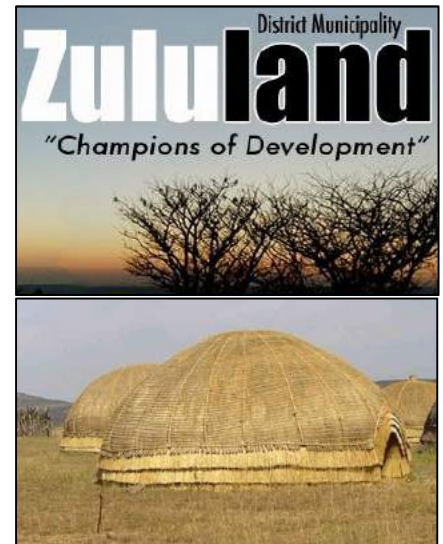




SPATIAL DEVELOPMENT FRAMEWORK FOR THE ZULULAND DISTRICT MUNICIPALITY

DRAFT SPATIAL DEVELOPMENT FRAMEWORK



May 2013



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1 Background & introduction

1.1 Background to the study

This status quo report contains the realities on the ground within Zululand Local Municipality, and aims to identify specific socio-economic and physical trends within the municipality. This document should not be seen as an analytical document, as a more detailed analysis of the area, and the implications of these realities will be conducted during the following phase. The content of this document is based on existing cadastral and GIS information, which will be augmented as more information becomes available from the District Municipality and Relevant Local Authorities.

The current Zululand SDF was prepared, as part of the Zululand Integrated Development Plan and the Municipal Council is required to periodically review it in accordance with the requirements of the Municipal Systems Act.

Section 26 (e) of the Local Government: Municipal Systems Act, No. 32 of 2000 (the “MSA”) requires all municipalities to compile Spatial Development Frameworks (the “SDF”) as a core component of Integrated Development Plans (the “IDP”). Many Municipalities have developed SDFs, either in silos or supported (technically and/or financially) by the Department of Rural Development and Land Reform (DRDLR) or by their respective provinces. Different SDF development approaches were applied depending on who was managing or has been contracted to undertake the project.

The Zululand District Municipality enlisted the services of Vuka Planning Africa Inc. to develop a new SDF to facilitate development of the Zululand District, and the implementation of the 2012-2016 Zululand Integrated Development Plan.

1.2 Study Objectives

The main objective of the project is to develop a Spatial Development Framework in order to address spatial, environmental and economic issues confronting the Zululand District Municipality.

This process will be guided by and comply with a number of legislative pieces which includes the Municipal Systems Act and the Municipal Planning and Performance Management Regulations, 2001, read together with the Spatial Planning and Land Use Management Bill, 2011. The required SDF must therefore-

- 1) give effect to the principles contained in chapter 1 of the Development facilitation Act 1995 (Act no. of 67 1995);
- 2) set out objectives that reflect desired- spatial form of the municipality;
- 3) contain strategies, policies and plans which must-
 - Indicate desired patterns of land use within the municipality;
 - Address the spatial reconstruction of the location and nature of development within the municipality; and
 - Provide strategic guidance in respect of the location and nature of development within the municipality;
- 4) contain a strategic assessment of the environmental impact of the SDF;
- 5) identify programs and projects for the development of land within the municipality;
- 6) be aligned with the SDFs reflected in the integrated development plans of neighbouring municipalities; and
- 7) provide a visual representation of the desired spatial form of the municipality, which representation:
 - must indicate where public and private land development and infrastructure investment should take place;
 - must indicate desired or undesired utilisation of space in a particular area;
 - delineate the urban edges;

- must identify areas where strategic intervention is required; and
- must indicate areas where priority spending is required.

1.3 Study Approach

The approach and execution of this study is guided by the following key principles;

1. **Integration:** Using the spatial basis of the study for:
 - a) the integration of development intention between the various local municipalities and surrounding district and local municipalities,
 - b) the physical integration of fragmented areas within the district towards improved economic imputes and service delivery and
 - c) sectoral integration of various public and private contributors and departments toward co-ordinated development of individual projects.
2. **Strategic Direction:** Providing strategic analysis and direction to the effective utilisation of land within the district towards social, economic and environmental development while addressing current and historic deficiencies and providing future spatial direction within the context of the unique spatial structure of the municipality.

1.4 Delineation Of Study Area

The Zululand District Municipality is one of ten District Authorities within the KwaZulu-Natal Province Municipality, which is situated on the northern boundary of the KwaZulu-Natal Province. Zululand District Municipality is approximately 14 810 km² in extent, and consists of the following municipalities:

- aBaqulusi Local Municipality
- eDumbe Local Municipality
- Nongoma Local Municipality
- Ulundi Local Municipality
- uPhongolo Local Municipality

2 Policy Environment

2.1 National Policies

2.1.1 National Spatial Development Perspective

The National Spatial Development Perspective (NSDP) was an initiative by the National Government to provide direction and guidelines for spatial planning in order to ensure the eradication of the spatially segregated growth pattern that still exists today. The key objectives of the NSDP are to:

- provide a framework within which to discuss the future development of the national space economy by reflecting the localities of severe deprivation and need, of resource potential, of infrastructure endowment and of current and potential economic activity by describing the key social, economic and natural resource trends and issues shaping the national geography.
- act as a common reference point for national, provincial and local governments to analyse and debate the comparative development potentials of localities in the country by providing a coarse-grained national mapping of potential.
- identify key areas of tension and/or priority in achieving positive spatial outcomes with government infrastructure investment and development spending.
- provide national government's strategic response to the above for a given time frame.

From the above data certain maps were produced that depicted the above mentioned information. Applicable to the Spatial Development Framework are the maps and information depicted in the diagrams below.

2.1.1.1 Minimum Level Of Living

The Minimum Living Level indicates those areas where the largest number of people is living below the minimum standard of living. These areas include some rural districts of the former homelands but the highest number of people below the minimum living level is in the large metropolitan areas.

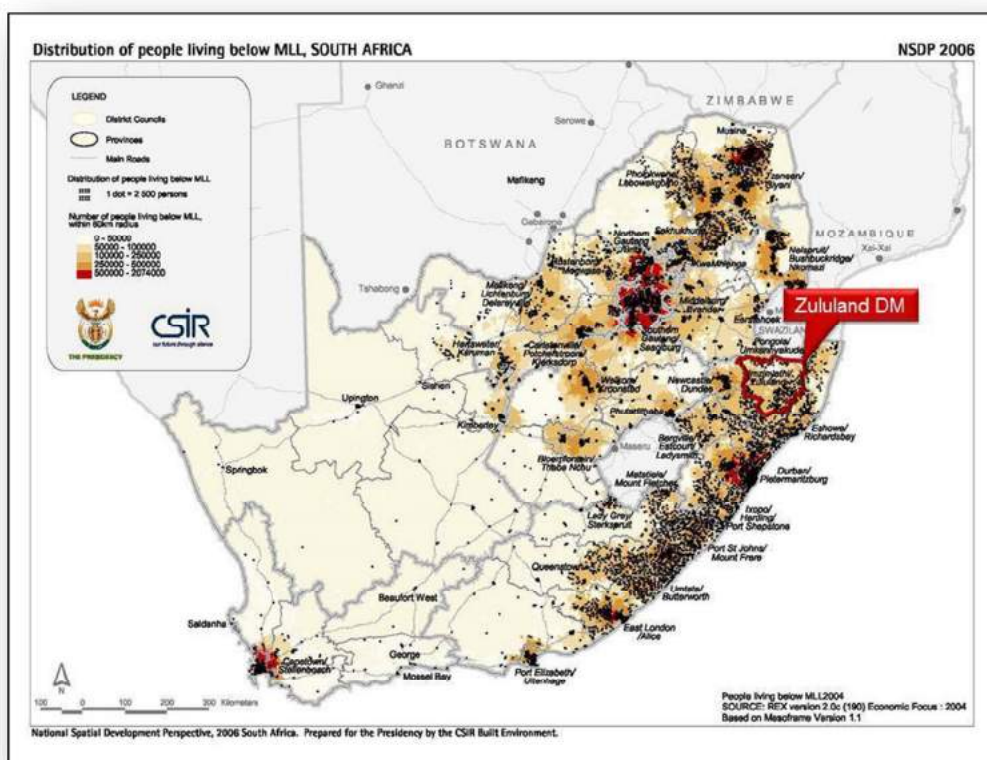
The Minimum Living Level reflects the minimum income required to sustain a household, and varies in accordance with household size – the larger the household, the larger the income required to keep its members out of poverty. Although no updated estimate is available, the MLL for 2004 as depicted in the National Spatial Development Perspective is only R2,042-00 per household of 5 population, which is the average household size in general. It is further a good indication of the little income this population is surviving on.

The MLL considers the following items:

- Clothing;
- Compulsory payments to local authorities in respect of rent, miscellaneous services, water and electricity;
- Contributions to medical funds and medical and dental expenses;
- Education;
- Food;
- Fuel and light;
- Replacement of household equipment;
- Support of relatives (applicable only to singles)
- Taxes; and
- Transport;
- Washing and cleaning materials;

On the map below, Zululand marked by its boundary in red on the map, has a population between 250,000 and 500,000 population living below Minimum Level of Living. Only the areas towards the North around Pongola have a distribution of below 100,000 population per 80km living below MLL. It is subsequently clear that the District Municipality has a high rate and concentrations of poverty.

Figure 1: Households Living Below MLL

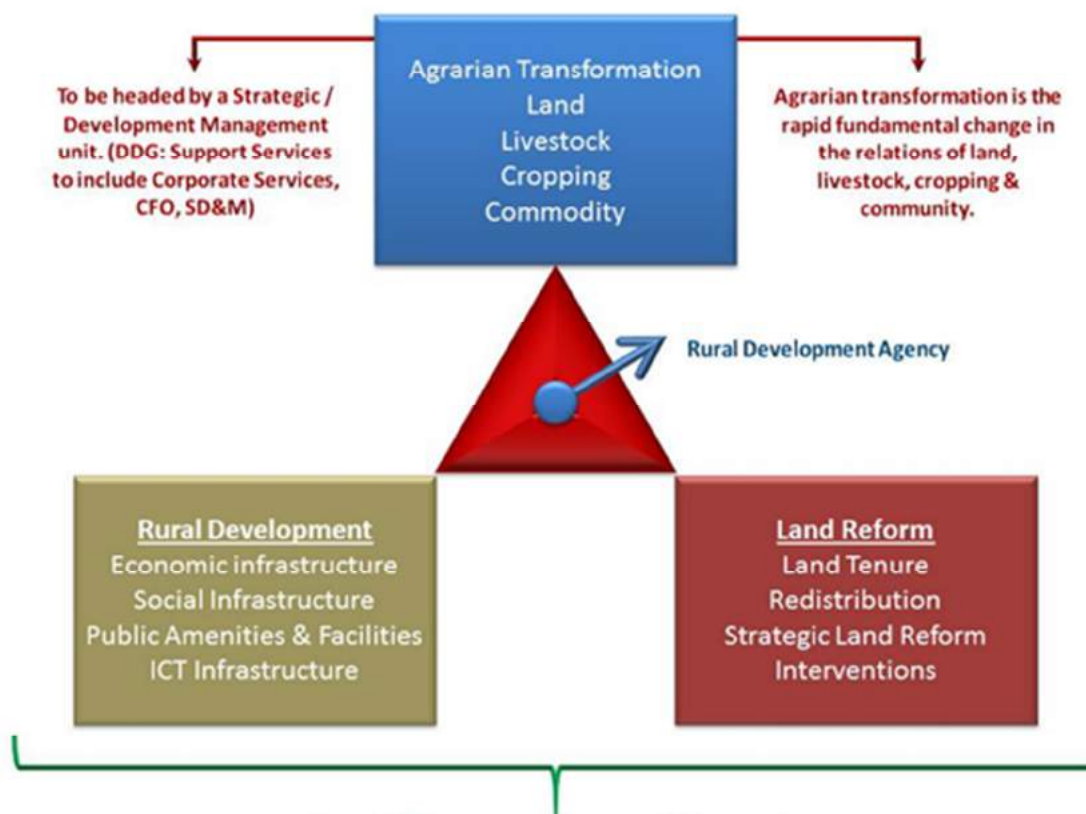


Source: NSDP, 2006 South Africa.

Development". This programme will be successful when it becomes apparent that "sustainable and vibrant rural communities" are succeeding throughout South Africa.

Below is a three pronged strategy to ensure that the Department achieves its objective (**Agrarian Transformation**, **Rural Development** and **Land Reform**):

Figure 3: Strategic Objectives Social Cohesion & Development



The Agrarian transformation includes, but is not limited to the following:

- Increased production and the optimal and sustainable use of natural resources including land, grass, trees, water, natural gasses, mineral resources etc.;
- livestock farming (cattle, sheep, goats, pigs, chickens, turkey, game, bees, fish, etc.), including the related value chain processes;
- cropping (grain, vegetables, fruit, spices, medicines, etc.), including the related value chain processes;
- the establishment and strengthening of rural livelihoods for vibrant local economic development;
- the use of appropriate technology, modern approaches and indigenous knowledge systems; and
- food security, dignity and an improved quality of life for each rural household.

Rural development includes, but is not limited to the following:

- Improved economic infrastructure:
 - Roads, railways, ports;
 - Shearing sheds;
 - Dipping tanks;
 - Milk parlours;
 - Community gardens;
 - Production/marketing stalls;
 - Fencing for agricultural purposes;
 - Storage warehouses;

- Distribution and transport networks;
- Electricity networks;
- Communication networks (land lines, cell phones, radio, television, etc.);
- Irrigation schemes for small scale farmers;
- Water harvesting, water basin and water shed management systems (dams etc.);
- Post office services and internet cafes;
- Rural shopping malls.
- Improved social infrastructure:
 - Social mobilization to enable rural communities to take initiatives;
 - Establish savings clubs and cooperatives for economic activities, wealth creation and the productive use of assets;
 - Communal sanitation and ablution systems to improve health conditions;
 - Access to resourced clinics;
 - Sport and recreation facilities especially for women and youth development;
 - Rural libraries to promote a reading culture;
 - Rehabilitation and development of schools as centres of excellence;
 - Community halls and museums;
 - Non-farming activities to strengthen rural livelihoods;
 - ABET centres for capacity building and appropriate skills development;
 - Leadership training, social facilitation and conscientious awareness for CRDP and socio-economic independence;
 - Democratising rural development, participation and ownership of all processes, projects and programmes;
 - Co-ordination, alignment and cooperative governance (local municipalities, traditional councils, provincial government);
 - Participation of NGOs, including faith-based organisations, community-based organizations and other organs of civil society;
 - Social cohesion and access to human and social capital.

Land reform includes, but is not limited to the following:

- Increasing the pace of land redistribution:
 - Provide increased access to land for previously disadvantaged people, through the redistribution of 30% of white-owned agricultural land;
 - Review the land reform products and approaches (LRAD, SPLAG, LASS, PLAS, ABP, LARP, etc.) for greater effectiveness and relevance to the CRDP, including the implementation of related policies (use-it-or-lose-it, leasing, post settlement support, etc.);
 - Review land acquisition processes (value for money for each hectare of land bought, proposal for a special land commission for an audit of privately owned agricultural land, the productive use of land transferred to the landless, the effective development and beneficiation of the land reform beneficiaries).
- Increasing the pace of land tenure reform:
 - Fast-track the settlement of labour tenant claims, especially in KwaZulu-Natal and Mpumalanga;
 - Facilitate secure access to land by farm dwellers;
 - Protect the land rights of farm workers and create decent jobs on farms;
 - Deal effectively and promptly with illegal evictions;
 - Establish agri-villages for local economic development on farms;
 - Provide basic needs for farm dwellers, including water, sanitation, electricity, housing, etc.;
 - Implement CLARA to stimulate economic growth in traditional communities in the former homeland areas, while promoting efficient use of land and the sustainable use of natural resources;
 - Deal effectively with state land administration;
 - Provide support and capacity building to farm dwellers.
- Speeding up the settlement of outstanding land restitution claims:
 - Provide an analysis of outstanding claims (nature and type), indicate related challenges and how these should be addressed to speed up the finalization of claims and indicate clearly what is possible by the year 2011 (including what will be still outstanding, if any);
 - Adopt a developmental approach to the settlement of restitution claims to demonstrate a contribution to the CRDP;

- Develop a strategy to deal with land claims in the Land Claims Court, to ensure that these are “winnable strong cases” setting good precedent and appealing cases that may set a bad precedent;
- Ensure sustainability, beneficiation and contribution to poverty eradication, economic growth and the creation of employment opportunities, as well as the vibrancy of land restitution projects, going forward.
- Effective support to all land reform programmes through land planning and information:
 - Provide a reliable and efficient property/deeds registration system; improving it by modernizing and digitizing the cadastres (e-cadastre);
 - Contribute to economic growth and housing development by providing government and private agents with essential land information to engage in planning as well as economic transactions;
 - Provide a basis for the design of a land value tax, land valuation and sustainable land management;
 - Provide surveys and mapping services to various clients for different needs;
 - Provide spatial planning information and services to local municipalities and other public or private institutions that may need these services for developmental purposes.

