaining established settlement patterns and accessibility. Therefore, they should be considered primary elements in anchoring the sub-regional spatial system.

The spatial framework is built around a connected system of nodes, networks, and surfaces. The essence of development in this system revolves around the movement of people, goods, and services, which creates the fundamental driving force behind functional connections among otherwise independent and unrelated elements. The movement of people, goods, and services is channelled along specific routes, forming a network of interactions. The intersection of these networks creates opportunities for people, goods, and services to interact, resulting in the formation of activity nodes. The degree of interaction leads to the development of a hierarchy of nodes of varying sizes, depending on the level of activity within each node. This one-dimensional system of networks and nodes is unified by surfaces that fill the spaces between the nodes and networks.

The initial structural element focuses on establishing and enhancing a diverse system of activity nodes. This strategy aims to enhance access to city-wide opportunities while ensuring equitable access to local opportunities. The goal is to enable all residents within the area to live within easy walking distance of a public transport hub that connects to the city's public transportation systems. Depending on their position in the hierarchy, these nodes will serve as access points to a range of local and, in some cases, regional opportunities. By concentrating development efforts at these nodes, the "emerging core" of Ndwedwe will gradually mirror the opportunities found in more developed areas.

16.1. CLASSIFICATION OF DEVELOPMENT NODES

Table 13: Nodal Classification

CLASSIFICATION	ECONOMC DEVELOPMENT	SERVICE DELIVERY	ADMINSTRATIVE CENTRE
Primary Node	Central economic hub catering to the entire municipal region.	➢ Sub-regional Commercial Center ➢ Primary and Secondary Schools/Daycares ➢ Community Hospital/Clinic ➢ Police Precinct ➢ Public Library ➢ Social Services Office/Pension Distribution Point ➢ Versatile Community Center/Satellite ➢ Customer Service Hub ➢ Municipal Hall ➢ Sports Complex	➢ Central hub for local municipal offices. ➢ Site of dispersed government offices.
Secondary Node	Site of economic operations benefiting the neighbouring communities.	➢ Primary and secondary schools/daycares ➢ Satellite police outpost ➢ Satellite pension distribution point ➢ Satellite customer service center ➢ Community hall ➢ Sports facilities ➢ Local commercial and industrial hub	Ward Councillor's Satellite Offices
Tertiary Node Rural Service Centres	Site of economic endeavours benefiting the nearby urban and rural communities.	➢ Primary and secondary schools/daycares ➢ Satellite clinic ➢ Community safety center ➢ Satellite pension distribution points ➢ Satellite government departments such as Home Affairs, SASSA, etc. ➢ Traditional court	

CLASSIFICATION	ECONOMC DEVELOPMENT	SERVICE DELIVERY	ADMINSTRATIVE CENTRE
		➢ Local commercial center ➢ Community center ➢ Sports complex	

16.1.1. PRIMARY NODES: NDWEDWE

The Ndwedwe Integrated Development Plan (IDP) has pinpointed several nodes (primary, secondary, tertiary, and quaternary) to serve as focal points for delivering services and social amenities. Among these nodes, Ndwedwe Village/Town has been designated as the primary development hub, situated in ward 13. This area functions both as an administrative and commercial center, offering access to various social amenities. It attracts residents from surrounding settlements who visit the Village to avail themselves of diverse services and facilities. Some of the land uses within this area include, but are not limited to:

- The Police Station
- Schools and more
- Further Education and Training College
- Local Municipal Offices

The following social facilities have been PLANNED for this node:

- Petrol and Bio-diesel station
- Fresh market produce
- Shopping center
- Light industrial hives
- Housing provision including water and electricity connections.
- Community halls
- Post office
- Community library
- Sports field
- Youth development centre.
- Cemeteries
- Clinic x 3
- Fire Station x 1
- Emergency Service Facility x 2
- Orphanage
- Old Age Home
- Pension Pay Point
- Post Office
- Sports Complex
- Sport Field
- Bus Service
- Taxi Rank.

In addition to the previously mentioned points, the SDF review has recognized the following crucial initiatives for Ndwedwe Village:

- Advancement of commercial ventures.
- Promotion of industrial growth centred around the agricultural sector.
- Establishment as a decentralized hub for provincial and local government services.
- Provision of top-tier social and commercial amenities.
- Implementation of housing projects (rental and middle-income housing).
- Fostering the development of sewing and clothing industries (Ndwedwe LED 2006 Initiative).
- Establishment of a Small and Medium-sized Enterprises (SMME) Skills Training Facility.
- Construction of strategic road connections between Ndwedwe and Maphumulo, among others.

In Ndwedwe Village/Town, essential infrastructure such as electricity and telecommunications are readily accessible. The primary road, P100, which traverses the town, is paved and in excellent condition. However, the local roads facilitating movement within and around Ndwedwe are currently unpaved and require attention to upgrade them to town-standard roads. The lower-order roads within Ndwedwe Village specifically need more focused improvements.

Sanitation services in Ndwedwe town are provided through a combination of facilities, including Ventilated Improved Pit latrines (VIPs) and the Septic Tank/Water Borne Sewerage System. Ensuring that all formal areas within the town have access to adequate sanitation facilities is of utmost importance to mitigate potential environmental consequences.

16.1.2. SECONDARY NODES

BHAMSHELA: As outlined in the Ndwedwe Integrated Development Plan, Bhamshela has been designated as a 'Secondary Node.' Situated at the entrance and exit point of Ndwedwe LM, it forms part of the north-western border. Bhamshela town offers a diverse range of land uses, predominantly featuring typical central business district (CBD) functions such as shops, supermarkets, wholesale stores, hardware shops, and specialized services. The western section, which falls under uMshwathi, is mainly characterized by a taxi rank, social amenities, and commercial buildings with limited facilities. On the eastern side, within the Ndwedwe area, you will primarily find transit and light industrial activities, along with a small number of single-family homes, creating a small residential area.

From an infrastructural standpoint and regarding accessibility, Bhamshela primarily relies on R614, a well-maintained tarred road, for ingress and egress. Additionally, D1524, another substantial tarred road, serves as a major route to Bhamshela and is also in good condition. Apart from these two roads, the remaining road network can be categorized as lower-order roads. These roads are intended to provide direct access to residential and other land uses but are composed of gravel, lacking uniformity, and necessitating ongoing maintenance.

According to the iLembe Rural Nodes Development Framework Plan, the Bhamshela area faces challenges related to water supply. The report suggests the construction of a reservoir to complement current water supply initiatives in the region. Sanitation services in Bhamshela encompass Ventilated Improved Pitlatrines (VIPs) and septic tanks. Ensuring that all formal areas within the town have access to proper sanitation facilities is crucial to mitigate potential environmental repercussions.

The iLembe Rural Nodes Development Framework Plan recommends the establishment of an efficient sanitation disposal system in Bhamshela, aligning with its status as a Secondary Node. Regarding electricity, the plan indicates that current resources suffice for lighting purposes. However, there is a need to enhance the existing electricity supply to accommodate various proposed development initiatives.

In terms of housing, Bhamshela encompasses both formal and informal housing structures, reflecting disparities in local residents' income levels.

The SDF has identified the planning of the following facilities in the node:

- Bhamshela Library
- Electrical Substation
- Establishment of a fresh produce market
- Formalisation of a Taxi Rank
- Development of a Youth Development Centre
- Cemetery
- Library
- Clinic x 3
- Emergency Service Facility x 2
- Mobile Police Station
- Pension Pay Point x 2
- Post Office x 2
- Post Boxes x 2
- Sport Complex x 1
- Sport Field x 2
- Bus Service

MONTBELLO: The Montobello Secondary Node is situated in the western region of the Ndwedwe Local Municipality. Access to this area is primarily via P102, which is presently a gravel road. However, there is an ongoing upgrade project for P102, extending from the intersection of R614 up to Montobello Hospital, the location of the secondary node. Within Montobello Secondary Node, there is a variety of land uses, including but not limited to:

- A hospital.
- Places of worship (church).
- Informal businesses.
- An informal taxi ranks.
- Residential areas (comprising both formal and informal housing), and more.

From an infrastructural standpoint, there is a lack of a well-defined and organized road hierarchy in the area. As mentioned earlier, access to Montobello primarily relies on P102, which serves as the dominant main road in the vicinity. The lower-order roads are not clearly delineated, and some of the existing structures and houses lack proper access roads.

As for water access, given the presence of a hospital in the area, there is a water supply system; however, it has been reported as unreliable, with water shortages occurring sporadically. The community comprises both formal and informal structures.

Regarding sanitation, a majority of local households utilize Ventilated Improved Pit latrines. It's worth noting that the hospital's sanitation system is reportedly based on a Sceptic Tank; however, there is some uncertainty regarding its operational status. Further investigation is needed to confirm the functionality of the Sceptic Tank system at the hospital.

QINISANI: Qinisani is one of the Secondary Nodes identified in the Ndwedwe Local Municipality's Integrated Development Plan (IDP). It is situated along the R614, connecting Ndwedwe LM to Tongaat in the east and Warburg in the west. Within the Qinisani vicinity, various land uses can be observed, including but not limited to:

- Educational institutions (schools)
- Retail stores (shops)

- Places of social gathering (tavern)
- Healthcare facilities (clinic)
- Areas designated for block making, and more.

From an infrastructural standpoint, there are two primary roads worth mentioning: P712, which is currently undergoing upgrades, and the R614. The lower-level roads in the area lack clear definition, and there are instances where certain structures and residences lack proper access roads.

As for water access, community members mentioned obtaining water from a communal standpipe, and in cases where it's unavailable, they rely on water tanks and nearby rivers. It's worth noting that the community relies on unreliable water sources in this region. The community comprises both formal and informal structures.

The following social facilities have been planned for the node:

- Fresh market produce
- Sport field
- Goat breeding centre
- Supermarket
- Youth Development Centre
- Installation of water connections
- Installation of electricity connections
- Cemetery
- Clinic x 3
- Mobile Police Station x1
- Community hall x1
- Pension Pay Point x 2
- Post Office x 2
- Post Boxes x 1
- Sport Field x 2
- Bus Service
- Taxi Service.