It must be noted that this is only a strategy, which differs in its approach from the NSDP in the sense that it does not make reference to specific areas/municipalities, or prescribe what actions need to be taken within specific municipalities. It merely outlines the aspects that must be addressed to ensure the comprehensive development of rural areas.

Not all aspects as listed under the three components (e.g. land redistribution/restitution), are applicable to the development of a Spatial Development Framework, as the SDF is a planning tool that focus on land use irrespective of the ownership. Redistribution for example is a political aspect/tool which focuses on land ownership, and more specific the ownership of agricultural land.

The aspects that are applicable to land use, includes items such as Economic & Social Infrastructure, Public Amenities and the protection of agricultural land and activities. These aspects will form an integral part of all the phases of this SDF from analysis to project proposals. The Spatial Development Framework will be the tool that ensures the future development of the rural Municipalities by providing direction on the provision of facilities, and identifying economic catalytic projects which will kick-start the development and exponential growth of the rural communities in all areas that is deemed as being part of a vibrant community.

2.1.3 Accelerated And Shared Growth Initiative (Asgi-Sa)

The Goals of ASGI-SA is the following:

- Formulate medium-term educational interventions to raise the level of skills in areas needed by the economy as immediate measures to acquire the skills needed for the implementation of ASGI-SA projects.
- Ensure skills transfer to new graduates by deployment of experienced professionals and managers to local governments to improve project development, implementation and maintenance capabilities.
- Leverage the increased levels of public expenditure, especially investment expenditure, to promote small businesses and Broad-Based Black Economic Empowerment.
- Focus on expanding and accelerating access to economic opportunities including skills development and finance for women.
- Leverage through Broad Based Black Economic Empowerment to support shared growth.

Support efforts to establish new venture funds for small, medium and micro enterprises.

The Accelerated and Shared Growth Initiative (ASGI-SA) is aimed at the development of South Africa As a whole, but with the emphasis on development of previously disadvantaged areas. The broader aim is therefore not only to promote economic development, but to empower the communities through active involvement in projects. This empowers communities through skills development to be able to participate in the formal economy and labour market.

This obviously has implications on an institutional as well as physical/spatial level. To have an impact on communities, it is necessary to ensure that public investment expenditure, which are to promote small businesses and Broad-Based Black Economic Empowerment, be implemented in areas with the highest economic need. The occurrence of Economic need should coincide with areas which have the highest physical need as well, translated

into the lack of services. The provision of services through a labour intensive, Extended Public Works Program will provide investment in the municipality as well as provide training and skills. Through preferential procurement procedures, emerging contractors/entrepreneurs will be able to participate in the formal economy.

The goal of uplifting poor areas implies that the strategies to be implemented by ASGISA, targets communities within the poorest rural areas of South Africa, where the second economy (which needs to be combatted) functions. The National Spatial Development Perspective indicated that the poverty levels of Zululand are of such significance that it is depicted on national level as one of the poorer areas. The philosophy for implementing projects geared towards ASGI-SA in Zululand is thus obvious.

2.1.4 Industrial Policy Action Plan

In January 2007 Cabinet adopted the National Industrial Policy Framework (NIPF) which sets out Government's broad approach to industrialisation with the following core objectives:

- To facilitate diversification beyond our current reliance on traditional commodities and non-tradable services. This requires the promotion of increased value-addition characterised particularly by movement into non-traditional tradable goods and services that compete in export markets as well as against imports.
- The long-term intensification of South Africa's industrialisation process and movement towards a knowledge economy.
- The promotion of a more labour-absorbing industrialisation path with a particular emphasis on tradable labour-absorbing goods and services and economic linkages that catalyse employment creation.
- The promotion of a broader-based industrialisation path characterised by the increased participation of historically disadvantaged people and marginalised regions in the mainstream of the industrial economy.
- Contributing to industrial development on the African continent, with a strong emphasis on building its productive capacity.

Prior to the global economic crisis of 2008, South Africa achieved a relatively high growth rate, which masked a number of structural challenges within the South African Economy.

By further investigating these challenges it became clear that a need exist to develop a comprehensive and integrated response to scale up industrial development.

Important to note is the role of IPAP in relation to other policies, which advances the work of the Economic Sectors and employment clusters in the following ways:

- Rural development through interventions in a range of sectors such as agro processing, bio-fuels, forestry, cultural industries, aquaculture, tourism
- Advanced technological capabilities through interventions in the nuclear, advanced materials, aerospace, and ICT industries
- A serious first step towards the systematic promotion of Green and energy-efficient goods and services.
- Downstream mineral beneficiation
- Strengthened linkages between Tourism and Cultural industries
- Stronger integration between sector strategies, skills development plans and commercialisation of publicly funded innovation.
- Macro-economic stability through:
 - Improvements in the trade balance
 - Lowering of inflationary pressures through increased supply and competition in a range of sectors
 - It has a profound positive net revenue impact
 - It contributes to medium to long-term diversification of the economy and hence risks mitigation.
- A substantial contribution to the creation of decent jobs, both directly and indirectly.

To support IPAP the following policies were developed, and is critical to facilitate the implementation of Industrial Development. These policies include:

1. Stronger articulation between macro and micro economic policies

2. Industrial financing channelled to real economy sectors.
3. Leveraging public and private procurement to raise domestic production and employment in a range of sectors, including alignment of B-BBEE and industrial development objectives, and influence over private procurement.
4. Developmental trade policies which deploy trade measures in a selected and strategic manner, including tariffs, enforcement and SQAM (standards, quality assurance and metrology) measures.
5. Competition and regulation policies that lower costs for productive investments and poor and working class households.
6. Skills and innovation policies that are aligned to sectoral priorities.
7. Deploying these policies in general and in relation to more ambitious sector strategies, building on work already done

Each of the above policies identifies key programmes, including milestones to monitor the progress of implementation of the strategy.

The Industrial Policy Action Plan focuses on three clusters of production sectors to be developed/expanded.

Cluster 1 – Qualitatively new areas of focus

- Realising the potential of the metal fabrication, capital and transport equipment sectors, particularly arising from large public investments;
- ‘Green’ and energy-saving industries;
- Agro-processing, linked to food security and food pricing imperatives;

Cluster 2 – Scale up and broaden interventions in existing IPAP sectors

- Automotive, components, medium and heavy commercial vehicles
- Plastics, pharmaceuticals and chemicals
- Clothing, textiles, footwear and leather
- Biofuels
- Forestry, paper, pulp and furniture
- Strengthening linkages between cultural industries and tourism
- Business process servicing

Cluster 3 – Sectors with potential for long-term advanced capabilities

- Nuclear
- Advanced materials
- Aerospace

The realities and impact on local authorities includes the implementation and enforcement of policies:

- Procurement of Industrial Financing
- Development and implementation of a Competition Policy
- Implementation of Developmental Trade Policy
- Public Procurement Policies

2.1.5 New Growth Path

There is growing consensus that creating decent work, reducing inequality and defeating poverty can only happen through a new growth path founded on a restructuring of the South African economy to improve its performance in terms of labour absorption as well as the composition and rate of growth. The Government is committed to forging such a consensus and leading the way by:

- Identifying areas where employment creation is possible on a large scale as a result of substantial changes in conditions in South Africa and globally.
- Developing a policy package to facilitate employment creation in these areas, above all through:
 - i. A comprehensive drive to enhance both social equity and competitiveness;
 - ii. Systemic changes to mobilise domestic investment around activities that can create sustainable employment; and
 - iii. Strong social dialogue to focus all stakeholders on encouraging growth in employment-creating activities.

In essence, the aim is to target limited capital and capacity at activities that maximise the creation of decent work opportunities. To that end, both macro and micro economic policies need to be created to develop an overall favourable environment and to support more labour-absorbing activities.

These strategies/policies are called development packages, which entails the following:

- **Macro-Economic Package:** Careful balancing of more active monetary policy interventions to achieve growth and job targets.
- **Microeconomic Package:** Targeted measures to control inflationary pressures and support competitiveness and increased equity through ten programmes:
 1. Active Industrial Policy
 2. Rural Development Policy
 3. Competition Policy
 4. Stepping up Education and skills development
 5. Enterprise development
 6. BBBEE
 7. Labour Policies
 8. Technology Policy
 9. Developmental Trade Policy
 10. Policies for African Development
- **Stakeholder commitments:** National consensus on wages, prices and savings.

The state must coordinate its efforts around core priorities rather than dispersing them across numerous efforts, however worthwhile, that do not contribute to a sustained expansion in economic opportunities for our people. These are the core characteristics of a developmental state.

The requisite policy stability and coherence will be supported by effective social dialogue that helps establish a broad consensus on long-run policy goals and a vision for the country, and facilitates the necessary trade-offs and sacrifices by ensuring a visibly fair distribution of the benefits from growth. Engagement with stakeholder representatives on policy, planning and implementation at national, sectoral and local levels is central to achieving coherent and effective strategies that are realised without endless debates and delays. That, in turn, means government must both strengthen its own capacity for engagement and leadership, and re-design delivery systems to include stakeholders meaningfully.

The growth path therefore proposes strategies:

- To deepen the domestic and regional market by growing employment, increasing incomes and undertaking other measures to improve equity and income distribution, and
- To widen the market for South African goods and services through a stronger focus on exports to the region and other rapidly growing economies.

The measures in the New Growth Path, considered together, constitute a key means to address the income inequalities in our society. They place decent work (more and better jobs) at the centre of the fight against inequality but also include measures such as skills enhancement, small enterprise development, wage and productivity gain-sharing policies, addressing the excessive pay gap between top and bottom, progressive taxation and support for the social wage, meaning public services targeted primarily at low-income households.

The connection between economic and social measures needs to be further strengthened. In addition to their important social goals, basic and secondary education plays a critical role in long-run equality, access to employment and competitiveness. So does investment in health, including effective measures to address HIV/AIDS. Government has prioritised health and education investment and delivery. While the detailed measures are not spelt out in the New Growth Path, these services are critical success factors for this employment-rich strategy.

Jobs Drivers

If employment can be increased by five million jobs by 2020 (around three million more than the anticipated growth if we extrapolated from 2002 to 2009), over half of all working-age South Africans would have paid employment and narrow unemployment would drop by 10 percentage points from 25% currently to around 15%.

In each of these areas, special effort will have to be made to generate opportunities for young people, who face the highest unemployment rate. Job Drivers need to facilitate the creation of employment opportunities. It is thus necessary to develop new approaches to strengthen the job drivers which are:

- Job Driver 1: Infrastructure.
 - Maintenance of spending plans
- Job Driver 2: Main economic sectors.
 - Agricultural value chain
 - Mining value chain
 - Manufacturing
 - Tourism & High-level services
- Job Driver 3: Seizing the potential of new economies.
 - The Green Economy
 - Growing the Knowledge Economy
- Jobs Driver 4: Investing in social capital and public services.\
 - The Social Economy
 - The Public Sector
- Jobs Driver 5: Spatial development.
 - Rural Development
 - African Regional Development

While urbanisation will continue, a significant share of the population will remain in rural areas, engaged in the rural economy. Government need to step up efforts to provide public infrastructure and housing in rural areas, both to lower the costs of economic activity and to foster sustainable communities.

The main indicators of success will be jobs (the number and quality of jobs created), growth (the rate, labour intensity and composition of economic growth), equity (lower income inequality and poverty) and environmental outcomes.

2.2 Provincial Policies

2.2.1 Provincial Spatial Economic Development Strategy

The KwaZulu-Natal Spatial Economic Development Strategy (PSEDS) was formulated in 2007 as a spatial economic assessment of the areas of need and potential within the province. The PSEDS is intended as a guide to service delivery within the cluster to achieve the goals set in ASGI-SA to halve poverty & unemployment by 2014.

The PSEDS is built on the principles of the National Spatial Development Strategy (NSDP), namely:

Principle 1: Rapid **economic growth that is sustained and inclusive** is a prerequisite for the achievement of poverty alleviation

Principle 2: **Fixed investment** should be focused in localities of economic growth or economic potential

Principle 3: Where low economic potential exists investments should be directed at projects and programmes to **address poverty and the provision of basic services** in order to address past and current social inequalities

Principle 4: Future settlement and economic development opportunities should be channelled into **activity corridors and nodes** that are adjacent to or link the main centres

Four key sectors have been identified as drivers of economic growth in the KWAZULU-NATAL, namely:

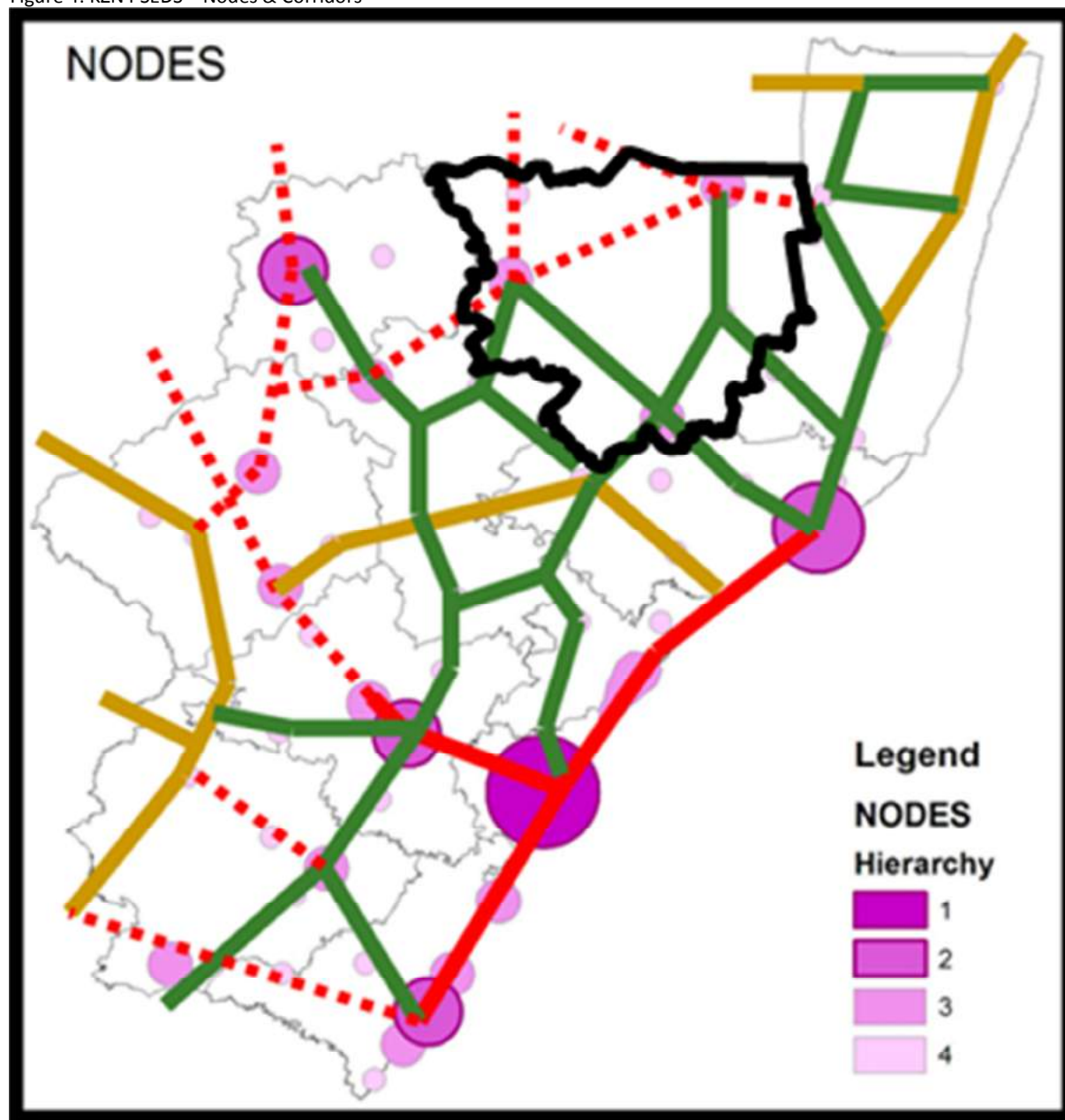
- The **Agricultural sector** (including agri-processing and land reform)
- The **Industrial sector** (Including Manufacturing)
- The **Tourism sector**
- The **Service sector** (including government services)

The logistics and **transport** sector (including rail) in the services sector are important sub-sectors underpinning growth in all four sectors. Sustainable and affordable **water and energy** provision is crucial to the economic growth & development of the province. The above sectors are discussed in more detail in the Status Quo Analysis, and

therefore we only provide an overview of the Nodes and Corridors to be utilised as investment points to grow the above sectors.

The image below is an extract from the KZN PSEDs 2007, which depicts Pongola, Ulundi and Vryheid as third order nodes (on provincial level), and Nongoma and Paul Pietersburg as fourth Order Nodes.

Figure 4: KZN PSEDs – Nodes & Corridors



Source: KZN PSEDs, 2007

2.2.1.1 Norms & Standards For Provision Of Facilities

The norms and Standards as outlined in the table below were researched from various sources, which are also captured in the table. These standards were utilised in the analysis of service and facility provision, to determine whether services are under provided, and where additional services needs to be installed.

Table 1 : Norms & Standard for Provision of Facilities

Facility	Thresholds Standard (1 Facility / X People)	Access Standard
Education *		
Pre-school (Inch Crèche & Day Care)	5 000	Walking Distance
Multi skilling / Training Centre / ABET	Need	Combined with other Community Facilities
Primary School	3 000	1,5km / 20min travel
Secondary School	6 000	5km Walking Distance
Tertiary Training (Excl. University)	100 000	
Library	50 000	Accessible Via Public Transport
Health **		
Clinic	5 000	Within Nodal Area. Accessible via Public Transport
Hospital	50 000	Within Nodal Area close to Major Public Transport Route
Safety & Security Facilities ***		
Magistrates Court	1 / Town	Within Primary Nodes
Fire Station	60 000	High Access Routes
Emergency Services Facility	25 000	High Access Routes
Community Safety Centre	200 000	Nodal Area
Police Station	50 000	Within Accessible nodal Areas
Police Station Mobile	25 000	
Social		
Cemetery	Need	Need
Orphanage	200 000	Within Accessible nodal Areas
Church	2 500	Near (Not on) Transport Routes
Civic Centre	1	
Multi Purposed Community Centre / Tsusong Centre	1	Within Accessible nodal Areas
Community Hall	20 000	Within Accessible nodal Areas
Old Age Home and Service Centre	1 / Town	
Pension Pay Point	Need - Min of 1 / Node	30 Min Travel
Post Office	11 000	1km/20min Walking
Post Boxes	16 500	500m/10min Walking distance
Traditional Admin Centre	1 / Tribal Authority	
Sport & Recreation		
Sport Complex (Incl Swimming Pool)	50 000	Within Primary Nodes
Sports Field	12 000	Clustered with schools
Transport		
Bus Service on Regular Basis	1/Node	Clustered within Nodal Areas
Taxi Rank and/or Bus Depot	1/Node	Clustered within Nodal Areas

Source: "Guidelines for Planning of Facilities in KwaZulu-Natal"

2.2.2 Provincial Growth And Development Strategy

The Provincial Growth and Development Strategy recognises that environmental vulnerability, social need and economic development are not evenly distributed and spatial disparities will always exist due to the spatial

distribution of natural resources, historical imperatives and cultural factors. These spatial disparities have often been aggravated by past spatial planning. This has resulted in a disjuncture between where people live and where social and economic opportunities are concentrated. This spatial marginalization from economic opportunities of the majority of the population needs to be addressed in order to reduce poverty and inequality and ensure shared growth and the protection of vulnerable bio-resources. The KwaZulu-Natal Provincial Spatial Development Strategy has therefore been developed in order to achieve the goals and objectives of the PGDS in a targeted and spatial co-ordinated manner.

The following nine spatial principles underscores the general spatial intentions of the PGDS and serves as provincial guiding principles which should ideally be pursued within all levels of spatial planning at district and local level in alignment with the provincial spatial development strategy.

Figure 5: Spatial Development Principles



The above principles are unpacked in more detail below.

2.2.2.1 Principle Of Sustainable Communities

The Principle of Sustainable Communities promotes the building of places where people want to live and work. Again the sense of Quality of Living refers to the balance between environmental quality, addressing social need and promoting economic activities within communities.

Often communities within the rural context of KwaZulu-Natal are not located in the areas with perceived highest economic potential. Where low economic potential exists planning and investments should be directed at projects and programmes to address poverty and the provision of basic services in order to address past and current social inequalities towards building sustainable communities.

2.2.2.2 Principle of Economic Potential

The Principle of Economic Potential aims to improving productivity and closing the economic performance gap between the various areas of KwaZulu-Natal towards economic excellence of all areas. Rapid economic growth that is sustained and inclusive is seen as a pre-requisite for the achievement of poverty alleviation.

The principles further promotes the consideration of spatial needs for Economic Competitiveness (Potential) by proposing an asset based spatial approach based on unique advantages and opportunities within various areas. An essential component of this principle is the engagement of the private sector in the refinement and spatial economic needs of any particular zone / area.

2.2.2.3 Principle of Environmental Planning

The Principle of Environmental Planning (Bioregional Planning) refers to understanding and respecting the environmental character (potential and vulnerability) and distinctiveness of places and landscapes and promoting balanced development in such areas.

The PSDF supports environmental planning as the fundamental methodology on which spatial planning should be based. Thus, rather than being a reactionary barrier to commenced development, the environment is seen as an enabling primary informant to spatial planning and development. Environmental planning can be defined as land-use planning and management that promotes sustainable development. The environmental planning methodology involves the use of Broad Provincial Spatial Planning Categories to reflect desired land use.

2.2.2.4 Principle of Sustainable Rural Livelihoods

The Principle of Sustainable Rural Livelihoods considers rural areas in a way which is integrated with other decision making associated with the Sustainable Livelihoods framework. This principle requires that spatial planning consider the locality and impact of human, physical, natural, financial and social capitals of an area and spatially structure these in support of each other.

Another aspect of this principle is promoting spatial planning in a continuum where rural areas are not addressed as completely separate entities to urban centres, but rather a gradual change in landscape with the potential progression of rural areas to more closely resemble the service standards and quality of living achieved in some urban contexts.

2.2.2.5 Principle of Spatial Concentration

The Principle of Spatial Concentration aims to build on existing concentrations of activities and infrastructure towards improved access of communities to social services and economic activities. In practical terms this promotes concentration along nodes and corridors with multi-sectoral investment i.e. roads, facilities, housing etc. This is envisaged to lead to greater co-ordination of both public and private investment and result in higher accessibility of goods and services to communities while ensuring more economic service delivery.

This principle will further assist in overcoming the spatial distortions of the past. Future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or link the main growth centres in order for them to become regional gateways.

2.2.2.6 Principle of Local Self-Sufficiency

The Principle of Local Self-Sufficiency promotes locating development in a way that reduces the need to travel, especially by car and enables people as far as possible to meet their need locally. Furthermore, the principle is underpinned by an assessment of each areas unique competency towards its own self-reliance and need to consider the environment, human skills, infrastructure and capital available to a specific area and how it could contribute to increase its self-sufficiency.

2.2.2.7 Principle of Co-Ordinated Implementation

The Principle of Co-ordinated Implementation actually projects beyond spatial planning and promotes the alignment of role-player mandates and resources with integrated spatial planning across sectors and localities. Essentially the principle suggests that planning-implementation becomes a more continuous

process and that government spending on fixed investment should be focused on planned key interventions localities.

This principle ultimately also proposes a move towards more developmental mandate definitions of the various departments away, from single mandates to enable the spatial alignment of growth and development investment.

2.2.2.8 Principle of Accessibility

The Principle of Accessibility simply promotes the highest level of accessibility to resources, services, opportunities and other communities. This is intrinsically linked to transportation planning and should consider localised needs for the transportation of people and goods by various modes of transport as guided by the scale and function of a region. At a provincial level there is a strong correlation between the most deprived areas and poor regional accessibility to those areas. In addressing accessibility at provincial and local level, the need for possible new linkages, the upgrade in the capacity of existing linkages and the suitable mix of modes of transport should be considered.

2.2.2.9 Principle of Balanced Development

The Principle of Balance Development promotes the linking of areas of economic opportunity with areas in greatest need of economic, social and physical restructuring and regeneration at all spatial scales. In practical terms the principles sought to find a balance between the potentially competing land uses by understanding the relationship and integration between major dimensions within the province and promoting a synergetic mixture of land uses in support of each other at various spatial scales.

Before analysing the spatial realities and the implications of these principles on the Zululand District Municipality, it is necessary to depict the relationship between the two sets of principles.

From these principles, the Provincial Spatial Development Strategy identified a number of provincial priority nodes, corridors and broad planning categories. The map overleaf illustrates the resulting provincial spatial strategy, localised for the Zululand District Municipality and need to be read in conjunction with the tables below, providing a brief explanation to the categories illustrated on the map.

The various nodes and their broad intended function and possible interventions are described by the table below.

Intervention Node	Broad Intended Function
Primary Node	Only eThekweni is classified as a Primary Node within the Provincial Context as an urban centre with very high existing economic growth and the potential for expansion thereof. Provides service to the national and provincial economy.
Secondary Nodes	Richards Bay, Msunduzi, Newcastle and Port Shepstone has been identified as provincial Secondary Nodes and thus urban centres with good existing economic development and the potential for growth and services to the regional economy.
Tertiary Nodes	These nodes are mainly centres which should provide service to the sub-regional economy and community needs and is represented by the following towns such as Pongola, Vryheid, Ulundi, Dundee, Ladysmith, Estcourt, Howick, KwaDukuza, Ixopo, Scottburgh, Hibberdene, Kokstad, and Margate.
Quaternary Nodes	These nodes are mainly centres which should provide service to the local economy and community needs and is represented by 31 towns, such as but not limited to: Port Edward Nongoma, Nkandla, Bergville, Greytown, Underberg, uMzimkulu, etc.
Rural Service Centres	The proposed rural service centres are envisaged to serve as the lowest level of provincial nodes and could typically be established around existing traditional administration centres as well as other accessible rural points identified as periodic markets. These will be identified in

consultation with the district municipalities and should serve as first access to basic services within rural areas. These rural service centres will include, as some have already emerged to include, a combination of the following activities:

- Traditional administration centre,
- Taxi/ bus stop,
- Informal trading / market area,
- Social facility (clinic, library etc.),
- Skills development centre (mainly local schools),
- Mobile services point (mobile clinics, pension pay points, mobile library etc.)
- Small commercial facility
- Recreational facility such as a sport field.

A conceptual model of these rural service centres will guide the formulation of a provincial implementation strategy towards the implementation of the proposed Rural Service Centres.

The Broad Provincial Spatial Planning Categories (BPSPCs) which are indicated within the above illustrated provincial spatial development framework should be interpreted as follow:

Table 2: KZN Spatial Development Plan – Interpretation Notes

Spatial Planning Category	Broad Intended Land Use and Interventions
Conservation Corridors	Proposed regional critical conservation areas which are linked in a continuous system of ecosystems and bioregions traversing the province between the Drakensberg and the Indian Ocean. These areas were identified combining existing environmentally protected areas as well as conservation corridors proposed by Ezemvelo KZN Wildlife, through combining extensive environmental research into bio-resources throughout the province as part of the formulation of a Critical Biodiversity Plan for the province. These Conservation Corridors are not suggested as absolute “no-go” areas, but rather highlighted as areas of environmental significance to the sustainable development of the entire province. Where economic opportunity (such as tourism development) and high social need exist within these Conservation Corridors, it implies both that the rich natural environment should contribute to the address such needs and potential, and further that any interventions in these areas need to consider the impact on such important regional ecological corridors. These corridors are however perceived as areas where extensive densification would be discouraged and sensitive development promoted.
Biodiversity Priority Areas	Areas with a significantly high biodiversity value expressed in the number of species and sensitive environments as identified through extensive research by Ezemvelo KZN Wildlife. These areas are most often located in close proximity to the identified Conservation Corridors and may serve as an additional buffer to these corridors. These areas too are not (at a provincial level) proposed as absolute “no-go” areas, but are identified to indicate areas where extensive densification would be discouraged and sensitive development promoted.
Areas of Economic Value Adding	The key economic centres and areas where all of the varieties of economic sectors (Agriculture, Tourism, Manufacturing, and Services) are prevalent and perceived to have good potential to be further expanded on. These areas are visibly linked to high accessibility areas with existing bulk infrastructure and relatively high population densities which would both contribute to the economic expansion and benefit from interventions in

	these areas. Due to these factors, further economic processing and value adding at a provincial level, are mainly proposed within these identified areas.
Areas of Economic Support	A number of regions resembled areas of good economic potential in more than just one of the key provincial economic sectors. Due to the fact that these areas represent a larger distribution across the entire province than the core areas of economic value adding, these zones are considered important areas of Economic Support. Typical interventions in these areas would include economic prioritisation of development, labour force interventions (e.g. skills development), key economic infrastructure investment and area promotion.
Areas of Agricultural Development	Relatively high agricultural production areas, which are not located within biodiversity areas of combined with other potential economic sectors, are highlighted by this category to identify and promote areas with the potential to make a significant contribution through agricultural production. Although successful farming practices are already occurring on some of these areas, it is proposed that underutilised agricultural land within these zones are more effectively utilised for sustainable agricultural production. Associated interventions may include agriculture specific infrastructure, skills development, market access interventions etc.
Areas of High Social Need	The highest ranges of combined social need when considering the population density, dependency ratio as the provincial index of multiple deprivations is illustrated by this category of high social need. These area broadly the areas where the most intensive social interventions area required and this category is further over layed above all other categories to provide a spatial reference to the types of interventions which might be pursued towards addressing the concentrated social need within these areas. As example where high social need is identified within an area earmarked as a conservation corridor, this firstly provides a reference to the fact that social conditions of communities will need to be addressed if any conservation is to be promoted within such areas. Further it suggests that the effective utilisation of the high biodiversity within such areas might be harnessed towards addressing social need through example conservation tourism.
Undifferentiated Areas	The areas which are not representative of any of the above mentioned categories are classified as undifferentiated areas. It is acknowledged that these areas also have communities residing on them with economic potential and environmental resources, however, based on the approach followed these areas weren't differentiated to the same degree as the identified preceding categories. It is therefore important that this category is not neglected from public and private interventions and as the various departmental programmes are inclusive in nature, these areas should also benefit from it. It is anticipated that the intensity of such programmes and the total portion of resource allocation to these areas would be less than the identified categories as well as the key intervention areas identified previously.

Please refer to the plan below for an extract of the Provincial Spatial Development Strategy related to the Zululand District Municipality, and to the figure below for a depiction of the above. The largest grouping of economic activities is situated around Vryheid where a large number of economic support areas are situated. This related mainly to agricultural activities. The Main Agricultural investment areas are situated in eDumbe LM around Paulpietersburg and are aimed at Forestry activities. Areas to the South of Pongola are identified as Critical Biodiversity Priority 1 areas and as is depicted later in the document, target the dense bush lands. The rural areas, which is mainly owned by the Ingonyama Trust, is earmarked as social intervention areas which depicts the high poverty levels and need for government intervention in these areas.

Figure 6: Provincial Spatial Development Framework – Zululand District Municipality

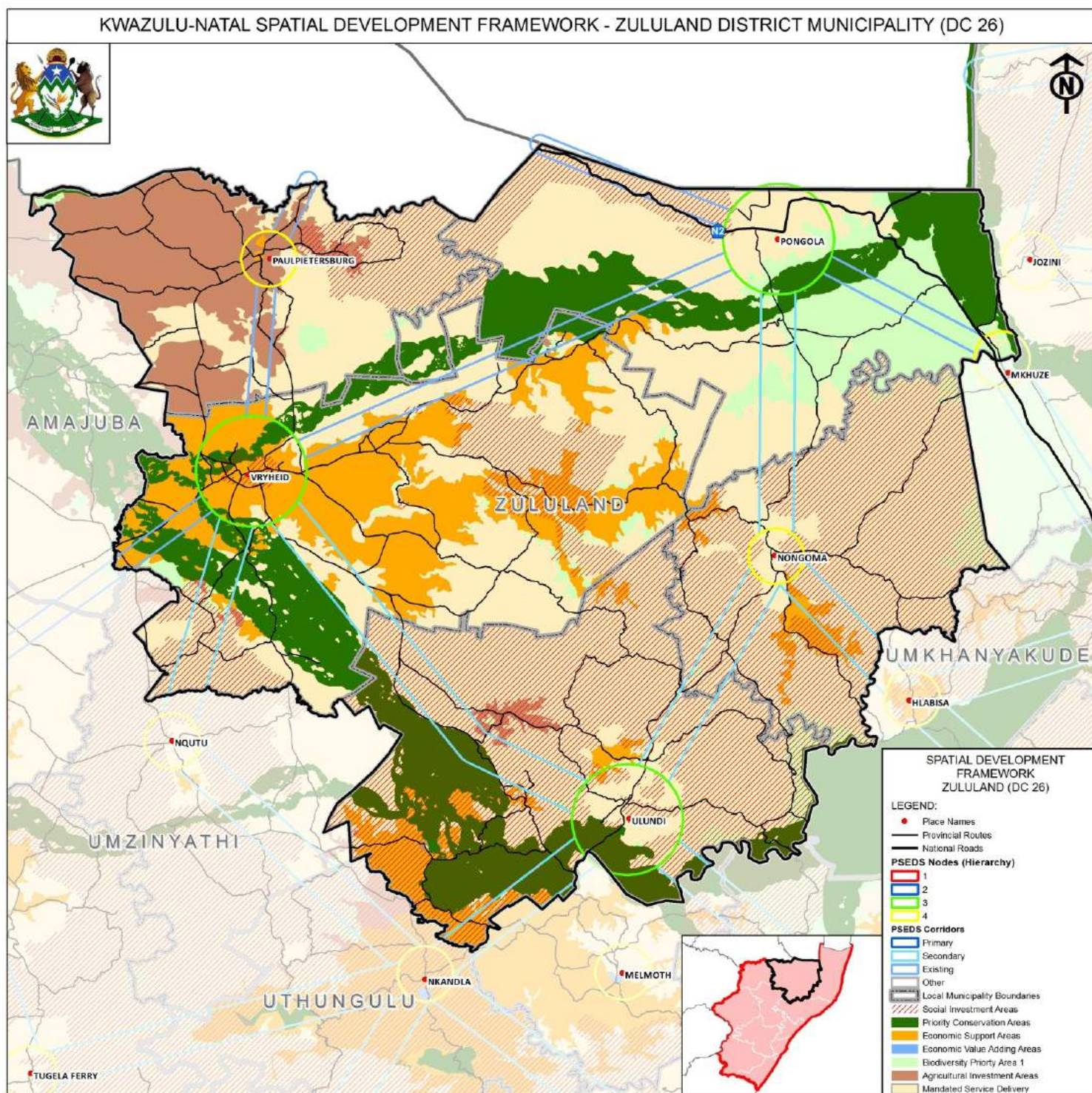


Figure 7: KZN SDF – Zululand District Municipality

2.3 District Policies

2.3.1 LED Strategy

The Zululand District Municipality Local Economic Development strategy (2003) has a number of set objectives, strategies and principles that needs to be considered during the development of the SDF. These are briefly discussed in the sections below.