GLENDALE: In this Spatial Development Framework (SDF), Glendale is designated as a Secondary Node, situated on the eastern side of Ndwedwe LM. Some of the land uses observed within the vicinity of the Glendale Secondary Node encompass:

- A Clinic (though it operates sporadically).
- A Church.
- A Primary School.
- Several tuck-shops.
- A distillery operation involved in alcohol manufacturing, among others.

From an infrastructural standpoint, the prominent route of significance is P104, which connects Glendale with the neighbouring areas. Within the Berea Township, there are internal roads facilitating access to individual sites. For the most part, the access roads within Berea Township are in good condition, being paved. However, certain segments of these roads have experienced erosion, making driving conditions challenging. Residential areas situated in various parts around Glendale are accessed via a network of gravel roads.

Concerning water accessibility, the Berea Township provides communal taps strategically located for residents. The area where alcohol manufacturing occurs (Distillery Operation) draws water from a nearby river and operates its own water purification facility.

Regarding sanitation, the Berea Township employs Ventilated Improved Pit latrines (VIPs), while the Distillery Operation utilizes a septic tank. The infrastructure of most service providers in Glendale appears to be functioning without significant issues.

The following facilities and infrastructure are planned for the node:

- Installation of Street Lights
- Library
- Cemetery
- Clinic Upgrade
- Emergency Services Facility
- Post Office x 2
- Sport Field
- Petrol Filling Station.

THAFAMASI: Within the Integrated Development Plan of Ndwedwe LM, Tafamasi has been recognized as an area with growth potential, resulting in its elevation to Secondary Node status. Positioned in the southwestern region of Ndwedwe LM, it is accessible via D1510. The surrounding area encompasses various land uses, including but not limited to:

- A clinic.
- Educational institutions (schools).
- Places of worship (church).
- An agricultural input shop, among others.

From an infrastructural standpoint, there is no clearly established road hierarchy in the Tafamasi area, which is expected given its predominantly rural nature. D1512 and D1510 stand out as the major roads providing access to Tafamasi. Local access roads lack proper definition and do not provide direct access to each household. All roads in the vicinity of Tafamasi are gravel, making them vulnerable to adverse weather conditions.

Concerning water access, available information indicates that the local clinic relies on a borehole for its water supply, while the community heavily depends on alternative water sources.

Regarding sanitation, the clinic reportedly uses a septic tank, while the rest of the community utilizes Ventilated Improved Pit latrines. In terms of telecommunication, during the site visit, some community members indicated no network issues, leading to the assumption that all major network service providers, such as Cell C, MTN, and Vodacom, are well-represented, ensuring network availability for all cell phones.

The following social facilities are planned for the node:

- Cemetery
- Clinic x 3
- Emergency Services Facility
- Mobile Police Station x1
- Community hall
- Pension Pay Point x 1
- Post Office x 2
- Post Boxes x 2
- Sport Field x 2
- Bus Service

- Taxi Service

SONKOMBO: The Integrated Development Plan of Ndwedwe LM has recognized Sonkombo as an area displaying promising potential for future growth. Consequently, it has been designated as a Secondary Node. Sonkombo Secondary Node is situated along P714, positioned near the central part of the municipal area. In the vicinity of this area, various land uses can be observed, including but not limited to:

- A childcare facility (crèche).
- A community hall.
- Informal sports field
- A Thusong Centre, among others.

From an infrastructural standpoint, the Sonkombo area serves as a convergence point for several important roads. These include P714 (currently undergoing upgrades), D1519, D865, and D1522. All of these roads are gravel, which makes them susceptible to adverse weather conditions. They connect Sonkombo with nearby settlements. Similar to many rural areas, the local access roads within the Sonkombo area lack proper organization, and some existing residences lack direct road access. Additionally, there is a relatively recent construction of an electricity substation. Regarding telecommunications, it appears that all major network service providers have a strong presence in the area.

Regarding water access, available information indicates that the local community relies on natural streams and a water tank for their water supply. Regarding sanitation, the community utilizes ventilated improved pit latrines.

The following facilities are planned for the area:

- Cemetery
- Clinic
- Emergency Services Facility
- Mobile Police Station
- Supermarket.
- Post Office
- Post Boxes
- Sport Field

17. DEVELOPMENT CORRIDORS AND MOVEMENT ROUTES

17.1. PRIMARY DEVELOPMENT CORRIDORS

The development corridor system is structured based on the function and activities within each corridor's sphere of influence. Within the Ndwedwe SDF, the following corridors have been identified as primary ones:

- R614: This road serves as a vital linkage to Tongaat, Verulam, and Durban in the east and Wartburg and Pietermaritzburg in the west. The primary corridor encompasses the central to western section of R614.
- P100: It directly connects the municipality area with Verulam in the southeast and serves as one of the key routes to the eThekwini Municipality.
- P102: Branching off from P100, this road connects the primary node of Ndwedwe Village with the secondary node of Montebello and the quaternary node of Simamane.
- P714: Running parallel to P102, this road links the densely populated Ndondolo settlement with Sonkombo (a secondary node) and the densely populated Bhamshela area (also a secondary node) to the west.
- P712: This road extends from Qinisani toward Maphumulo and Stanger in the northeastern part of the municipality area.
- The road from Qinisani to KwaNyuswa Clinic (D863), continuing through the Simamane area and connecting with P102 to Montebello.
- P715: Branching off from P714, it connects with P100 and runs through Msunduze, Ndwedwe Village, and onwards towards Nanda in the southern part of the municipality.
- 8. D863 and D867: These roads run from Qinisani through KwaNondwengu, linking with P102 in the KwaSimamane area, enhancing internal connections between nodes.

17.2. SECONDARY DEVELOPMENT CORRIDORS

Several routes with significant potential to contribute to the growth and development of Ndwedwe LM have been identified and designated as Secondary Development Corridors (SDCs). These routes include, among others:

- P716: Branching off from P100 and passing through the Zimpondweni area.
- D869 and D870: These roads traverse the Ngoza quaternary node, connecting with P716 in the southwestern part of the municipal area.
- P713: Extending from Ndwedwe Village towards the Ogunjini area.
- D1510: This road branches from P100 and travels through Tafamasi to Wosiyane Clinic, with D1604 branching from D1510 to link with P102, connecting to the Montebello secondary node.
- D1524: Running from Bhamshela through Deda towards the eChibini area.

- D889: Emerging from P712 and linking with D1523 in the direction of the Bhamshela area.
- D2395: Branching from P712 and connecting with D890 and D1631 in the Phambela area.

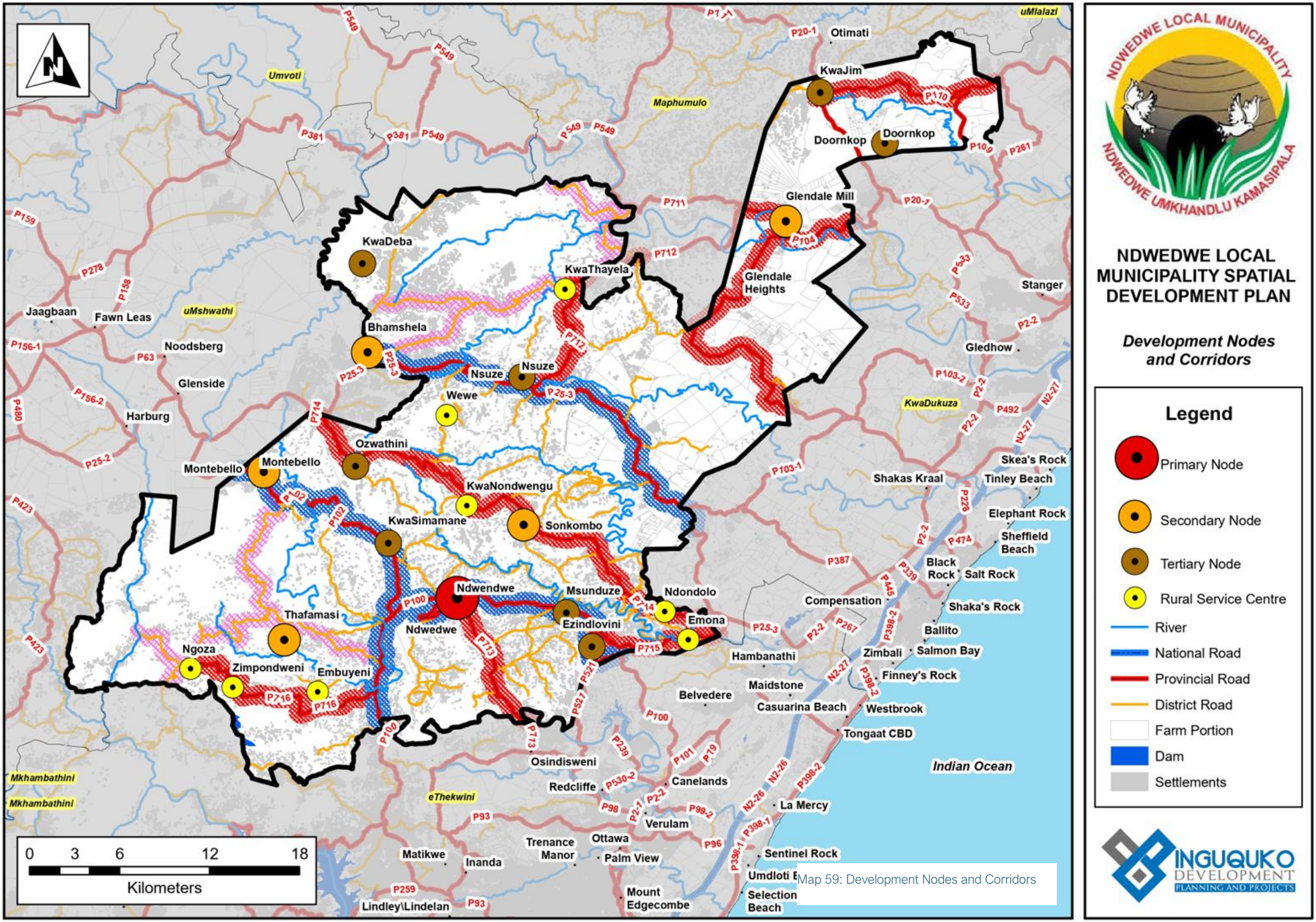
17.3. TERTIARY DEVELOPMENT CORRIDORS

Tertiary corridors primarily serve as local connectors, aiming to link communities and services with primary and secondary routes. Several tertiary routes have been identified within Ndwedwe LM.