LED Objectives

The ZDM LED strategy has the following overall objectives to be achieved.

Table 3: ZDM LED Strategy Objectives

Reduction in income leakage	Ensure spendable income is utilised within district itself.
To increase investment (Local and external)	Investment in tourism, agriculture and business is to be promoted
To promote local business development and business interaction	Interaction between businesses will contribute to countering income leakage and establishing a new vibrancy in the economy.
To increase entrepreneurial opportunities and employment	All the objectives need to be supported by a strong focus on entrepreneurial development, micro and small business establishment, and employment creation through appropriate support mechanisms.

Source: ZDM LED Strategy 2003

Principles

In addition to the above mentioned objectives, the following principles needs to be considered during development of the ZDM Spatial Development Framework.

Table 4: ZDM LED Strategy Principles

Process approach:	Local economic development is a process and the planning for implementation should consider the logical steps involved in such a process, i.e. a focus on small scale community tourism if tourists cannot be attracted to the area will not be sustainable.
Sustainability	Local economic development processes should be economically, socially and environmentally sustainable, e.g. the impact of coal mining on the environment and specifically on tourism needs to be considered, because it is makes economic sense does not suggest that it is sustainable.
Collaborative effort / Coordination	The District Municipality views economic development as a collaborative effort in which a wide range of stakeholders have a role to fulfil. The successful implementation of the strategies will be dependent on all stakeholders fulfilling its specific role in a coordinated fashion.
Market based	Support for new economic development ventures will be based on a clearly defined market for the products / services which the venture will deliver.
Integration	Integration of existing and new economic development ventures are essential. The upstream and downstream impact of ventures within the District needs to be considered. The impact of ventures should not be considered in isolation.

Source: ZDM LED Strategy 2003

Strategies

The sector specific strategies relating to the District are outlined in the table below:

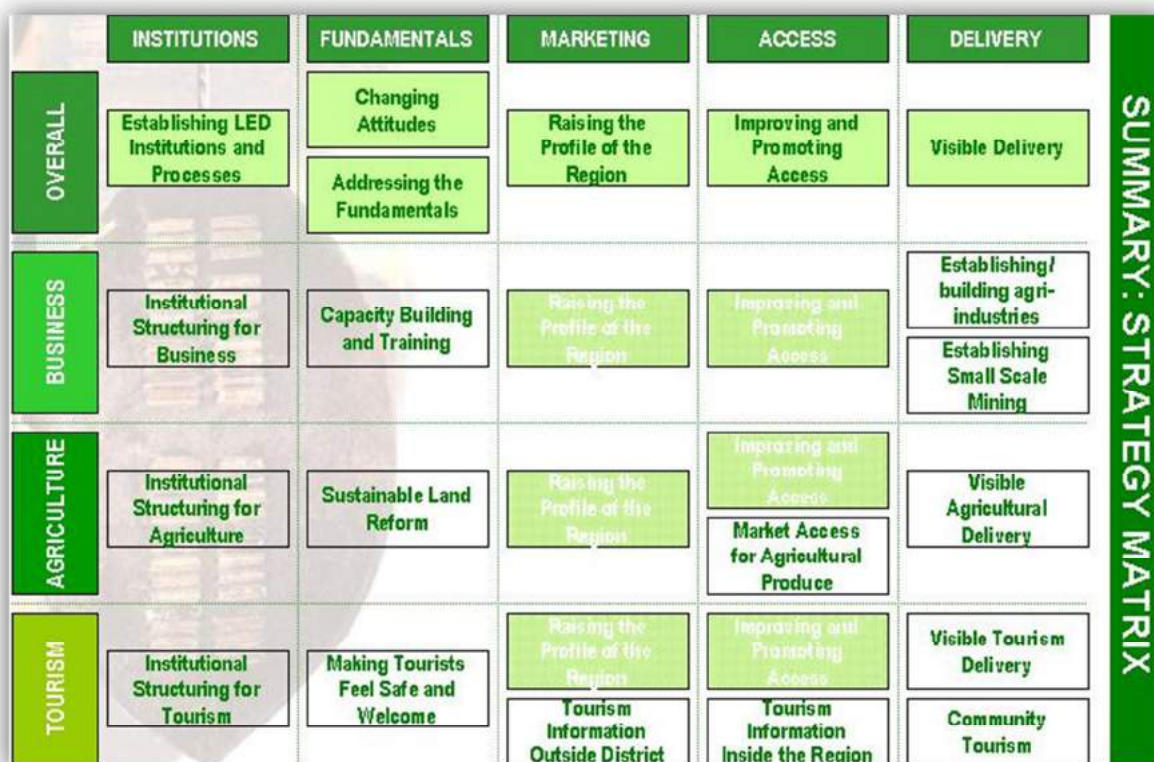
Table 5: ZDM LED Strategy – Strategies

DISTRICT STRATEGIES	<ol style="list-style-type: none"> 1. Establishing LED institutions and processes 2. Changing attitudes 3. Addressing the fundamentals 4. Raising the profile of the region 5. Improving and Promoting Access 6. Visible Delivery
BUSINESS STRATEGIES	<ol style="list-style-type: none"> 1. Institutional structuring for delivery 2. Capacity building and training 3. Establishing/building agri-industries 4. Establishing small scale mining 5. Municipal business strategies
AGRICULTURE STRATEGIES	<ol style="list-style-type: none"> 1. Institutional structuring for agricultural delivery 2. Sustainable land reform 3. Improved market access for agricultural produce 4. Visible delivery in agricultural sector 5. Municipal agricultural strategies
TOURISM STRATEGIES	<ol style="list-style-type: none"> 1. Institutional structuring for tourism 2. Tourist information inside the District 3. Tourist information outside the District 4. Making tourists feel safe and welcome 5. Community tourism 6. Visible tourism delivery 7. Municipal tourism strategies

Source: ZDM LED Strategy 2003

The above strategies are summarised and depicted on the diagram below:

Figure 8: Integrated LED Strategy



Source: ZDM LED Strategy

2.3.2 WSDP Strategy

The Water Services Development Plan has an impact on the Spatial Development of the District, as physical development initiatives needs to be timed to link/coincide with the roll-out strategy of water & Sanitation projects. In addition to the roll-out plan and projects to be implemented, the WSDP does not contain specific strategies that will impact on the compilation of the Spatial Development Framework.

The WSDP contains strategies to manage water usage and conservation, which are listed below. As indicated above, this does not impact directly onto the compilation of the SDF but assist in managing water utilisation. These strategies are the following:

- Influencing the behaviour of consumers:
 - School and public educational and awareness programmes aimed at promoting effective usage of water (brochures, advertising, newsletters, demonstrations, exhibits, informative billing, etc);
 - Water services tariff that promotes efficient water usage;
 - Any other “win-win” initiatives that could influence consumers positively;
- Specific targeted projects like:
 - Repair plumbing leaks inside properties;
 - Installation of water flow control devices, etc;

The roll-out plan for the WSDP will be discussed in more detail in the status quo section, and will provide the timeframes for rollout of the SDF.

3 CURRENT REALITIES

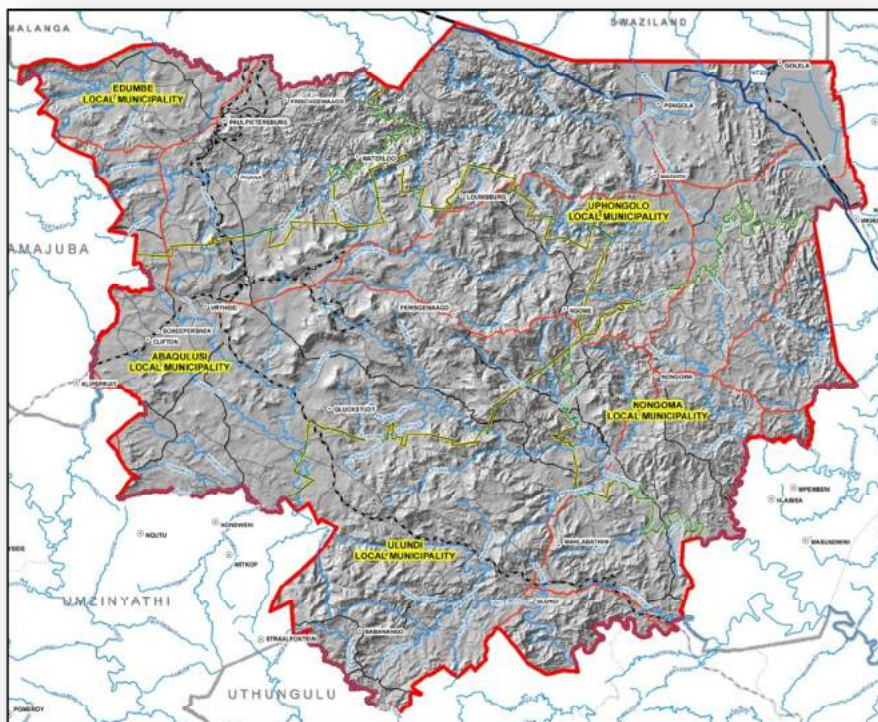
The following section aims to provide an overview of the Status Quo, or the current situation within the Zululand District Municipality. The section addresses the following aspects:

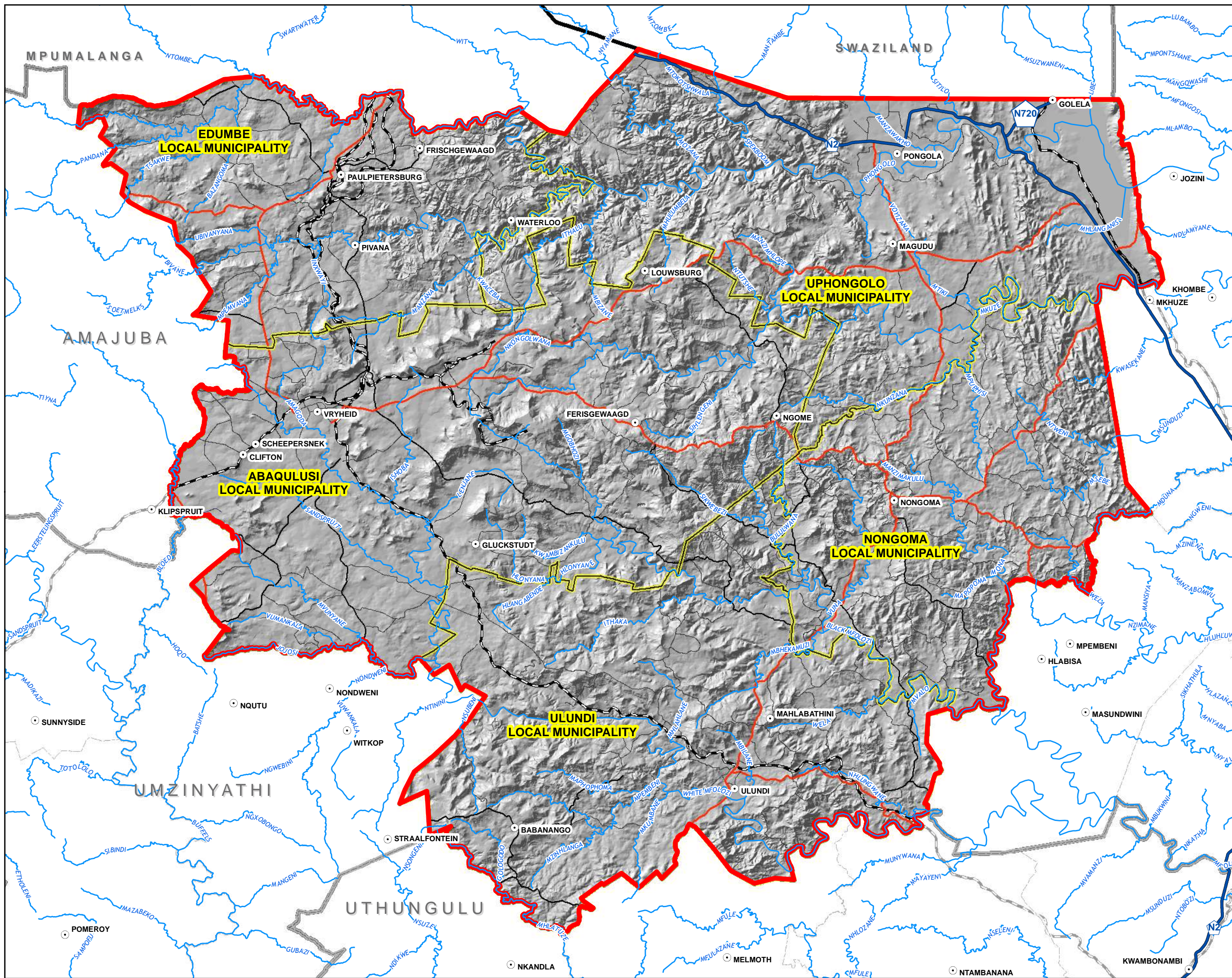
- Natural Resources, which looks at the physical features of the Municipality such as the topography and landscape, water bodies etc. These features will influence the spatial distribution proposed land uses, and guide inputs into the planning scheme to protect natural features and environmental services.
- Human Resources, which looks at the demographics, the population distribution and the distribution of poverty pockets. This will guide focused investments aimed at poverty eradication and social upliftment projects.
- Social Resources, which address availability of social infrastructure to service the community, such as medical facilities, educational facilities, public safety facilities etc. This will guide the spatial distribution of facilities to ensure optimum accessibility to such facilities by the public.
- Physical Resources, looks at basic services such as water & sanitation, roads and transportation facilities. This will guide the identification of areas lacking accessibility via roads, and subsequently allow for the establishment of the linkages that increase accessibility and from economic activities.
- Financial Resources, addressing the economic climate within the municipality, to guide the identification of projects that can increase economic activities within the municipality.

3.1 Natural Resources

3.1.1 Locality

The Zululand District Municipality is situated on the northern boundary of the KwaZulu-Natal Province which is also an International border (via uPhongolo Municipality) with the Kingdom of Swaziland. The eDumbe Municipality is also situated on a Provincial Boundary with the Mpumalanga Province, and as such has implications on the management of cross border aspects. Please refer to the Image below as well as **Map 1: Regional Locality** on overleaf.