17.4. COMMERCIAL AGRICULTURAL DEVELOPMENT CORRIDORS

Commercial Agricultural Development Corridors (CADCs) are areas characterized by intensive commercial agricultural production, with limited encouragement for other non-agricultural development activities. In the context of Ndwedwe LM, the following Commercial Agricultural Development Corridors have been identified:

- R614: This corridor is divided into two sections. The first part, originating from the eastern side of the municipality, is designated as the Commercial Agricultural Development Corridor, while the remainder functions as a standard secondary development corridor.
- P104: It traverses Glendale and encompasses several significant commercial farms.
- D394: Another route notable for significant commercial agricultural production.
- Additional roads with agricultural importance situated in the northeastern portion of the municipality include P711, P20-1, P109, and P110.
- R74: This road cuts through the northeastern sector of the municipality, connecting the municipality to the town of Stanger in the east and Maphumulo LM in the west.



Map 59: Development Nodes and Corridors

17.5. LAND LEGAL ASSESSMENT

17.5.1. LANDOWNERSHIP

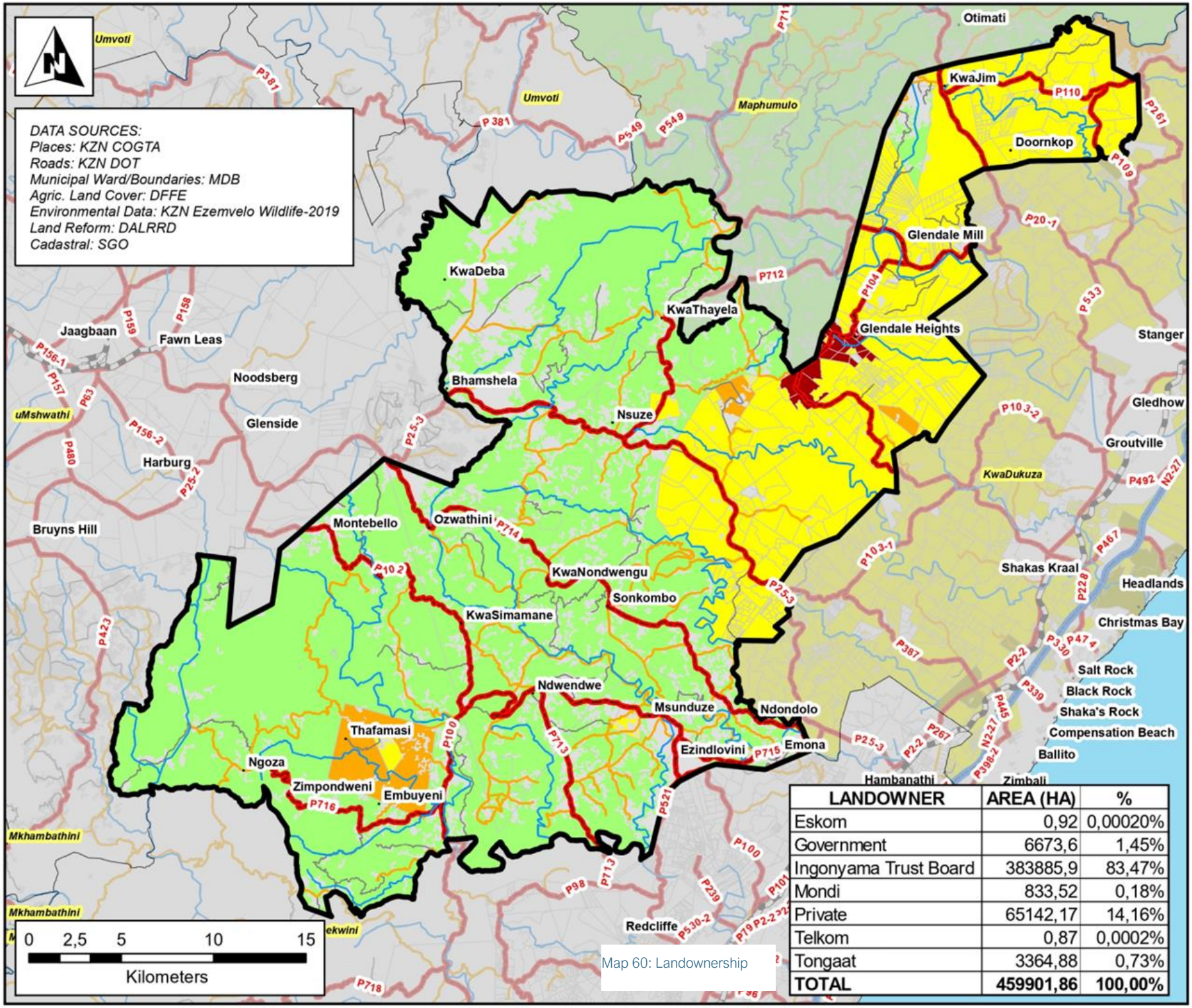
The majority of land in the local municipality is owned by the Ingonyama Trust Board (herein referred to as “ITB”). This favourable for the municipality in it provides ease of land acquisition for the purposes of human settlement and other economic development projects. One of the major issues, however, is that the majority of land under the ITB is not serviced with bulk infrastructure which makes for a high input cost when doing projects.

17.5.2. LAND USE MANAGEMENT

The municipality is currently in its final stages of developing and adopting a land use scheme in terms of the requirements of the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013). The land use scheme will be wall-to-wall in that it will cover the entire extent of the municipality including areas that were previously not under the scheme.

17.5.3. LAND REFORM

The municipality is subject to Gazetted Land Restitution and Transferred Redistribution projects. Part of the requirements for planning approval is for a Land Claims Clearance Letter issued by the Department of Agriculture, Land Reform and Rural Development (DALRRD).



LANDOWNER	AREA (HA)	%
Eskom	0,92	0,00020%
Government	6673,6	1,45%
Ingonyama Trust Board	383885,9	83,47%
Mondi	833,52	0,18%
Private	65142,17	14,16%
Telkom	0,87	0,0002%
Tongaat	3364,88	0,73%
TOTAL	**459901,86**	**100,00%**

Map 60: Landownership

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

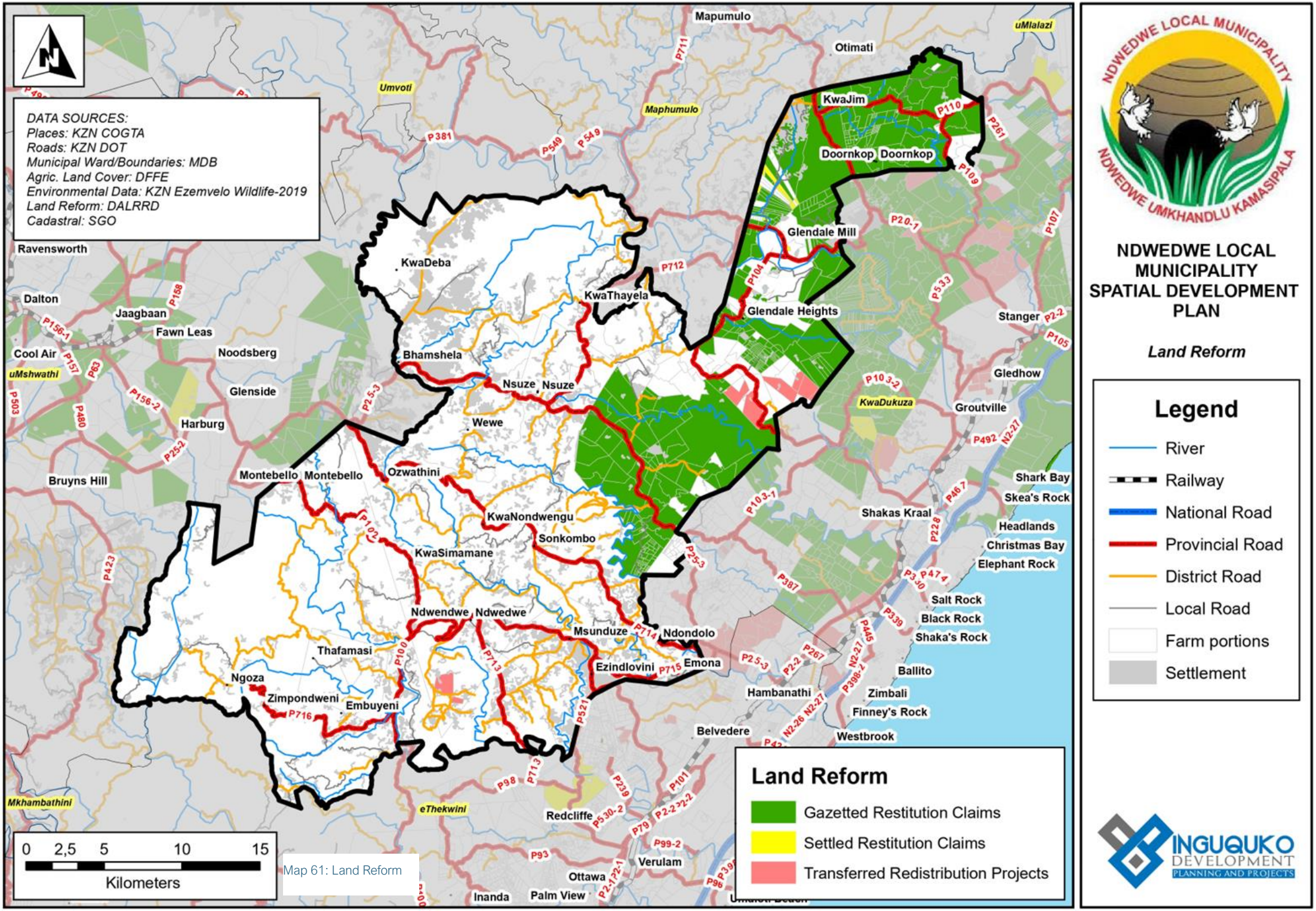
NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Landownership

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement
- Government
- Ingonyama Trust Board
- Mondi
- Private
- Sappi
- Tongaat Hulett
- Transnet

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS



Map 61: Land Reform

NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Land Reform

Legend

- River
- Railway
- National Road
- Provincial Road
- District Road
- Local Road
- Farm portions
- Settlement

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS

18. HUMAN SETTLEMENTS

The aim of this section is to conduct an assessment of the current housing requirements, the level of demand, and the existing housing supply in Ndwedwe Local Municipality. This section, in conjunction with other pertinent sections such as the legal and policy framework, infrastructure conditions, local context, and demographic context, will be examined to formulate a housing strategy tailored to Ndwedwe Local Municipality. The subsequent subsection will outline the methodology employed to ascertain the housing need and demand within the municipality.

18.1. APPROACH

The methodology used to determine housing requirements and demand encompasses the following techniques:

- Assessing the housing conditions, taking into account the challenges faced by both residents and the local government in the Ndwedwe Municipal Area.
- Evaluating the housing supply by documenting all ongoing housing-related projects in the Ndwedwe Municipal Area.
- Estimating the housing demand by analysing the income levels of the population. Housing demand will be categorized based on income thresholds.
- Identifying housing backlogs by evaluating the existing types of dwellings in Ndwedwe and identifying those that do not meet the criteria outlined in the Breaking New Ground policy (2004). This includes calculating the housing waiting list.

This approach necessitates consultation with relevant stakeholders and the utilization of documented resources such as the Ndwedwe IDP (2022-2027), Ndwedwe Spatial Development Framework (2022 Review), the current Ndwedwe Housing Sector Plan (2020 - 2025), as well as data from Stats SA Census and Community Survey 2016.

18.2. HOUSING SITUATION AND CONDITIONS

Table 14: Dwelling Types

TYPE OF MAIN DWELLINGS	2011	2016
Formal dwelling/house or brick/concrete block structure on a	12012	68939
Traditional dwelling/hut/structure made of traditional mater	14280	57236
Flat or apartment in a block of flats	1575	1325
Cluster house in complex	234	364
Townhouse (semi-detached house in a complex)	39	1602
Semi-detached house	33	14
Formal dwelling/house/flat/room in backyard	231	4254
Informal dwelling/shack in backyard	210	2382
Informal dwelling/shack not in backyard (e.g., in an informal	363	6499
Room/flatlet on a property or larger dwelling/servants' quart	36	121
Other	168	380

Source: Census, 2011 and Community Survey 2016

The relationship between population and housing is two-sided. On the one hand, population change leads to a changing demand for housing. Population growth, and particularly a growth in the number of households, leads to a growth in housing demand. According to Stats SA (2016), this primary source of information indicates that the number of households who reside in "formal dwelling/houses or brick/concrete black structure" has grown from 12 012 to 58 828 households. This increase may be attributed to the decrease of households residing in rural areas as well as the households who have received formal houses for the first time due to completed low–cost housing projects between the period. Furthermore, the rural housing projects that were completed in divergent areas of the municipality has led to the increased number of formal houses.

There has also been increase in formal houses in the rural area of Mavela, Wosiyane, Cibane, Malangeni, Glendale, Qadi, Nkumbanyuswa areas due to the housing projects that have been developed and currently under construction. Ndwedwe LM needs to establish a housing demand database/register to be able to appropriately plan for future housing requirements and the nature of the requirements thereof.

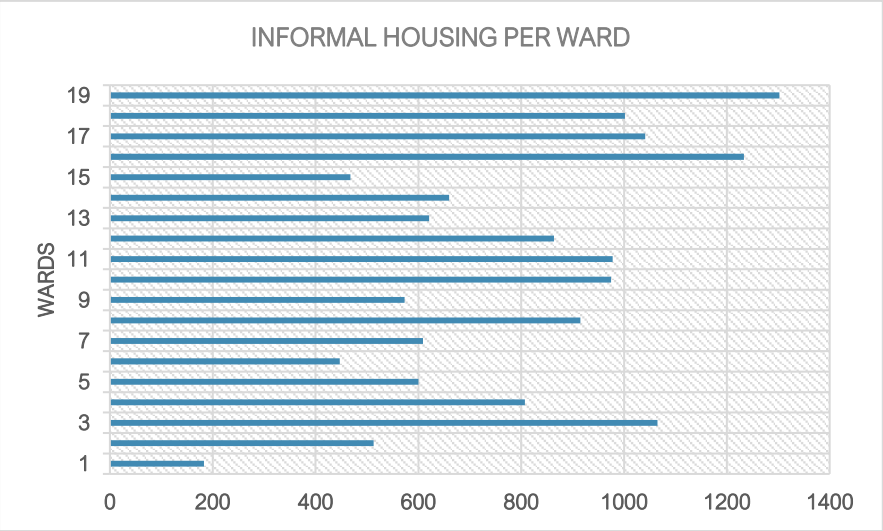


The table above is the households demand of the Ndwedwe Local Municipality. It identifies households that reside in housing made from brick and mortar (in line with National Building Regulations). Other forms of dwellings/housing can thus be included in as the housing demand which amounts to 66 117 households as from 2016. As tabulated below Wards 19, 3, and 17 have the highest number of households that do not qualify as meeting the National Building Regulations and thus are identified as informal.

Table 15: Housing Demand Per Ward

HOUSING/DWELLING TYPES	WARDS																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
House or brick/concrete block structure on a separate stand or yard or on a farm	1473	462	1602	378	633	1134	315	495	420	384	495	1260	747	378	849	123	216	348	291
Traditional dwelling/hut/structure made of traditional materials	153	510	690	807	588	429	606	906	570	972	963	840	603	642	441	1233	1041	1002	1290
Flat or apartment in a block of flats	201	87	273	90	60	288	39	36	21	102	12	36	159	36	72	12	18	12	24
Cluster house in complex	84	18	6	15	12	6	0	6	0	0	0	3	15	3	51	0	0	0	9
Townhouse (semi-detached house in a complex)	6	12	3	0	3	0	3	0	6	0	0	0	3	0	0	0	0	3	0
Semi-detached house	6	3	12	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	3
House/flat/room in backyard	3	0	9	12	6	18	18	15	3	12	3	6	6	27	6	6	63	3	18
Informal dwelling (shack; in backyard)	9	3	81	0	9	9	3	6	3	3	9	18	12	15	18	0	0	0	9
Informal dwelling (shack; not in backyard, e.g., in an informal/squatter settlement or on a farm)	21	0	294	0	3	9	0	3	0	0	6	6	6	3	9	0	0	0	3
Room/flatlet on a property or larger dwelling/servants quarters/granny flat	3	3	9	0	0	6	0	3	0	0	0	0	0	0	12	0	0	0	3
Caravan/tent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	3
Other	33	0	12	0	0	9	0	6	6	3	3	3	57	12	6	3	3	6	0

Source: Census, 2011



Graph 21: Informal Housing Per Ward

Source: Census, 2011

18.3. HOUSEHOLD TENURE STATUS

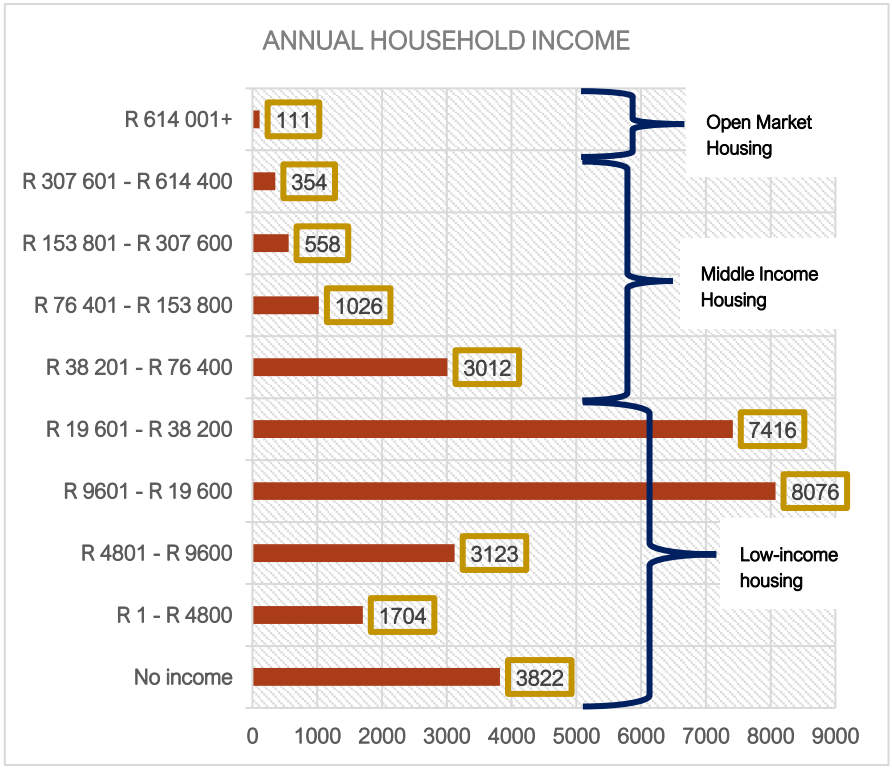
Table 16: Household Tenure Status

TENURE STATUS	NO. OF HOUSEHOLDS
Rented from private individual	1377
Rented from other (incl. municipality and social housing ins	74
Owned; but not yet paid off	8218
Owned and fully paid off	118541
Occupied rent-free	1735
Other	12328
Do not know	558
Unspecified	286

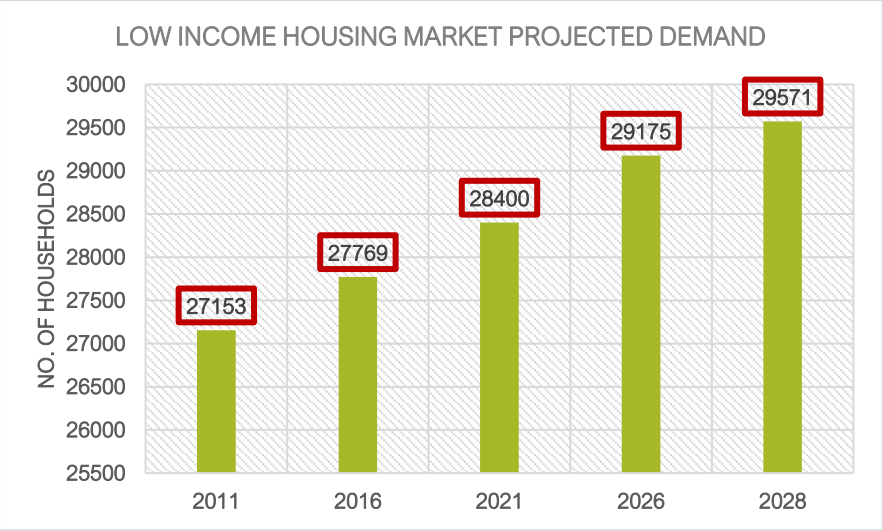
Source: Community Survey, 2016

The table above describes the current tenure status for households in Ndwedwe Local Municipality. In terms of tenure status, the above table shows that a large portion of the household own and have fully paid off their houses or properties. This appears to be good in the sense that it creates an opportunity for boosting economic growth in the Municipality.