**ZULULAND
DISTRICT MUNICIPALITY
SPATIAL DEVELOPMENT
FRAMEWORK**

LOCALITY MAP

LEGEND

- Place Names
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Zululand District Municipality
- Local Municipalities
- District Municipalities

MPUMALANGA
FREE STATE
UMZINYATHI
KWAZULU-NATAL
NORTH CAPE
WEST CAPE
EASTERN CAPE
INDIAN OCEAN

0 2.5 5 10 15 20
Kilometres

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3.1.2 Elevation

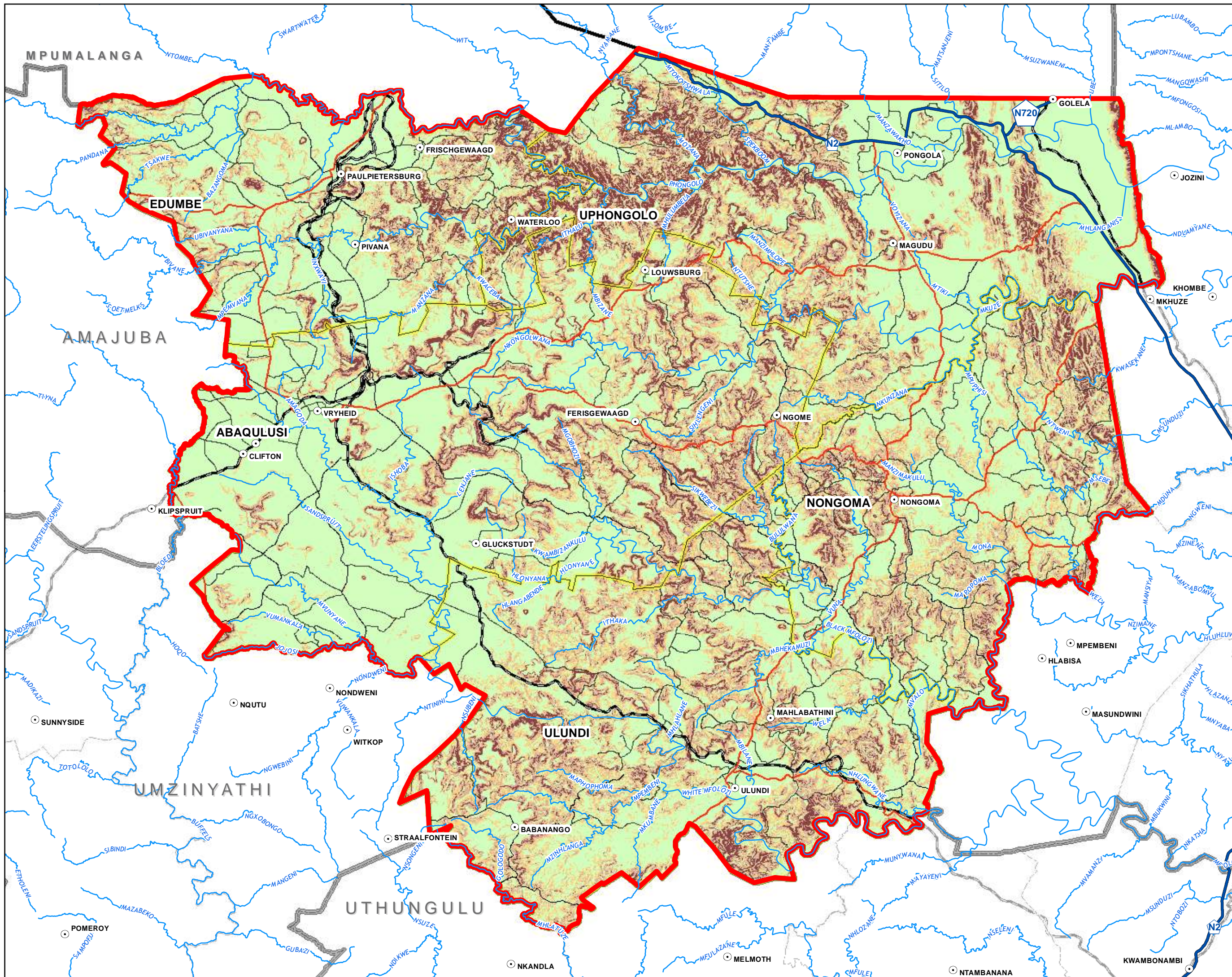
The map “Elevation” attached as **Map 2** depicts the elevation and general topographical characteristics of the Zululand District Municipality. The mean elevation (m above sea level) ranges from 0m above sea level, to 6987m above sea level. The map displays a typical increase in height above sea level as one move away from the Coast, with uPhongolo LM and Nongoma LM (eastern areas) ranging from 0m to 910m above sea level, whilst eDumbe and aBaqulusi in the west ranges from 655m to 4,559m above sea level. The height above sea level influences climate, which impacts on agricultural production and the crops cultivated.

3.1.3 Topography And Slope Analysis

Map 3: Slope Analysis illustrates the slope variance across the municipality and depicts slope ranges of “< 1:10”, “1:10 to 1:6”, “1:6 to 1:3” and “>1:3” incline. The central part of the District is clearly very mountainous and has extreme topographical features. Two distinct areas where extreme topographical areas is observed is firstly along the Pongola River on the boundary between the uPhongolo and eDumbe Municipalities, and secondly along the eastern boundary of the Municipality along the N2 National Routes. The mountainous areas on the eastern border divides two evenly sloped agricultural production areas from each other.

Slope further has an impact on the development of areas and ease of implementation of projects. The greater the gradient (20-58%), the more difficult and more expensive construction becomes and this should be considered during infrastructure intervention planning. The terrain therefore plays an integral part in determining settlement patterns or the line of roads which needs to be built cost-effectively. Apart from infrastructure provision and housing, the slope of the land will be a determining factor in potential economic activity especially agricultural product potential.

With the above mentioned in mind it is notable how the agricultural activities coincide with the more evenly sloped areas.



**ZULULAND
DISTRICT MUNICIPALITY
SPATIAL DEVELOPMENT
FRAMEWORK**

SLOPE ANALYSIS

LEGEND

- Place Names
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Zululand District Municipality
- Local Municipalities
- District Municipalities

Slope Category

- <1:10
- 1:10 - 1:6
- 1:6 - 1:3
- >1:3

0 2.5 5 10 15 20
Kilometres

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3.1.4 Water Catchment Areas

Catchment areas is an extent or area of land where water from rain drains downhill into a body of water, such as a river, lake or dam. The drainage basin includes both the streams and rivers that convey the water as well as the land surfaces from which water drains into those channels, and is separated from adjacent basins by a catchment divide. **Map 4: Water Catchment Areas** depicts the catchment areas for Zululand municipality.

The Zululand District Municipality is affected by two Primary Water Catchment areas Namely the Mfolozi/Pongola Catchment Area, although the area west of Clifton and Scheepersnek, is situated within the Tugela Primary Catchment Areas.

Ecological aspects also need to be taken into account when considering Catchment Areas/Drainage Basins. The water flowing from the catchment areas, flows to a dam which is ultimately used for service provision such as water used for household purposes. It is therefore necessary to consider the impact that settlements have on the quality of water, and where sanitation services are critically needed to prevent cholera for example. The use of pesticides on large scale for agricultural use must be limited where commercial farming can have a negative impact on the quality of water. The spatial development framework must therefore highlight the critical aspects which need to be addressed as a matter of urgency, and ensure that no land use is proposed in an area, where the specific land use can have detrimental effects on the environment.

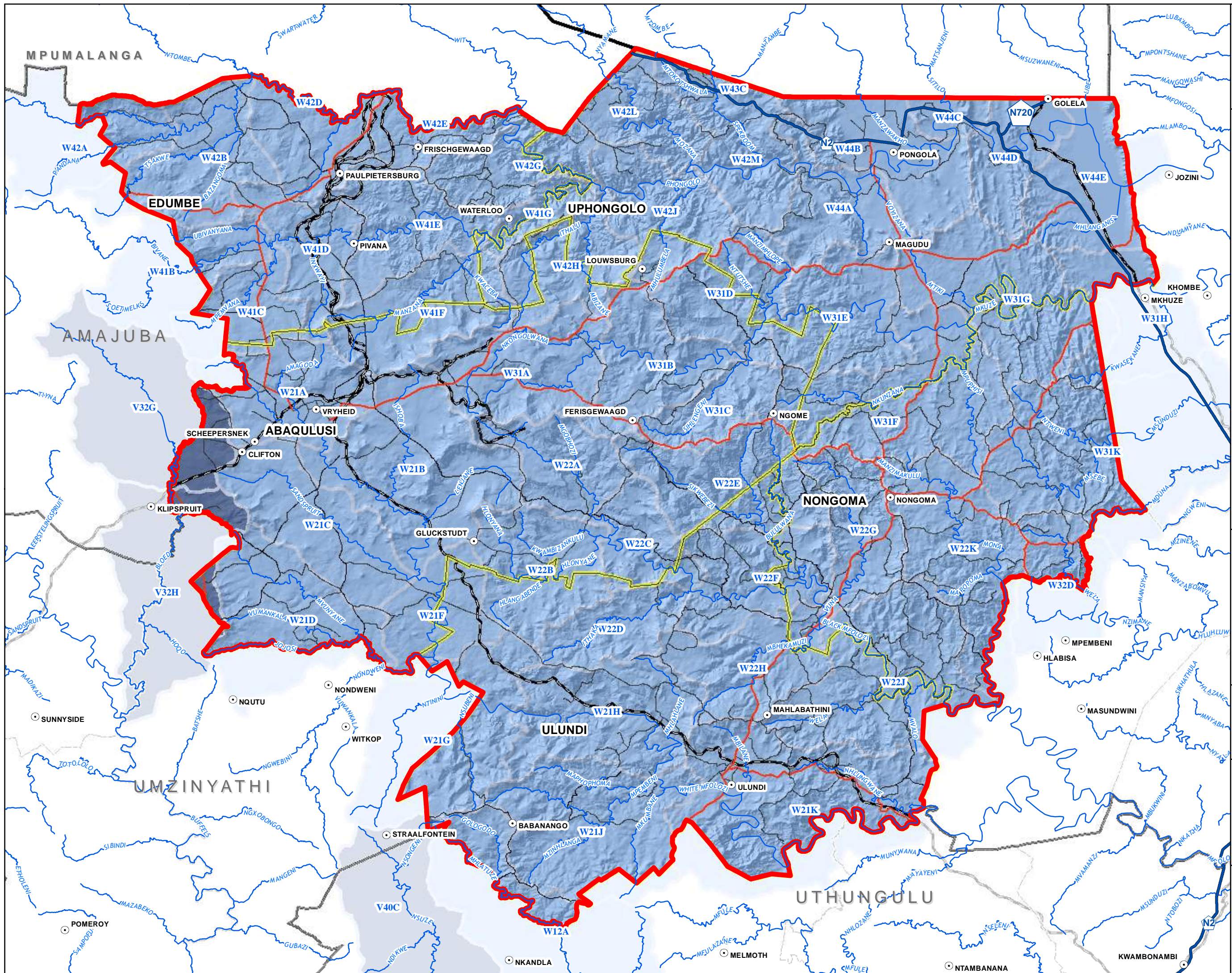
The presence of a large number of rivers and high volumes of water implies that safety of communities also needs to be considered by locating them outside possible flood line areas.

3.1.5 Land Cover

The broad land cover found in Zululand District Municipality, as depicted on **Map 5: Land Cover** consist of:

- Annual Commercial Crops (Dry Land)
- Annual Commercial Crops (Irrigated)
- Bare Rock and Sand
- Bushland
- Degraded Bushland (All Types)
- Degraded Forest
- Degraded Grassland
- Dense Bush
- Erosion
- Forest
- Golf Courses
- Grassland
- Grasslands / Bush Crumps Mix
- Mines and Quarries
- Old Cultivated Fields
- Permanent Orchards (Banana & Citrus) Irrigated
- Plantation
- Plantation Clear-felled
- Rural Dwellings
- Smallholdings (Grassland)
- Sugarcane (Commercial)
- Sugarcane (Emerging Farmer)
- Subsistence (Rural)
- Urban
- Water (Natural)
- Wetlands
- Wetlands (Mangrove)
- Woodland

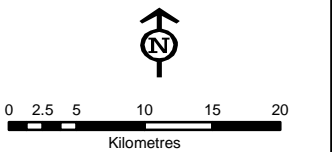
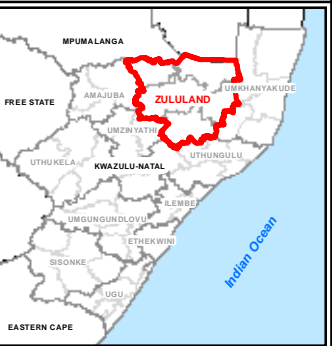
In considering the above broad land uses it is necessary to identify main groupings of economic activities (agriculture) developed areas, and environmental sensitive area. On the district scale a number of main or prominent groupings of land uses can be observed:



**ZULULAND
DISTRICT MUNICIPALITY
SPATIAL DEVELOPMENT
FRAMEWORK**

CATCHMENTS

- LEGEND**
- Place Names
 - Rivers
 - Railway Lines
 - National Roads
 - Regional Distributor
 - District Distributor
 - District Collector
- Catchments**
- Mfolozi/Pongola
 - Tugela
 - Local Municipalities
 - Zululand District Municipality
 - District Municipalities



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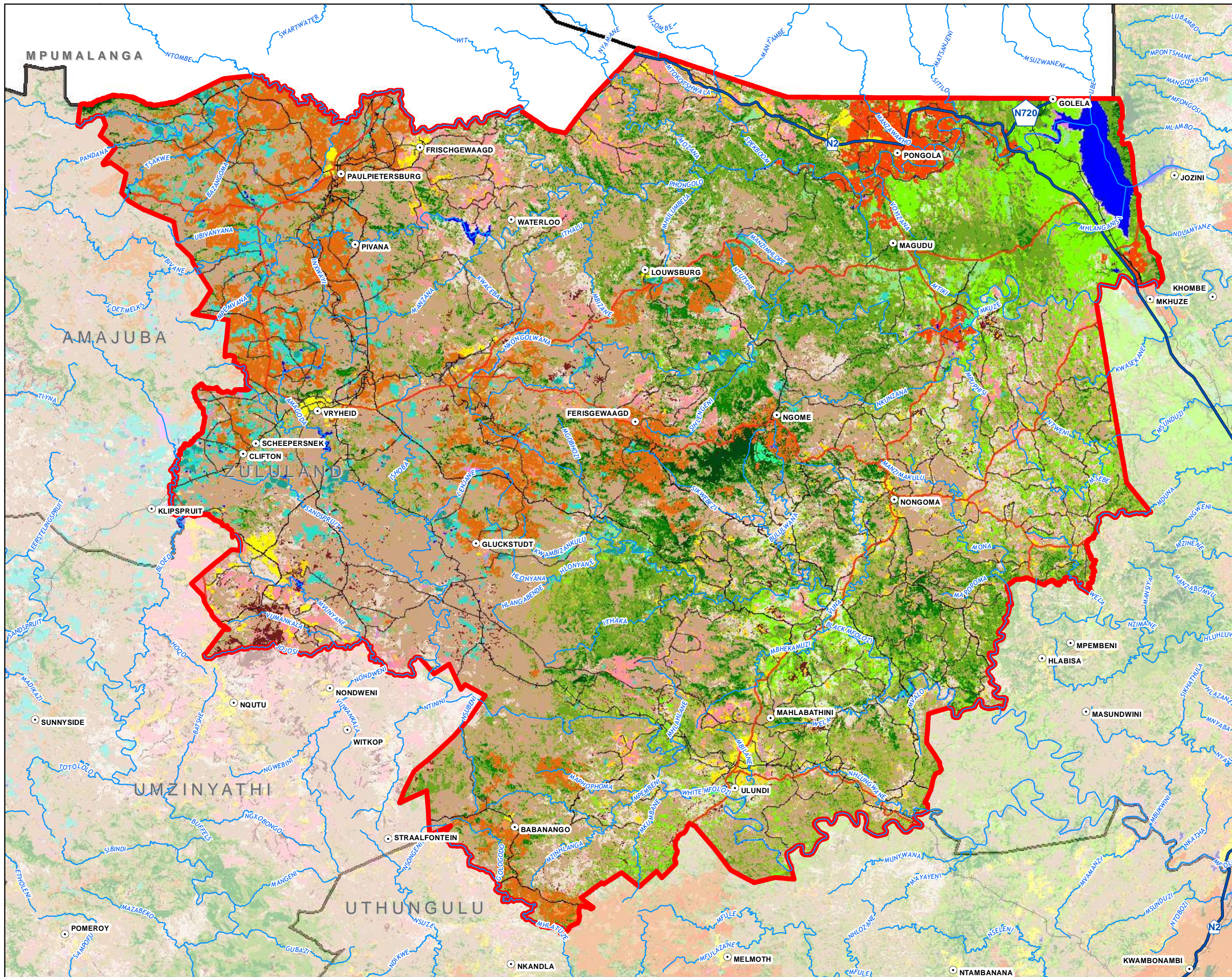
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ZULULAND DISTRICT MUNICIPALITY

SPATIAL DEVELOPMENT FRAMEWORK

BROAD MUNICIPAL LAND USE

LEGEND

- Place Names
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Zululand District Municipality

Land Cover (2005)

- Main & District roads
- National Roads
- Annual Commercial Crops (dryland)
- Annual Commercial Crops (irrigated)
- Bare Rock and Sand
- Bushland (< 70cc)
- Degraded Bushland (all types)
- Degraded Forest
- Degraded Grassland
- Dense Bush (70-100 cc)
- Erosion
- Forest
- Golf Courses
- Grassland
- Grassland/Bush Clumps Mix
- Mines and Quarries
- Old Cultivated Fields
- Permanent Orchards (banana, citrus) Irrigated
- Plantation
- Plantation Clearfelled
- Rural Dwellings
- Smallholdings (grassland)
- Sugarcane (commercial)
- Sugarcane (emerging farmer)
- Subsistence (rural)
- Urban
- Water (natural)
- Wetlands
- Wetlands (mangrove)
- Woodland

0 2.5 5 10 15 20

Kilometres

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- **Sugarcane:** Large sugarcane plantations are observed around Pongola, as well as an area on the R66 towards Nongoma just south of Magugu where the R66 crosses over the Mkhuze River.
- **Woodland Areas:** West of the Pongola Poort Dam, reaching the R66 near Magugu. An area just north of Mahlabathini in the Ulundi Local Municipality.
- **Plantations:** Although found scattered throughout the central to western areas of the District, the largest grouping of plantations are found on the northern Mpumalanga Provincial Boundary around Paulpietersburg. When comparing the elevation map, the forestry activities are all situated in the higher lying areas of the district. There are further significant forestry activities in the following areas:
 - North of Vryheid up to the groupings at Paulpietersburg.
 - Around Ferisgewaagd and along the road to Ngome.
 - Areas north of Gluckstuddt leading to the R69, and along the R69 toward Louwsburg.
 - Clifton & Scheepersnek.
 - Babanango in the Ulundi Local Municipality.
- **Erosion Pits:** Although situated throughout the District a large erosion area can be identified just north of Nquthu along the Jojosi River at Telezeni.

3.1.6 Land Capability And Agricultural Potential

The land capability map depicts land capability as classified by the Department of Agriculture, Forestry and Fisheries, with classes 1 to 4 being suitable for arable agriculture, and classes 5 to 8 more suitable for keeping of livestock units. The figure below depicts the agricultural uses proposed by the Department of Agriculture, Forestry and Fisheries suitable for the various land classifications.

Table 6: Land Use Options

LAND CAPABILITY CLASS	LAND USE OPTIONS									LAND CAPABILITY GROUPS
	Wildlife	Forestry	Light Grazing	Moderate Grazing	Intensive Grazing	Poor Cultivation	Moderately Cultivation	Intensive Cultivation	Very Intensive Cultivation	
I										ARABLE LAND
II										
III										
IV										
V										GRAZING
VI										
VII										
VIII										WILDLIFE

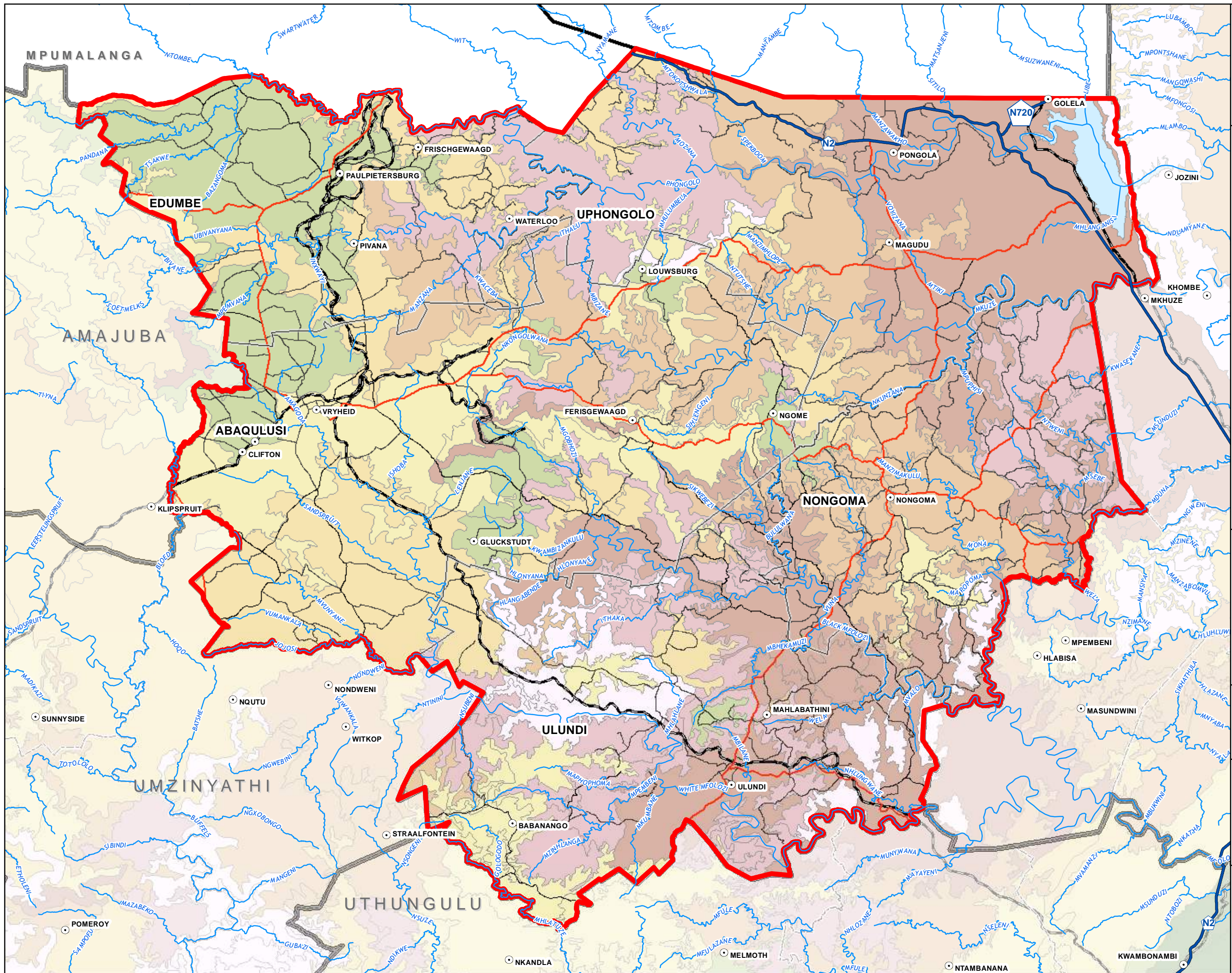
Source: Department of Agriculture

The land Capability map attached as **Map 6: Land Capability** depicts that the areas best suited for arable agriculture is situated in the western parts of the District within aBaqulusi and eDumbe Municipalities, and stretches from Vryheid northwards up to the Mpumalanga KZN Provincial Border.

The largest part of the aBaqulusi Municipality has good to moderate arable land potential with the highest potential north of Vryheid and around Gluckstuddt.

Although the Land Potential depicts the largest part of the uPhongolo LM as having grazing potential instead of arable potential, the development of irrigation schemes makes the municipality suitable for crop cultivation.

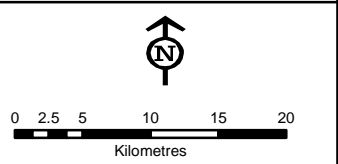
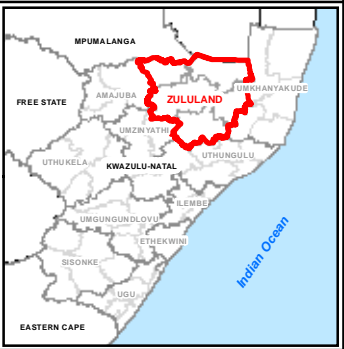
The municipalities of Ulundi and Nongoma in general has low arable potential with marginal agricultural potential., with the higher potential in these municipalities situated on the more evenly sloped higher lying areas.



**ZULULAND
DISTRICT MUNICIPALITY
SPATIAL DEVELOPMENT
FRAMEWORK**

**AGRICULTURAL LAND
POTENTIAL**

- LEGEND**
- Place Names
 - National Roads
 - Regional Distributor
 - District Distributor
 - District Collector
 - Rivers
 - Railway Lines
 - Farm Cadastral
 - Erf Boundaries
 - Zululand District Municipality
 - Local Municipalities
 - District Municipalities
- Land Potential**
- 1. Very High Potential Land
 - 2. High Potential Land
 - 3. Good Potential Land
 - 4. Moderate Potential Land
 - 5. Restricted Potential Land
 - 6. Very Restricted Potential Land
 - 7. Low Potential Land
 - 8. Very Low Potential Land
 - Vleis and Waterbodies



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The Zululand Agricultural Sector Plan (prepared by PR Africa in 2006) indicates that the White and Black Umfolozi Rivers provides opportunities for the development of irrigation schemes which, due to the moderate climate of the area, will allow for horticultural activities during off-peak or winter seasons. These river valleys throughout the district, but especially in the eastern low arable potential areas, has potential for intensive agricultural practices linked to proposed irrigation schemes¹.

The Zululand Agricultural Sector Plan proposes interventions to be employed to develop the agricultural sector. These interventions include:

- Institutional structuring for agriculture
- Sustainable land reform
- Visible delivery in agriculture sector
- Improved market access for agricultural products

Also linked to the agricultural potential is the soil clay content of the District, although further site specific studies is required to determine exact contents of soil. The Soil/Clay Content within the Municipal Area ranges from <15% to >35%, and in excess of 35%. (Refer to **Map 7: Soil Clay Content**). The vast majority of the district has soil clay content between 15 to 35% with very limited and scattered areas having clay content outside of this range.

Current Agricultural Activities, as depicted on **Map 8: Agricultural Land Uses**, is classified as Cultivated land, Commercial Agriculture, Conservation, Forestry and subsistence Agriculture.

The primary groupings of Commercial Agricultural Activities is situated around Pongola, with scattered commercial farming activities around Gluckstuddt, Vryheid, areas west of Clifton in the aBaqulusi LM, and areas along the R33 connecting Vryheid to Paulpietersburg.

Occurrence of subsistence agriculture coincides with the rural and informal settlements especially in the Nongoma and Ulundi Local Municipalities.

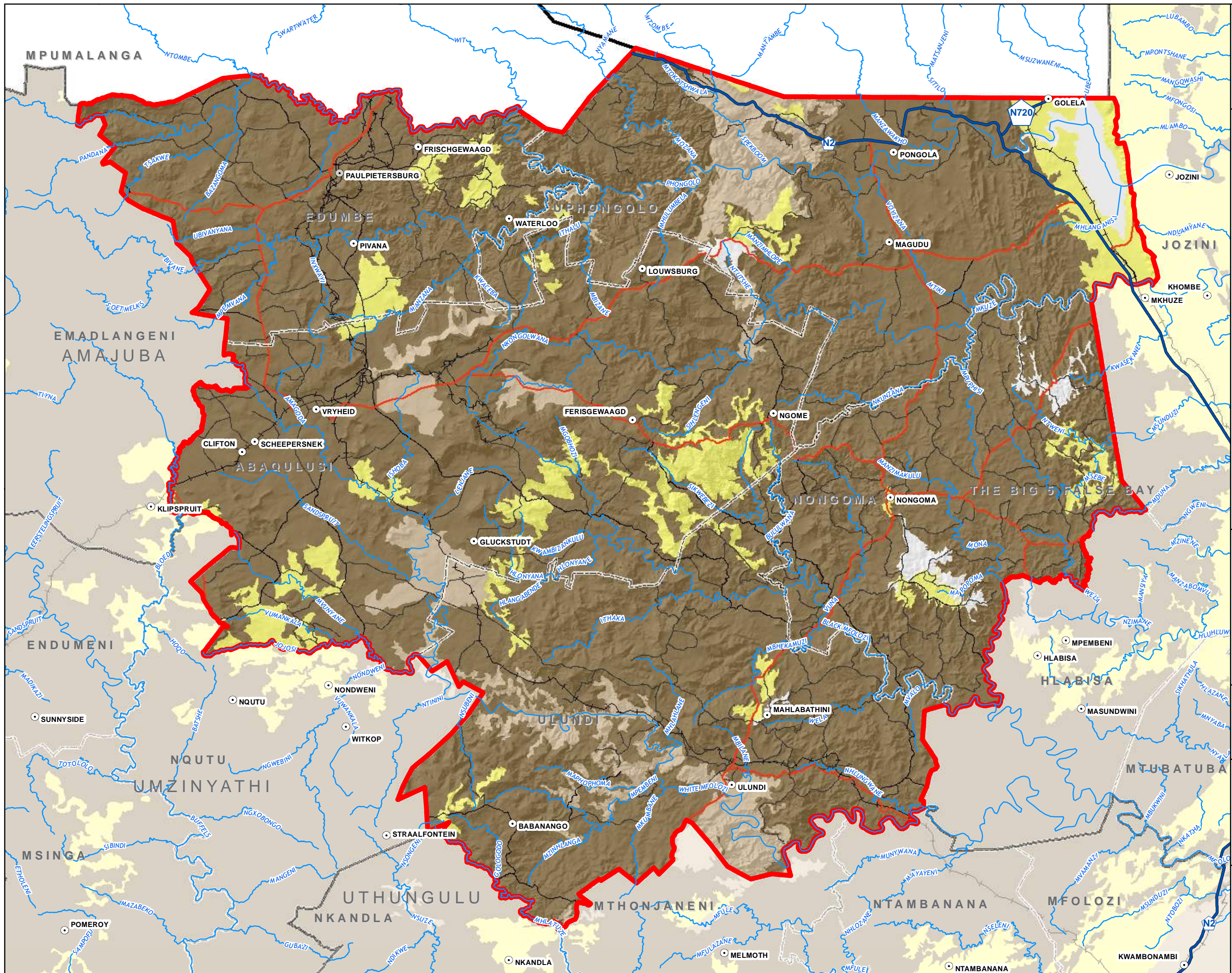
Forestry activities are restricted to the steeper sloped and mountainous areas which are higher lying with a climate conducive for forestry activities. Although the largest grouping of forestry activities is situated north of Paulpietersburg, there are also large scale forestry activities within the aBaqulusi LM around Ferisgewaagd, as well as in the Ulundi LM south of Babanango.

The district further has a number of conservation areas which includes the following areas:

aBaqulusi	Vryheid Mountain Reserve
eDumbe	Pongola Bush Reserve
Nongoma	None
Ulundi	Opathe Reserve Matshitsholo
uPhongolo	iThala Game Reserve Pongola Poort Reserve Pongola Reserve Hlatikulu Reserve

The comparison of the agricultural land uses, with the land potential and broad land cover, allows for the identification of uncultivated land and areas for agricultural expansion. It is clear that the arable areas in the aBaqulusi LM is underutilised, and that the forestry industry in northern eDumbe LM can be expanded.

¹ Zululand Agriculture Sector Plan: (2006); pg. 17.

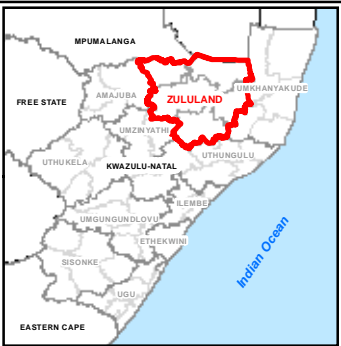


**ZULULAND
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SPATIAL DEVELOPMENT
FRAMEWORK**

SOIL CLAY CONTENT

LEGEND

- Place Names
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- + Railway Lines
- ▭ Zululand District Municipality
- ▭ Local Municipalities
- ▭ District Municipalities
- Clay Content**
 - 15% - 35%
 - < 15%
 - >35%
 - No Data



0 2.5 5 10 15 20
Kilometres



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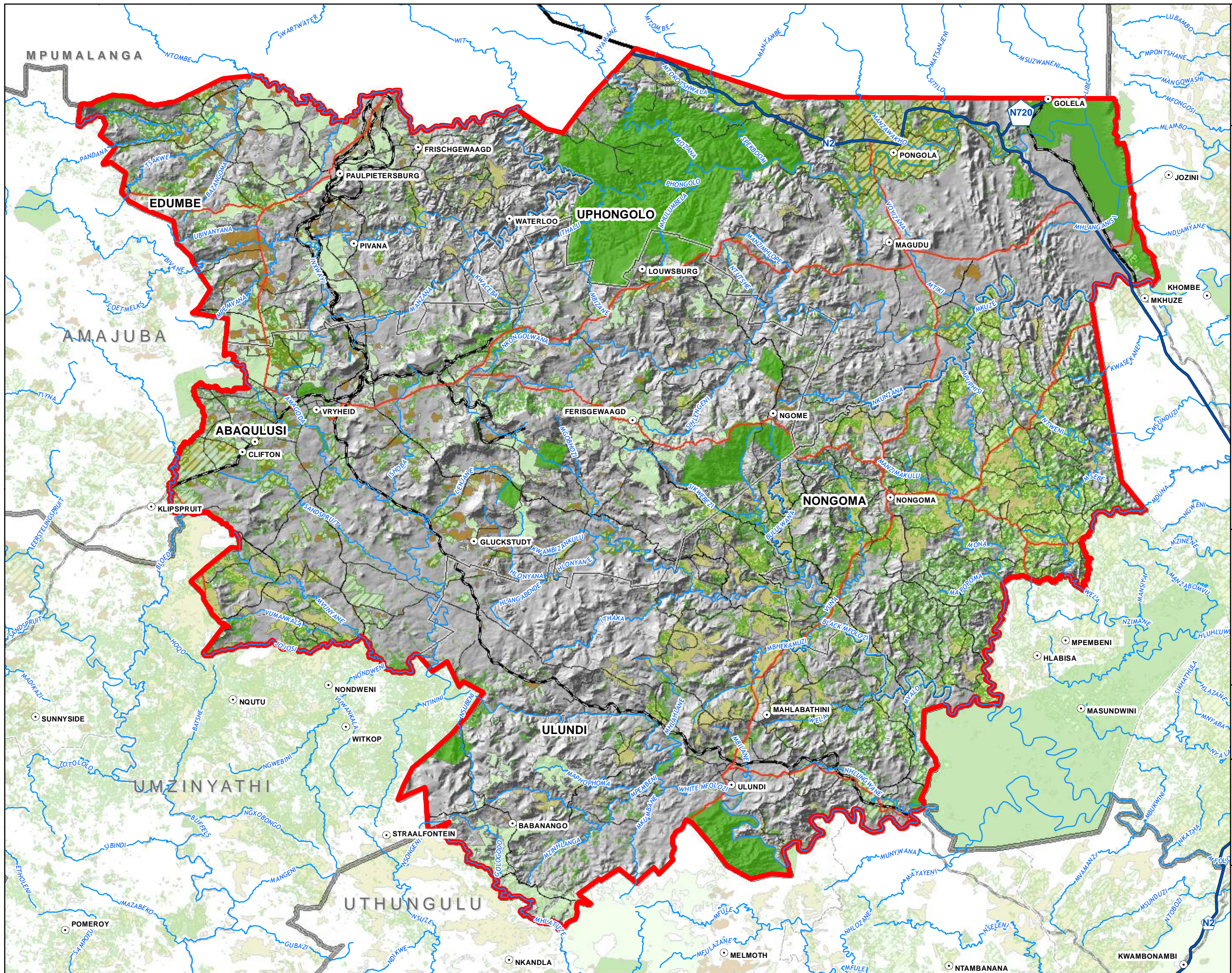
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**ZULULAND
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FRAMEWORK**

AGRICULTURAL LAND USE

LEGEND

- Place Names
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Cultivated Land

Land Use

- Commercial Agriculture
- Conservation
- Forestry
- Subsistence Agriculture
- Zululand District Municipality
- Local Municipalities
- District Municipalities

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Kilometres

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3.1.7 Protected & Conservation Worthy Areas

Ezemvelo KZN Wildlife has embarked on a process, during 2005, whereby it systematically mapped Critical Biodiversity Areas (CBA's) in Kwazulu-Natal with increasing accuracy. This dataset is based on various studies on fauna, flora and water resources, identifying key local biodiversity areas to be considered in spatial planning. The analysis identify a minimum optimal selection of sites that will best meet the conservation targets for all the biodiversity features housed within the conservation plan of Ezemvelo KZN Wildlife using a number of predefined rules. The identification of these minimum optimal sites is called the Minimum Set Analysis Process or MINSET abbreviated. CBA's depicts landscapes that need to be maintained in a natural or near-natural state in order to ensure the continued existence and functioning of species and ecosystems as well as facilitate the continued delivery of ecosystem services. Maintaining an area in a natural state can include a variety of land uses compatible with the present biodiversity resources.