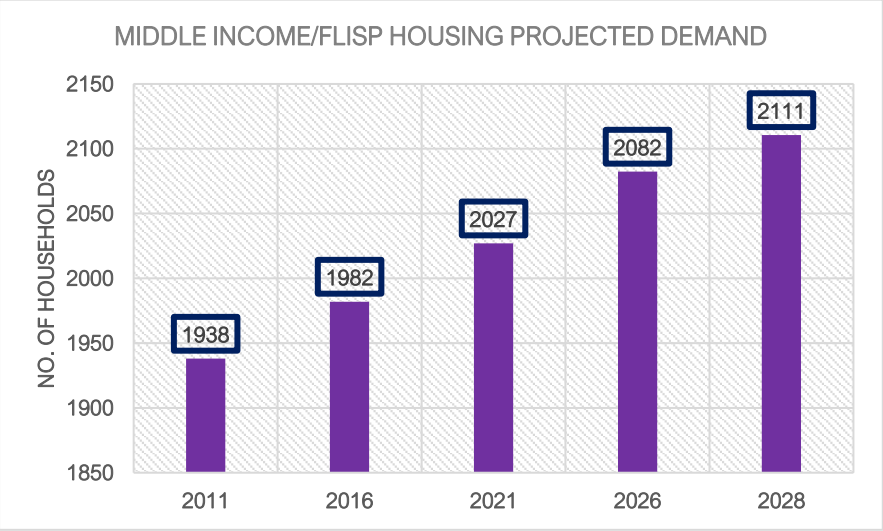
18.4. PROJECT DEMAND FOR SUBSIDISED HOUSING



Graph 22: Annual Household Income



Graph 23: Low Income Housing Market Projected Demand



Graph 24: Middle Income/FLISP Housing Market Projected Demand

Human settlements encompass both the physical manifestation and spatial aspect of economic and social endeavours. The establishment of sustainable human habitats becomes an inherent aim in the realm of social progress, as it moulds and influences the interaction between individuals' places of residence, leisure, and employment on one side, and the manner in which this interaction transpires within the boundaries of the natural world. This pursuit stands out as a highly observable and measurable gauge of society's capacity to fulfil a fundamental requirement, which is shelter, and is a fundamental prerequisite for fostering sustainable human advancement and economic expansion.

As mentioned earlier, Ndwedwe LM must create a housing demand database or update its housing registry to effectively prepare for future housing needs and their characteristics. It is also necessary for the municipality to shift its focus from low-cost housing to GAP (FLISP) housing. It is important to note that beneficiary qualification considers multiple factors, so the municipality must apply rigorous criteria to identify households eligible for low-cost housing subsidies.

18.4.1. LAND REQUIRED

In order to determine the amount of land required for future human settlements in Ndwedwe Local Municipality, an analysis must be made of the future housing demand as has been demonstrated in the previous subsection.

Tabulated below is land required (in hectares) to cater for the future/projected housing demand in the municipality:

Table 17: Land Requirements for Subsidised Housing

HOUSING MARKET	MIN. SITE SIZE	PROJECTED DEMAND (5-YEARS)	FUTURE LAND REQUIREMENT
Low-Cost Housing (BNG Housing)	250m²	29 571 Households	739,28ha
Middle Income/FLISP Housing Projected Demand	600m²	2 111 Households	126,66ha

According to the above table, the land requirements for low-income housing is approximately 739,28 hectares. This is based on the average site size of low-cost housing, which is 250m². The land requirements for middle income/FLISP housing are approximately 126,66 hectares. This is based on the average site size of middle-income housing, being 600m².

18.5. DISTINCT HOUSING

18.5.1. EMERGENCY HOUSING

The current secondary sources of information about the municipality do not contain any mention of emergency housing needs or emergency aid within the municipal area up to this point. This program offers temporary support in the form of secure access to land, basic municipal services, or shelter. This aid is extended to individuals who, due to circumstances beyond their control, have found themselves in an emergency housing crisis. This crisis could involve the destruction or damage of their current shelter, an immediate threat to their health, life, or safety, eviction, or the imminent risk of eviction. This program is exclusively applicable during exceptional housing crises that qualify as emergency situations.

18.5.2. MILITARY VETERANS

According to the National Department of Human Settlements, a Military Veteran can be defined as "a South African who served under any previous military dispensation, including individuals involved in the liberation movement." Research conducted by the National Department of Human Settlements indicates that the majority of veterans are elderly and experiencing poverty. Consequently, it is highly likely that the majority of veterans in the province meet the standard eligibility criteria, with the only exception being the potential lack of formal documentation. In such cases, efforts should first be made to resolve this issue by facilitating the formalization process through relevant government departments, such as Home Affairs and/or Social Development (KZN DHS).

Several challenges have hindered the delivery of housing for military veterans, including inadequate policies, the absence of a dependable and credible veterans database, and inefficient governance mechanisms. The Department of Defence and Military Veterans is responsible for maintaining the list of Military Veterans, while the Department of Human Settlements is responsible for housing delivery. Military Veterans are an integral part of society and should, therefore, be integrated into society through the allocation of houses within existing and planned housing projects.

The KZN Department of Human Settlements has published a Policy Framework for extra-parliamentary war veterans, defining this group as

"those veterans who were trained and engaged in liberation military activities against the apartheid government, resulting in their exile for a period of at least one year."

It is recommended that Ndwedwe Local Municipality and the Local Office of the Department of Human Settlements develop a practical program to assist Military Veterans in accessing housing, provided that there are indeed military veterans within Ndwedwe Municipality. However, it remains unclear at this stage how many veterans there are and whether they meet the qualifications for this program. The municipality can encourage veterans to come forward for further assistance.

18.5.3. FARMWORKER HOUSING

Farmworker housing refers to accommodations provided within the farm for the farmworkers. These lodgings can be provided either by the farmer or employer, or through farm resident subsidies from the Department of Human Settlements. In general, farmworkers in South Africa are still enduring substandard living conditions, marked by a lack of access to clean drinking water, adequate housing, basic healthcare, secure land tenure, sanitation facilities, and education, among other things.

Since 1994, various laws have been enacted to regulate and enhance the living conditions and rights of farm workers and farm dwellers. However, despite this new legislation, black individuals residing on farms in South Africa remain among the most vulnerable segments of society, as highlighted by Wegerif in 2005: "Since 1994, a number of pieces of legislation have been enacted with the intention of regulating and improving the conditions and rights of farm workers and farm dwellers. Despite the new legislation, black people living on farms in South Africa remain amongst the most vulnerable people in society" (Wegerif, 2005: 7).

Within the boundaries of Ndwedwe, several farms are in existence, and the living conditions of the workers on these farms are presently unknown. There is a pressing need to provide assistance in cases where farmworkers are in need of proper housing.

19. SPATIAL DEVELOPMENT PLAN STRATEGIES

The municipality developed and adopted a Spatial Development Framework which provides a vision for the municipality's desired spatial outcome over the next 20 years. As indicated, the purpose of a Spatial Development Plan is to provide a short term or 5-year vision of the desired outcome of the municipality. This includes the assessment of the potential implications of the projects proposed in the Capital Expenditure Framework developed as a part of the SDF.

This section will make an assessment on the strategies that have been identified in the SDF and what the sub-strategies will be to ensure their implementation.

19.1. SPLUMA AS A FRAMEWORK FOR DEVELOPMENT PLANNING

In alignment with the principles outlined in SPLUMA and those incorporated in the KwaZulu Natal Spatial Development Framework Plan, the following set of principles have been devised and tailored to the specific context of Ndwedwe Local Municipality:

- Reorganizing settlements that are spatially inefficient.
- Directing resources toward areas with the most pressing development needs and potential, thus rectifying historical disparities in the treatment of marginalized regions.
- Taking into consideration the financial, institutional, and administrative capacities of stakeholders, as well as the requirements of communities and the environment.
- Promoting economic development opportunities in both rural and urban areas.
- Upholding equitable rights to and in land, while encouraging the sustainable use of land.

Additionally, these principles advocate for:

- Ensuring accountable spatial planning, land use management, and land development decision-making by governmental bodies.
- Fostering cooperative governance and extensive information sharing in the processes of planning and implementation.
- Promoting the highest degree of transparency and openness in decision-making.

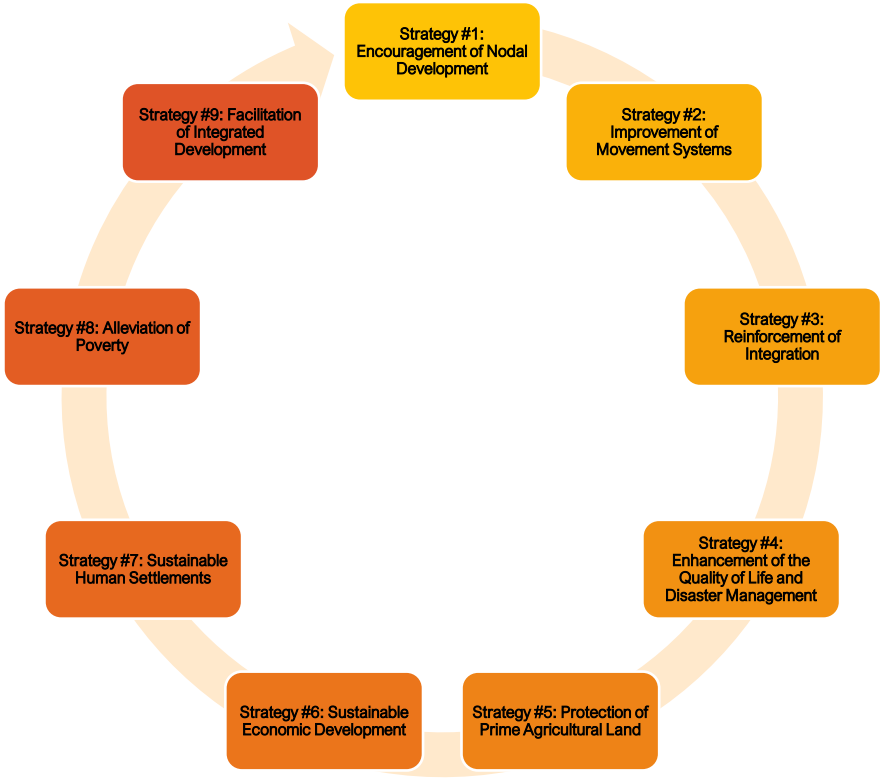


Figure 16: Spatial Development Framework Strategies

19.2. STRATEGY #1: ENCOURAGEMENT OF NODAL DEVELOPMENT

Nodal development in spatial planning refers to a strategy or approach that focuses on the development of specific nodes or key points within a region or urban area. These nodes are typically characterized by their strategic location, often serving as transportation hubs, commercial centres, or areas with high development potential. The aim of nodal development is to concentrate resources, infrastructure, and development efforts in these specific areas to achieve various planning goals.

The SDF proposes the fair distribution of services and amenities in the municipality and affirms that it is one of the key concerns that Integrated Development Plans aim to tackle. This issue has a spatial impact on a municipal area because it necessitates the strategic organization and placement of services and facilities in a way that enhances accessibility and the efficient delivery of services. This is crucial for the overall performance of the municipal area as well as the integration of land use. The following planning areas have been identified:

- Sub-regional center (primary nodes): These hubs provide higher-level services and amenities. They hold significant importance for the entire municipality, attracting people from all across Ndwedwe LM and even beyond.
- Community center (secondary nodes): These nodes cater to the needs of the local population by offering social and community facilities, as well as basic retail services.
- Neighbourhood centre (tertiary nodes): These nodes offer access to services and amenities at a more localized scale.

- Settlement clusters, located in both rural and urban areas.

Nodes are areas characterized by high levels of activity, often associated with the presence of employment opportunities, retail services, and high-density residential development situated on or near major transportation routes. As a result, they act as focal points for public transportation. These nodes play a central role in clustering development and providing services, ensuring that social and economic opportunities are accessible to the entire surrounding area (addressing spatial resilience). The concentration of activities in and around these areas will stimulate further development and attract additional investments.

19.2.1. IMPLICATIONS ON SPATIAL DEVELOPMENT IN THE NEXT 5 YEARS

It imperative that the municipality commence by investing resource both financial and human in the development of the Ndwedwe Village, being the primary node. The SDF proposes the following:

Ndwedwe Village or Town has been designated as the central hub for development. Situated in ward 13, Ndwedwe Village functions as both an administrative and commercial center. Additionally, it offers access to a range of social amenities. People from various neighbouring settlements visit the Village to access various services and facilities. Some of the land uses within this area include, among others:

- The Police Station.
- Educational institutions such as schools.
- A Further Education and Training College.
- Offices of the Local Municipality.

The node requires the following facilities:

- Cemeteries
- Clinic
- Fire Station and Emergency Service Facility
- Orphanage
  Old Age Home
- Pension Pay Point
- Post Office
- Sport Complex
- Sport Field
- Bus Service
- Taxi Rank.
- Telecommunications infrastructure (urgent need!!!)

Thus, the municipality should reserve/ raise funding for the following within the next 5 years:

Community Service Centre (CSC) which will be a one stop shop for all governmental and social offices including, library, pension payout and post office. This will require the formalisation of the town through a township establishment process which will include sites for commercial, mixed use and community facility uses. A site needs to be earmarked for the development of the CSC and upgrading the existing Community Health Facility.

Bhamshela Node has been designated as a 'Secondary Node.' It is situated at the entry and exit points of Ndwedwe LM, forming part of the north-western border. The town of Bhamshela encompasses a diverse range of land uses, mainly centred around a typical Central Business

District (CBD), including shops, supermarkets, wholesale stores, hardware shops, and specialty services.

The western section, which falls under uMshwathi, is primarily characterized by a taxi rank, social facilities, and commercial blocks, with limited amenities. On the eastern end, within the Ndwedwe area, there is a prevalence of transit and light industrial activities, along with a small number of single-family homes, forming a compact residential precinct.

Bhamshela is primarily accessed via two well-maintained roads: the tarred R614 and D1524. However, the remaining roads in the area are of lower quality, serving as direct access routes to residential and other land uses. These roads are gravel-based and lack cohesion, necessitating ongoing maintenance.

According to the iLembe Rural Nodes Development Framework Plan, Bhamshela faces a water supply challenge. The plan recommends the construction of a reservoir to supplement existing water initiatives in the area. Bhamshela has a mix of sanitation services, including Ventilated Improved Pit Latrines (VIPs) and Septic Tanks. It is essential to ensure that all areas within the formal town have access to proper sanitation facilities to mitigate potential environmental issues.

The iLembe Rural Nodes Development Framework Plan also suggests the development of an effective sanitation disposal system in Bhamshela, aligning with its status as a Secondary Node. Concerning electricity, the plan indicates that the current resources are adequate for lighting purposes. However, there is a need to expand the electricity supply to accommodate other proposed forms of development.

In terms of housing, the Bhamshela area accommodates both formal and informal structures, reflecting variations in income levels among local residents.

The SDF proposes the following for the Bhamshela Node:

- Cemetery
- Library
- Clinic (including mobile clinic)
- Emergency Service Facility
- Mobile Police Station
- Pension Pay Point
- Post Office
- Post Boxes
- Sport Complex
- Bus Service

Thus, the municipality should reserve/ raise funding for the following within the next 5 years:

It is proposed that the municipality upgrade the existing Civic Centre to a Community Services Centre that will include a post office and pension payout. These facilities will also be used by settlements in the uMshwathi Local Municipality given the bordering the location of the node.

Montebello Node is identified as a Secondary Node and is situated in the western region of the Ndwedwe Local Municipality area. Its primary access route is currently the gravel road, P102, but there is an ongoing upgrade project to improve this road from the intersection of R614 to Montobello Hospital, which is where the secondary node is located.

Within the Montobello Secondary Node, various land uses coexist, including but not limited to:

- A hospital.
- A church.
- Informal businesses.
- An informal taxi ranks.
- Residential areas, encompassing both formal and informal housing, and more.

This node will require the following in the next 5 years:

- Formalisation of the existing informal taxi rank
- Upgrading of the hospital

Qinisani Node is one of the Secondary Nodes listed in the IDP for the Ndwedwe Local Municipality. It is positioned alongside the R614, which connects Ndwedwe LM to Tongaat in the east and Warburg in the west. Within the vicinity of Qinisani, you can find various land uses, including, but not limited to:

- Schools
- Retail shops
- A tavern
- A clinic
- A block-making area, and more.

There are two prominent roads worth mentioning, namely P712 (which is currently undergoing an upgrade) and the R614. The lower-grade roads are not well-defined, and certain existing structures or houses lack proper access roads.

Regarding water access, the community relies on a community standpipe as their primary source, and in cases where it's unavailable, they depend on water tanks and nearby rivers. This area grapples with an unreliable water supply. Both formal and informal structures are present in this location.

The following has been proposed for the Qinisani Node:

- Cemetery
- Clinic
- Mobile Police Station
- Community hall
- Pension Pay Point
- Post Office
- Sport Field
- Bus Service
- Taxi Service.

Thus, the following can be implemented within the next 5 years:

- Taxi rank
- Community Hall
- Mobile Police Station
- Mobile Clinic

Glendale Node is put forward as a Secondary Node. It is situated in the eastern section of Ndwedwe LM. Various land uses can be observed in the area surrounding the Glendale Secondary Node, including, but not limited to:

- A clinic (although its operation is intermittent).

- A church.
- A primary school.
- Several tuck-shops.
- A distillery operation involved in alcohol manufacturing, and more.

P104 provincial road is a noteworthy road as it serves as the main link connecting Glendale with its surrounding areas. Within the Berea Township, there is an internal network of roads providing access to individual sites. The majority of these access roads in Berea Township are in good condition as they are paved; however, certain sections of these roads have eroded, leading to a challenging driving experience. Residential areas in the vicinity of Glendale are connected via a network of gravel roads.

As for water access, Berea Township features communal taps strategically positioned to provide water to residents. The area where alcohol manufacturing, specifically the Distillery Operation, takes place, sources water from a nearby river and has its water purification plant.

In terms of sanitation, Berea Township uses Ventilated Improved Pit latrines (VIPs), while the Distillery Operation employs a Sceptic Tank for its sanitation needs. The overall network for most service providers in Glendale appears to be functioning without significant issues.

The SDF proposes the following for the node:

- Library
- Cemetery
- Clinic Upgrade
- Emergency Services Facility
- Post Office
- Sport Field
- Petrol Filling Station, etc.

The following can be implemented within the next five years:

- Upgrading of the existing clinic
- Expression of interest for the development of a petrol station
- Development of a sports field

Thafamasi Node This area has been recognized as having growth potential, which is why it has been designated as a Secondary Node. It is located in the southwest region of Ndwedwe LM and can be accessed via D1510. Various land uses can be observed in the vicinity of this area, including, but not limited to:

- A clinic.
- Schools.
- A church.
- An agri-input shop, and more.