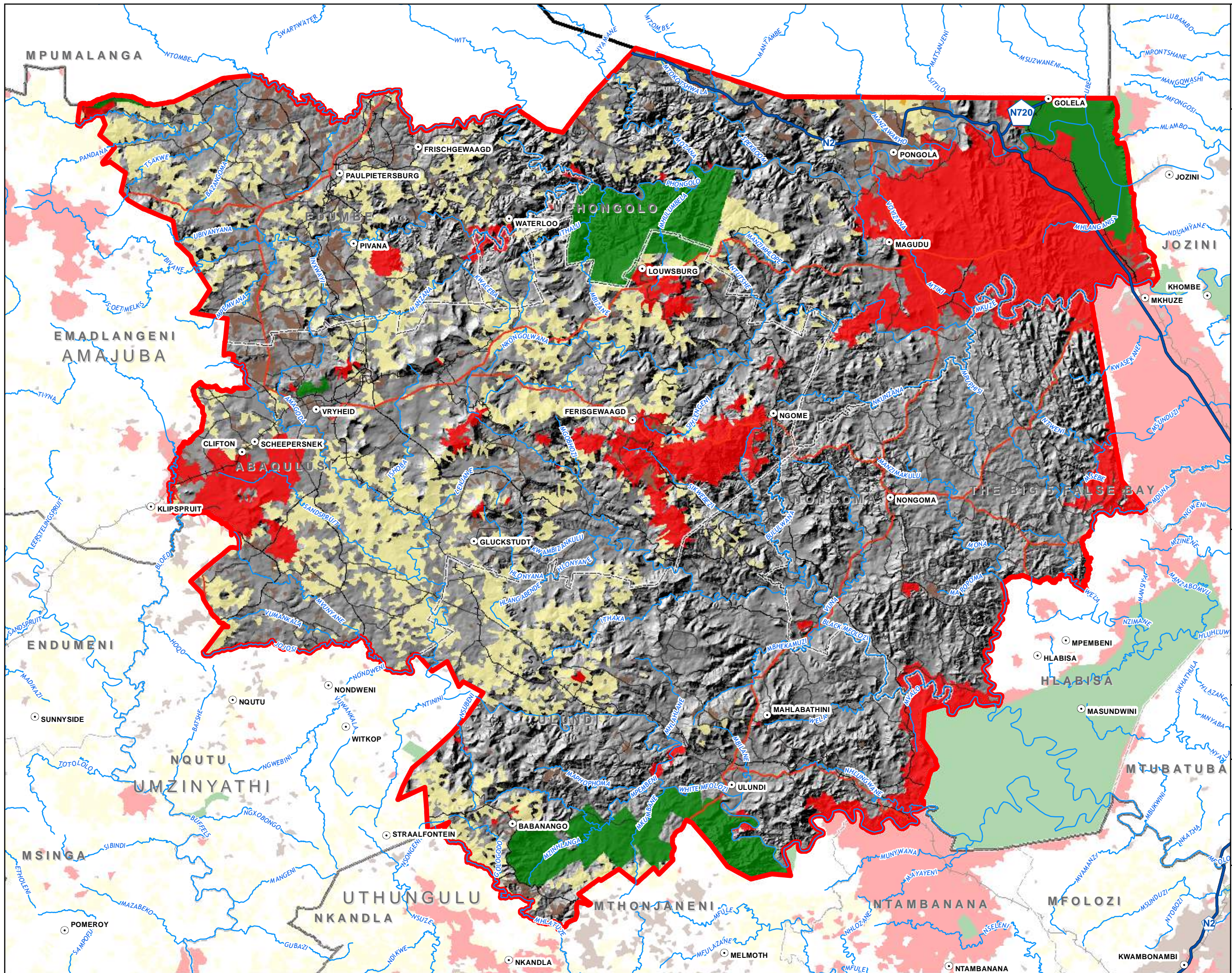
The purpose of CBA's is simply to indicate spatially the location of critical or important areas for biodiversity in the landscape. The CBA, through the underlying land management objectives that define the CBA, prescribes the desired ecological state in which we would like to keep this biodiversity. Therefore, the desired ecological state or land management objective determines which land-use activities are compatible with each CBA category based on the perceived impact of each activity on biodiversity pattern and process.

The **Map 9: Critical Biodiversity Areas** on overleaf depicts the Critical Biodiversity areas as identified through the MinSet Process.

The Critical Biodiversity Priority areas are linked to the vegetation that can house a number of Species. Subsequently the Priority Conservation areas are distributed as follow:

- The woodland areas between Pongola and the Pongola Poort Dam (uPhongolo LM);
- The forest areas south of and between Ngome and Ferisgewaagd (aBaqulusi LM);
- Forests South of Louwsburg (aBaqulusi LM);
- The Mixture of Grasslands, woodlands and forests south of Clifton and Scheepersnek (aBaqulusi LM);
- The Bushlands and Woodlands linking to the Hluhluwe-uMfolozi Park (Ulundi LM);

A number of smaller CBA Priority 1 Areas are scattered throughout the District. A large number of CBA Priority 3 Areas are scattered all over the western side of the Municipality and links to a number of land uses/cover. Areas that have been transformed 100% and have no conservation value is largely associated with the cultivated and forestry activities in eDumbe Municipality, although small pockets of 100% transformed areas are scattered all over the district. No biodiversity Priority 2 areas are identifiable.



ZULULAND DISTRICT MUNICIPALITY

SPATIAL DEVELOPMENT FRAMEWORK

CRITICAL BIODIVERSITY AREAS

LEGEND

- Place Names
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Existing Protected Area Network
- 100% Transformed (2005 LC)
- Biodiversity Priority Area 1
- Biodiversity Priority Area 2
- Biodiversity Priority Area 3
- Zululand District Municipality
- Local Municipalities
- District Municipalities

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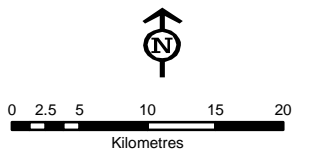
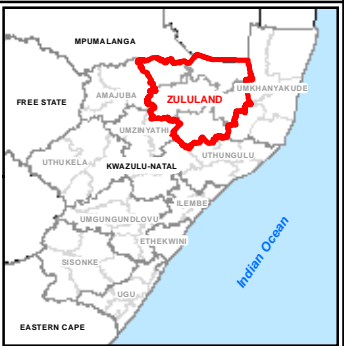
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**ZULULAND
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SPATIAL DEVELOPMENT
FRAMEWORK**

**OPEN SPACES
AND CONSERVATION**

- LEGEND**
- Place Names
 - National Roads
 - Regional Distributor
 - District Distributor
 - District Collector
 - Protected Areas
 - Rivers
 - Railway Lines
 - Zululand District Municipality
 - Local Municipalities
 - District Municipalities



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3.2 Human Resources

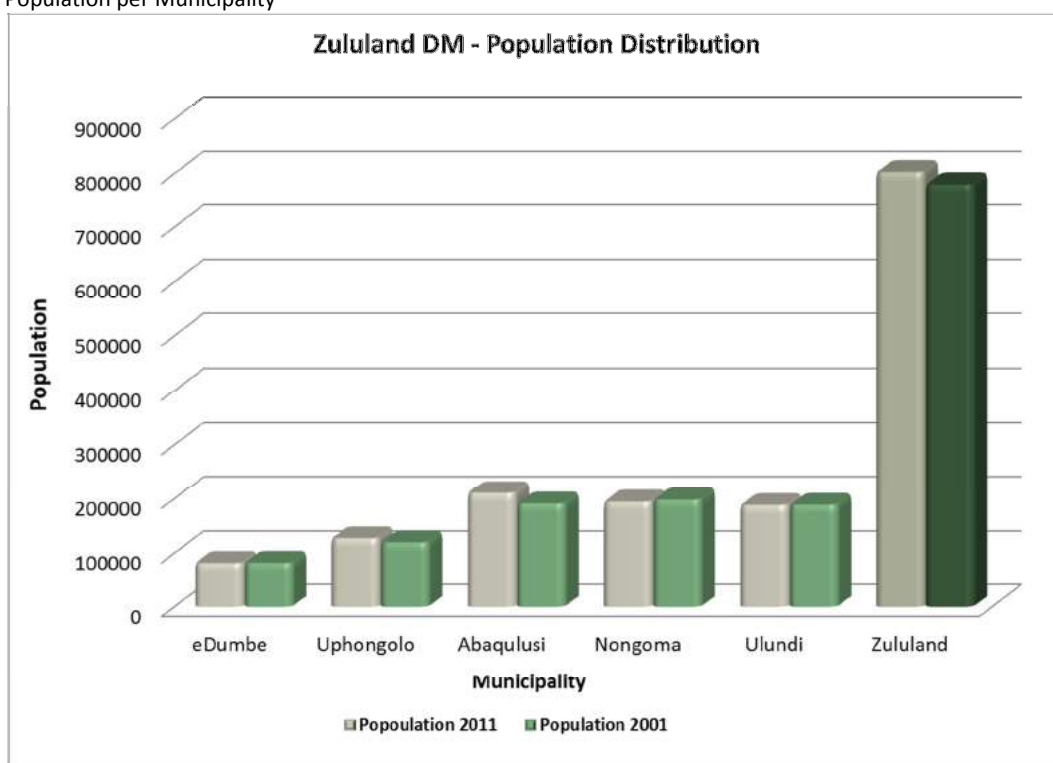
This section relies on the accuracy and reliability of statistical data. Although the 2007 HH survey might have updated the estimated population figures of the Municipality, the 2007 HH survey did not consider or measure access to infrastructure, levels of education etc. Apart from the population figures which consider the population figure contained in the Draft Integrated Development Plan 2012-2016, the sections dealing with trends within the Municipalities related to infrastructure availability etc., the 2001 statistical data was utilised.

3.2.1 Population

The 2001 census data depicts the population of the Zululand District Municipality as being 780,069 whilst the 2011 census data depicts that the Population of the Zululand District as being 802,646 with an increase of 22,577 population over 10 years. The population distribution between the various municipalities remained fairly similar. Only aBaqulusi and uPhongolo Municipalities indicated a growth, whilst the other municipalities had a slight decrease in population.

A total of 4,482 population migrated from the municipalities with a decline in population, whilst a total growth of 27,059 were experienced within aBaqulusi and uPhongolo. This could depict internal migration towards areas with higher economic activities, or can be ascribed to normal population growth.

Graph 1: Population per Municipality



Source: Ulundi Stats SA Census 2001 & 2011

The table below depicts the figures presented in the above Graph:

Table 7: Population Figures per Municipality

Municipality	2001	2011
eDumbe	82,241	81,907
uPhongolo	119,781	127,095
aBaqulusi	191,019	210,764
Nongoma	198,443	194,778
Ulundi	188,585	188,102
Total	780,069	802,646

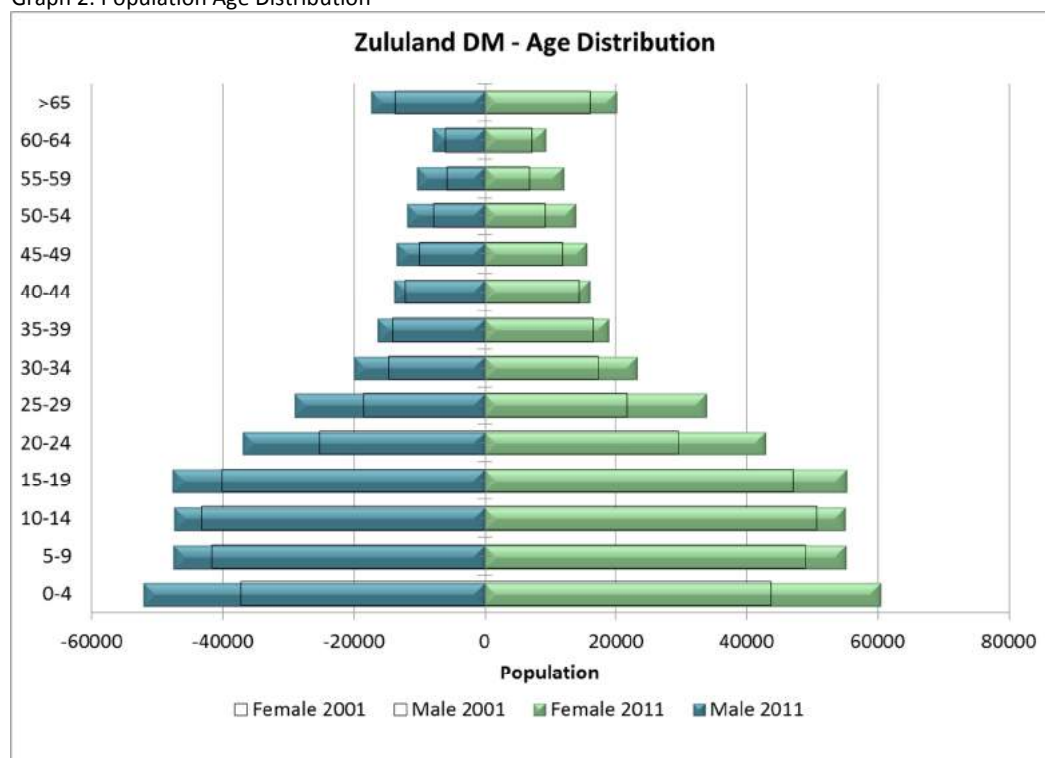
Source: Census 2001 & 2011

3.2.2 Age & Gender Distribution

The demographic pyramid below depicting the Zululand Age and Gender distribution depicts that the current population of working age is far less than the school going population and retired age groups. A large portion of the population is therefore dependent on a relatively small portion of the population for a livelihood. Considering this fact with the high unemployment rate, the situation seems dire.

The bell-curved changed slightly to depict an increase of population aged 0-4 (relative to other age groups). This suggests an increase in level and quality of medical services provided in the province.

Graph 2: Population Age Distribution



Source: Stats SA Census 2001 & 2011

3.2.3 Household Size

The average household size for Zululand is calculated by subdividing population with the number of households recorded. The average household size for Zululand LM is 5,09 population per household. Since the majority of the households are located within the rural areas of the municipality, this average will be used for all areas.

3.2.4 Population Density

The population density within the District is illustrated by **Map 10: Population Density** and depicts the number of household's within the Zululand District Municipality.

It is clearly visible that a high densities and concentrations of population south eastern part of the municipality as well as on the northern boundary of the district (Swaziland Border).

Comparing the population density map with land ownership it is clear that the largest densities are found in the Nongoma and Ulundi Local Municipalities where large rural areas are owned by the Ingonyama Trust. It is further noticeable that the population groupings are situated along movement and distributions routes, of which the N2 and the population groupings west of Pongola is a good example. This allows the population to be close to transportation routes and to the relative accessibility of economic activities provided by the transportation infrastructure. There is however a lot of households not residing near transportation routes which create a lot of challenges with regard to equal provision of services.

It will be necessary to identify potential areas for densification, where provision of services can be done cost-effectively, and efficient economic initiatives could be implemented.