The Municipal SDF has identified the following as needs in the area:

- Cemetery
- Clinic
- Emergency Services Facility
- Mobile Police Station
- Community hall
- Pension Pay Point
- Post Office
- Post Boxes

- Sport Field
- Bus Service
- Taxi Service.

The municipality to set aside/ procure funding for the implementation of the following:

- Upgrading of the agri-input shop into a FSPU
- Development of a community hall
- Emergency Services Satellite Station

Sonkombo Node is identified as an area with evident potential for future growth, leading to its classification as a Secondary Node. Situated along P714, Sonkombo Secondary Node is positioned near the central part of the municipality area. In the surrounding vicinity, there are various land uses, including but not limited to:

- A daycare center (crèche).
- A community hall.
- Informal sports field.
- A Thusong Centre, and more.

Sonkombo area serves as a convergence point for several significant roads. These roads include P714 (currently undergoing upgrades), D1519, D865, and D1522. All of these roads are unpaved (gravel), making them vulnerable to adverse weather conditions. They connect Sonkombo to neighboring settlements. Similar to many rural areas, the local access roads within Sonkombo are not well-defined, and some houses lack direct road access.

In the vicinity, there is an electricity sub-station that seems to have been recently constructed. Telecommunication services provided by various network providers are well-represented in the area.

In terms of water access, information suggests that the local community currently relies on natural streams and a water tank. This situation highlights the potential for future growth. Therefore, Sonkombo has been granted Secondary Node status. Regarding sanitation, the community utilizes ventilated improved pit latrines.

The Municipal SDF has identified the following as needs in the node:

- Cemetery
- Clinic
- Emergency Services Facility
- Mobile Police Station
- Supermarket
- Post Office
- Post Boxes
- Sport Field

Thus, the following should be developed and implemented in the next five years:

- Formalisation of the existing informal sports field
- Upgrading of the existing community hall
- Upgrading of the existing Thusong Centre.

19.3. STRATEGY #2: IMPROVEMENT OF MOVEMENT SYSTEMS

According to the municipal SDF in order for the municipality to operate with effectiveness and efficiency, it is imperative that various development focal areas function cohesively as a unified entity. Currently, these nodal areas function independently with limited integration, making it a significant challenge to navigate from one part of the municipality to another. This challenge necessitates a comprehensive spatial integration approach with robust internal linkages.

Among its objectives, the internal linkage strategy aims to accomplish the following:

- Enhancing the ease of accessibility and movement of people within different parts of the municipality.
- Facilitating the movement of goods and services throughout the municipality.
- Improving access to various social amenities within the municipal area, such as Montebello Hospital.
- Promoting internal commerce and the flow of capital within the municipal boundaries.
- Creating the potential for unforeseen opportunities and more.
- The strategy outlined above is designed to uphold the principles of spatial justice, spatial efficiency, and good administration.

19.3.1. IMPLICATIONS ON SPATIAL DEVELOPMENT IN THE NEXT 5 YEARS

The following roads will need to be upgraded to blacktop over the next years:

- P102 provincial road
- P104 provincial road
- P712 provincial road
- P716 provincial road
- P714 provincial road
- P713 provincial road
- P715 provincial road

19.4. STRATEGY #3: REINFORCEMENT OF INTEGRATION

The efficiency of the sub-region is closely tied to the effectiveness of its transportation system, which encompasses the movement of goods, services, and people both within and outside the municipal boundaries. This strategy aims to achieve the following objectives:

- Fostering functional connections with significant neighbouring centres, such as Dube Trade Port, and more.
- Enhancing the accessibility of communities to economic opportunities (employment), recreational activities, and social amenities.
- Safeguarding, improving, and enhancing the mobility function of major roadways and arterial routes.
- Supporting and aligning with the existing and planned public transport infrastructure.

- Ensuring that the transportation system is seamlessly linked with and bolstered by robust high-intensity nodes and denser residential developments.

This approach involves strengthening the role of the current road networks while also exploring the creation of new transportation routes and refining the functions of certain existing roads, all in alignment with the principles of efficiency and good administration.

19.4.1. IMPLICATIONS ON SPATIAL DEVELOPMENT IN THE NEXT 5 YEARS

The municipality will need to reinforce the R614 provincial road as the primary corridor linking the municipality to the R102 and N2 roads.

19.5. STRATEGY #4: ENHANCEMENT OF QUALITY OF LIFE AND DISASTER MANAGEMENT

The current population of Ndwedwe LM bears the responsibility of utilizing natural resources and addressing development needs in a way that doesn't jeopardize the ability of future generations to fulfil their essential development requirements. This concept is commonly known as "environmentally sustainable development."

19.5.1. IMPLICATIONS ON SPATIAL DEVELOPMENT IN THE NEXT 5 YEARS

The municipality will need undertake social facilitation for the relocation of all households located within 100-year floodlines, river 32m buffers, wetlands and wetland 32m buffers. This will include the construction of new housing through the Breaking New Ground Programme.

19.6. STRATEGY #5: PROTECTION OF PRIME AGRICULTURAL LAND

Ndwedwe Local Municipality possesses a considerable amount of land, primarily categorized as having high or good potential for agriculture. It's noteworthy that high-potential agricultural land is rapidly becoming a limited and diminishing resource. The safeguarding of this land holds significant importance and is a top priority for the provincial Department of Agriculture and Rural Development (DARD).

The division and alteration of land use on agricultural land are governed by the Sub-division of Agricultural Land Act (SALA), Act No. 70 of 1970, which is managed at the national level (although not applicable in Ingonyama Trust areas). However, there currently lacks a cohesive provincial policy to guide this process. Therefore, it is of paramount importance for Ndwedwe Municipality to establish its own guidelines, as part of the Spatial Development Framework (SDF), for managing development on agricultural land, particularly in traditionally administered areas. This strategy aims to address the principles of both spatial sustainability and efficiency.

19.6.1. IMPLICATIONS ON SPATIAL DEVELOPMENT IN THE NEXT 5 YEARS

Protecting prime agricultural land is a crucial component of sustainable urban development and ensuring long-term food security. The aim should thus be to safeguard and promote the responsible use of prime agricultural land within our jurisdiction.

The following should be done in the ***short term:***

Assessment and Mapping

- Land Assessment: Conduct a comprehensive assessment to identify and classify prime agricultural land within the city limits.
- Mapping: Develop a detailed map of prime agricultural areas, considering factors such as soil quality, water resources, and land productivity.
- Stakeholder Engagement: Collaborate with farmers, agricultural associations, and local communities to gather insights and feedback on land use priorities.

Zoning and Regulations

- Zoning: Establish zoning regulations that designate prime agricultural land as protected zones with restricted land use changes.
- Development Guidelines: Develop guidelines for sustainable agricultural practices and environmentally friendly land management.
- Review of Land Conversion Procedures: Review and enhance the process for changing the land use of prime agricultural areas to make it more stringent and environmentally responsible.

The following should be done in the ***medium term:***

Education and Promotion

- Public Awareness: Launch public education campaigns to raise awareness about the importance of prime agricultural land.
- Incentive Programmes: Create incentives for sustainable farming practices, such as organic farming and crop rotation, to encourage farmers to protect and improve their land.
- Training and Workshops: Offer training programs and workshops for farmers to enhance their skills and knowledge in sustainable agricultural practices.

The following should be done in the ***long term*** and beyond:

Monitoring and Enforcement

- Monitoring Systems: Implement a comprehensive monitoring system to track land use changes and compliance with zoning regulations.
- Compliance Enforcement: Enforce strict penalties for violations of agricultural land protection regulations.
- Regular Inspections: Conduct regular inspections to ensure land is being used responsibly.

Land Preservation and Restoration

- Conservation Easements: Collaborate with land trusts and organizations to establish conservation easements that protect prime agricultural land from development.
- Land Acquisition: Acquire and preserve key parcels of prime agricultural land through strategic land purchases.
- Land Rehabilitation: Invest in land rehabilitation projects to restore degraded agricultural land to its productive state.

19.7. STRATEGY #5: SUSTAINABLE ECONOMIC DEVELOPMENT

The economic development of Ndwedwe places significant emphasis on the municipality's overall progress. Within all the identified economic activities, it is paramount to balance the protection of our unique natural environment with the exploration of opportunities emerging from diverse economic sectors.

Enterprise iLembe, the Economic Development Agency under the ownership of the iLembe District Municipality, plays a vital role in promoting our district as a destination for both investors and tourists. Furthermore, it collaborates with local municipalities to implement various Local Economic Development (LED) programs. This additional capacity within the district is essential for the execution of LED initiatives and the growth of our tourism sector.

The NLM Spatial Development Framework (SDF) recommends the following actions:

Corridor Study: Conduct a thorough Corridor Study to pinpoint strategically positioned land suitable for development. This development can take various forms, including petrol filling stations, industrial zones, market stalls, retail spaces, housing projects, bed and breakfast establishments, and more.

Rural Settlements: Undertake Feasibility Studies to identify suitable commodities for rural settlements, making efficient use of available high-value agricultural land that remains unspoiled. Potential commodities may include forest plantations, especially in steep terrain areas, and others.

Irrigation Schemes in Rural Settlements: Recognize the importance of rivers that traverse rural parts of Ndwedwe LM. Historically, land adjacent to rivers, often referred to as riverbanks, is the most fertile for establishing irrigation schemes. Therefore, it is recommended to initiate a study on irrigation schemes to identify potential areas for development.

19.7.1. IMPLICATIONS ON SPATIAL DEVELOPMENT IN THE NEXT 5 YEARS

The following will need to be implemented in the ***short-term*** horizon:

Corridor Study and Land Assessment

- Corridor Study: Conduct a detailed Corridor Study to identify strategically located land suitable for development. This study will consider various land uses, such as industrial zones, market stalls, housing, and agricultural projects.
- Land Assessment: Identify and classify prime agricultural land within the municipality to ensure its protection and responsible use.