3.3 Social Resources

3.3.1 Land Tenure

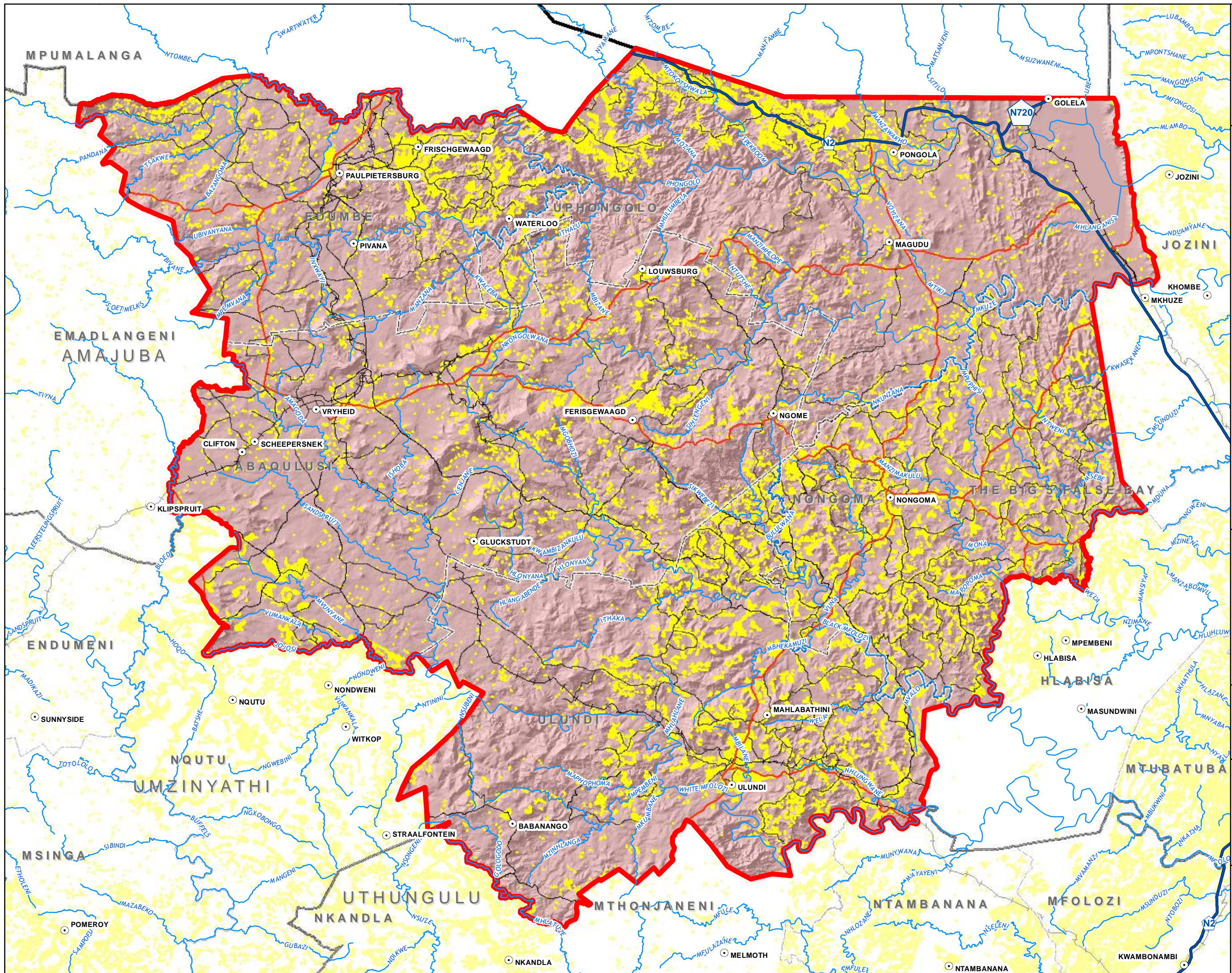
Map 11: Land Ownership attached overleaf classifies the property ownership in terms of the following:

Redistribution	Land to be redistributed to Previously Disadvantaged Individuals
Restitution	Land to be returned to previous owners
Labour Tenant Applications	Labour tenants claiming residential rights in terms of Extension of Security of Tenure Act.
Unalienated State Land	Land in the process of being transferred for redistribution or restitution purposes, but still registered in the name of a Government Department.
Privately Owned Farm Portions	Farm Land privately owned.
Ingonyama Trust land	Land under administration of the Ingonyama Trust Board.

The Ingonyama Trust Board (ITB) is the largest land owner within the District with the whole of Nongoma, as well as a significant part of the Ulundi LM registered in its name. The ITB further owns properties on the Northern Border of the District on Swaziland Border in the area west of Pongola. A third grouping of properties are situated on the Nquthu LM Boundary directly north of Nquthu and the Jojosi River, and west of the Mvunyane River within the aBaqulusi Local Municipality.

A Number of Restitution claims and redistribution applications have been submitted and is either finalised or being processed by the land Claims Commissioner and the Department of Rural Development and Land Reform.

The largest number of properties in the district is privately owned farm land, although a large number of Labour Tenant Applications have been submitted where farm workers have been residing on farms where they work for a significant number of years.



**ZULULAND
DISTRICT MUNICIPALITY
SPATIAL DEVELOPMENT
FRAMEWORK**

POPULATION DENSITY

LEGEND

- Households
- Place Names
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Zululand District Municipality
- Local Municipalities
- District Municipalities

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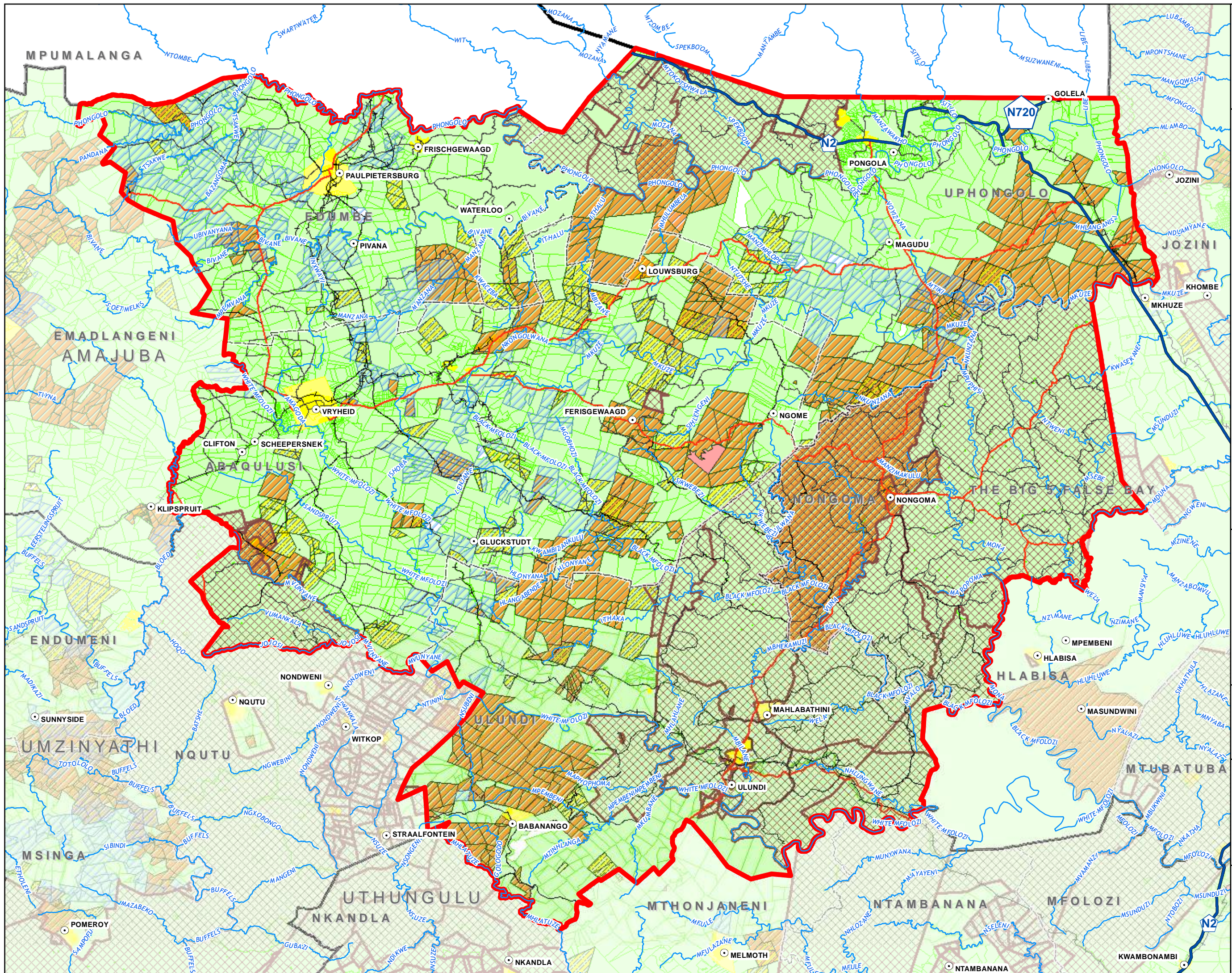
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ZULULAND DISTRICT MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK

LAND TENURE

LEGEND

- Place Names
- Rivers
- Railway Lines
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Priority Redistribution Claims
- Labour Tenants Applications
- Gazetted Restitution Claims
- Unalienated State Land
- Urban Cadastral
- Farm Portions
- Ingonyama Trust Board Land
- Zululand District Municipality
- Local Municipalities
- District Municipalities



0 2.5 5 10 15 20
Kilometres



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The labour tenant applications depicts a need for housing opportunities in close proximity to work opportunities as all applications will not be successful. The increasing size of communities will increase the demand for housing which will not and cannot be catered for on the farms.

The Urban Cadastral areas depicted are privately owned.

3.3.2 Settlement Pattern

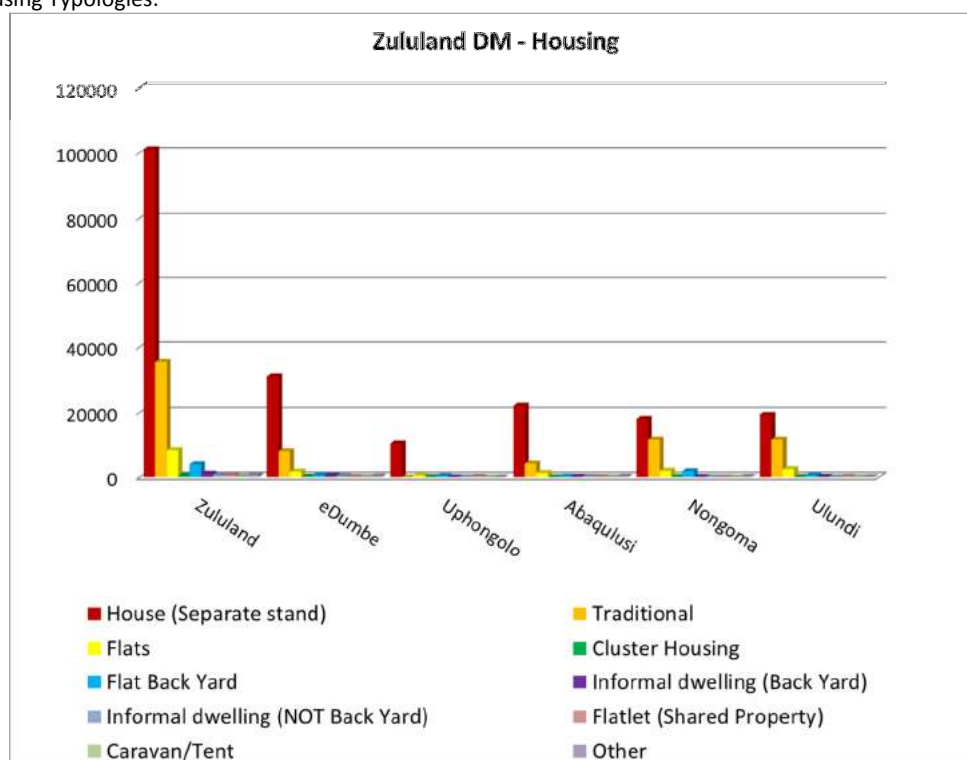
In similar fashion to the population density map, the settlement distributions is linked to land ownership. The settlement pattern map further depicts the urban edges of the areas with formal cadastral boundaries namely the following areas as depicted on **Map 12: Settlement Pattern**:

- Paulpietersburg;
- Pongola;
- Nongoma;
- Ulundi;
- Mondlo;
- Vryheid;

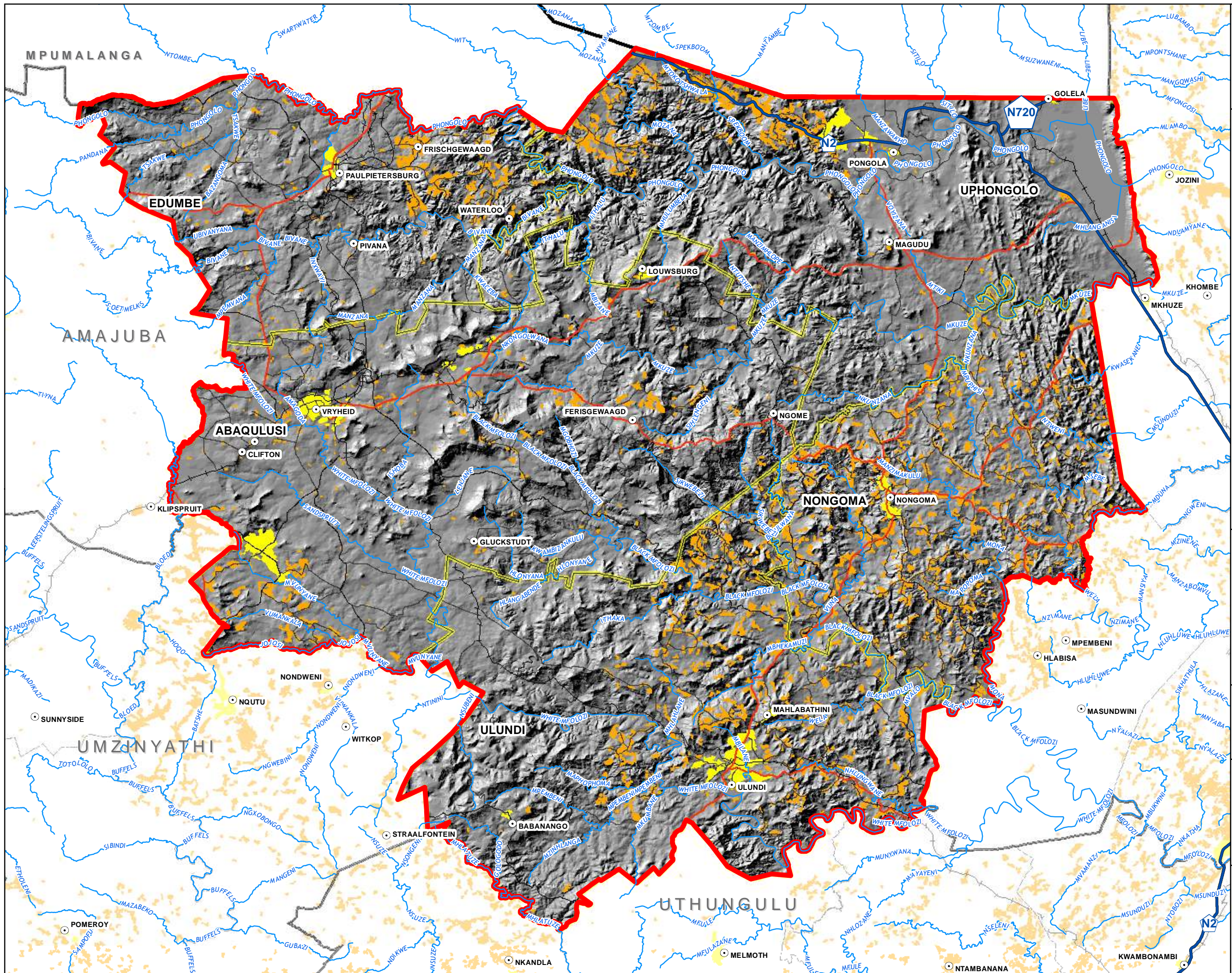
3.3.3 Housing

According to the Draft Zululand DM IDP the dwelling typologies and distribution between dwelling types only changes slightly. The graph below depicts the dwelling types utilised by the ZDM Population.

Graph 3: Housing Typologies:



Source: StatsSA 2011 Census Data



**ZULULAND
DISTRICT MUNICIPALITY
SPATIAL DEVELOPMENT
FRAMEWORK**

SETTLEMENT PATTERN

LEGEND

- Place Names
- Rivers
- Railway Lines
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Settlement Boundaries
- Urban Edges
- Local Municipalities
- Zululand District Municipality
- District Municipalities



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The above housing typologies clearly distinguish the more urban Municipal areas from the rural Municipalities. Nongoma and Ulundi is clearly more rural orientated due to the high number of traditional dwellings being occupied, whilst eDumbe, uPhongolo, and aBaqulusi are more urban orientated although it still has a very strong rural component. In general the highest number of population resides in Traditional Housing throughout the District.

In response to the high number of traditional housing units, the following projects are to be implemented within the various Local Municipalities of ZDM.