Rural Settlements Development and Feasibility Studies

- Rural Settlements Development: Initiate Feasibility Studies to identify commodities suitable for rural settlements. This process will maximize the utilization of high-value agricultural land, potentially including forest plantations in steep areas.
- Community Engagement: Engage with local communities, farmers, and stakeholders to gather insights and preferences for sustainable rural development.

The following will need to be implemented in the ***medium term***:

Irrigation Schemes and Environmental Impact Assessments

- Irrigation Schemes Study: Launch an Irrigation Schemes Study to identify potential areas for irrigation development, particularly in fertile riverbank regions.
- Environmental Impact Assessments: Conduct comprehensive Environmental Impact Assessments for all proposed developments to ensure they align with environmental sustainability.

The following will need to be implemented in the ***long term*** and beyond:

Investment Promotion and Infrastructure Development

- Investment Promotion: Promote our municipality as an attractive destination for investors and tourists. Collaborate with agencies like Enterprise iLembe to bolster investments.
- Infrastructure Enhancement: Upgrade infrastructure to support economic development, including roads, utilities, and community facilities.

Implementation and Monitoring

- Implementation: Begin executing the projects identified in the previous years, focusing on corridor development, rural settlements, and irrigation systems.
- Regular Monitoring: Implement a robust monitoring system to track project progress, adherence to environmental regulations, and their economic impact.

19.8. STRATEGY #6: SUSTAINABLE HUMAN SETTLEMENTS

The prevailing trend in rural municipalities is the notable disintegration and fragmentation of settlement patterns. The ideal approach involves establishing higher-density settlements along primary transportation routes, interconnected by a network of local access roads and public amenities. Regionally, these settlements should be connected through a system of regional access routes. However, it's essential to acknowledge that settlements are dynamic entities, constantly evolving in response to change. This dynamism significantly impacts the detailed planning and development of these areas.

Historical evidence highlights the primary challenge of transforming settlements from legacies of the apartheid era into sustainable human habitats. The aim is to create settlements that offer not only social and economic opportunities but also unforeseen prospects for growth. Less densely populated settlements, characterized by expansive crop fields between homesteads, should be regarded as opportunities for agricultural development, encompassing crop production and livestock farming.

In theory, centrally located settlements typically provide enhanced access to higher-level public facilities, intensive agriculture, and other urban services. Moreover, individuals residing in conveniently located settlements enjoy a broader range of choices and have a higher potential to attract investment. In contrast, less accessible settlements impose a specific lifestyle on their inhabitants and result in unnecessary expenses.

Settlements should adhere to the principles of equity, ensuring reasonable access to opportunities and facilities for all residents. It is neither feasible nor desirable for settlements to be uniform, hence the emphasis on providing choices. This strategy addresses the aspects of spatial sustainability and justice.

19.9. STRATEGY #7: ALLEVIATION OF POVERTY THROUGH NATURAL RESOURCES

Ndwedwe Local Municipality is endowed with approximately 42.14% of high-potential agricultural land and approximately 12.23% of land with good agricultural potential. Some of this fertile land is situated within traditional areas, which also face significant challenges related to high levels of unemployment and poverty. The strategy of utilizing natural resources to alleviate poverty is founded on the following principles:

- In the eastern part of Ndwedwe LM, the Glendale Distillery Operation is located.
- Traditional areas possess ample good agricultural land, which presents an opportunity to support and develop new Small Scale Sugarcane Growers (SSSG). Their products can potentially find a market at the nearby Sugar Mill.
- Several significant rivers flow through the municipality area, including traditional settlements. Specific areas offer the potential to establish irrigation schemes along these rivers, which can serve as a means to combat unemployment and poverty, thus promoting spatial justice.

19.9.1. IMPLICATIONS ON SPATIAL DEVELOPMENT IN THE NEXT 5 YEARS

The municipality needs to identify poverty and unemployment focus areas. The municipality needs to support subsistence farming and assist emerging farmers in the municipality. The following should be implemented in the short term:

Access to Land:

- Land Assessment: Conduct a comprehensive assessment of available public and private land suitable for agricultural use.
- Transparent Allocation: Establish a transparent land allocation system that prioritizes emerging farmers, focusing on fairness, inclusivity, and sustainability.
- Access to Financing: Collaborate with financial institutions to provide emerging farmers with access to tailored financing options, such as grants, loans, or land leasing programs.
- Land Redistribution: Work closely with relevant government agencies to reallocate underutilized land to emerging farmers, ensuring a fair and equitable redistribution process.

Skills Development:

- Comprehensive Training: Launch comprehensive training programs covering modern agricultural techniques, sustainable practices, and effective farm management.
- Mentorship: Pair emerging farmers with experienced mentors to provide guidance and knowledge transfer.

- Agricultural Extension Services: Strengthen agricultural extension services to offer ongoing support and expertise to emerging farmers.

The following will need to be implemented in the medium term:

Access to Resources:

- Infrastructure Development: Invest in rural infrastructure, including road networks, storage facilities, and irrigation systems, to enhance land productivity.
- Resource Accessibility: Facilitate access to essential resources, such as high-quality seeds, fertilizers, and modern farming equipment.

The following will need to be implemented in the long term and beyond:

Market Access:

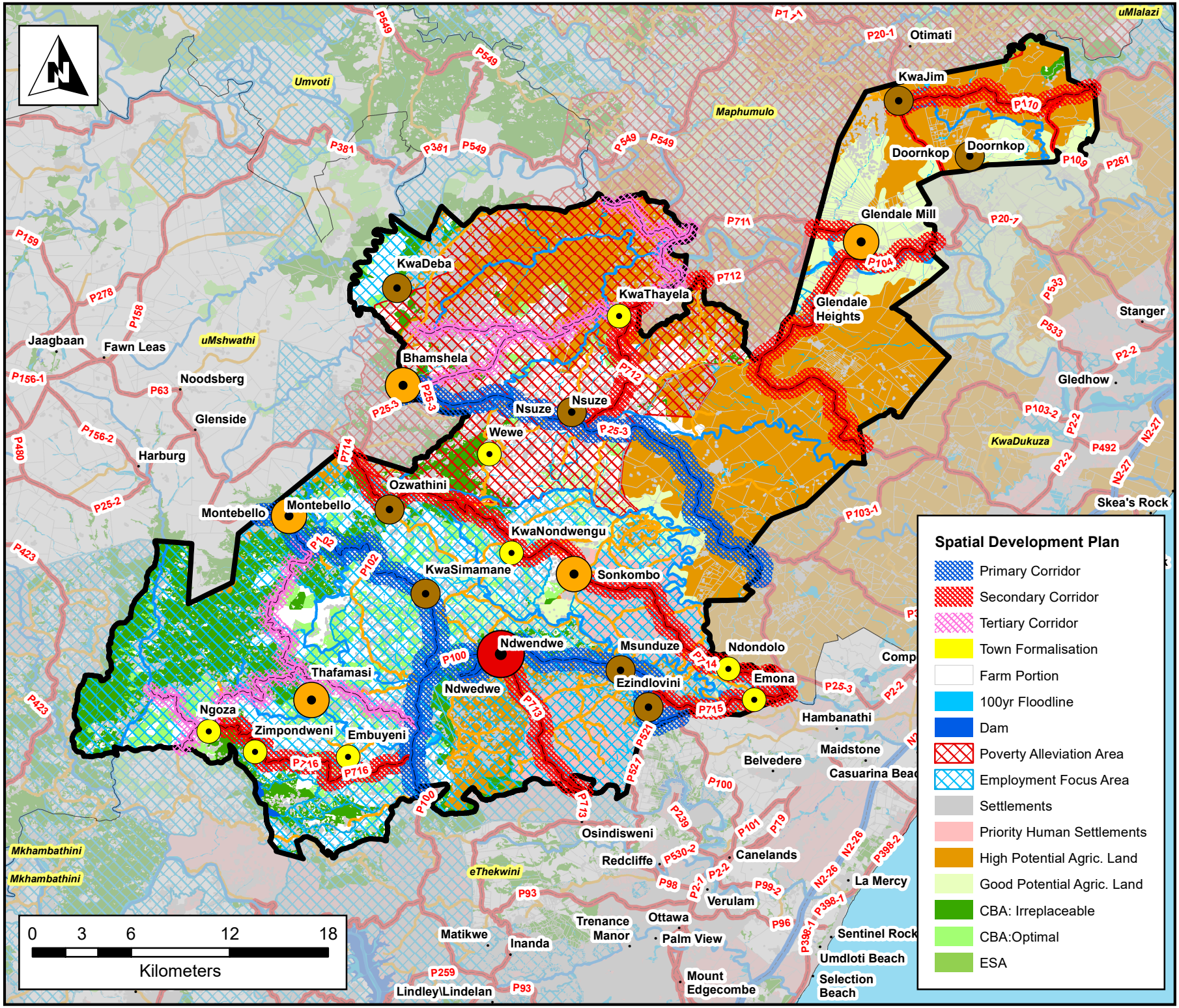
- Market Research: Conduct market research to identify potential markets, demand trends, and value chains.
- Market Linkages: Develop partnerships with local markets, agribusinesses, and cooperatives to provide emerging farmers with market access and market information.
- Quality Assurance: Implement quality control measures to ensure that emerging farmers meet market standards and requirements.

Sustainability and Growth

- Sustainable Farming Practices: Promote sustainable and environmentally friendly farming practices, emphasizing responsible land use and resource management.
- Scaling Up: Encourage emerging farmers to expand their operations, diversify their products, and explore value-added opportunities.
- Market Expansion: Support emerging farmers in accessing new markets and export opportunities to further their economic growth.

20. FIVE YEAR HORIZON SPATIAL CONCEPT

The five-year horizon spatial concept provides insight into the desired outcome of the municipality in the the next 5 years and which areas the municipality needs to focus investment, funding and resources I order to create sustainable and equitable development.



NDWEDWE LOCAL MUNICIPALITY
NDWEDWE UMKHANDLU KAMASIPALA

NDWEDWE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT PLAN

Five Year Horizon Development Plan

Legend

- Primary Node
- Secondary Node
- Tertiary Node
- Rural Service Centre
- River
- National Road
- Provincial Road
- District Road

INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS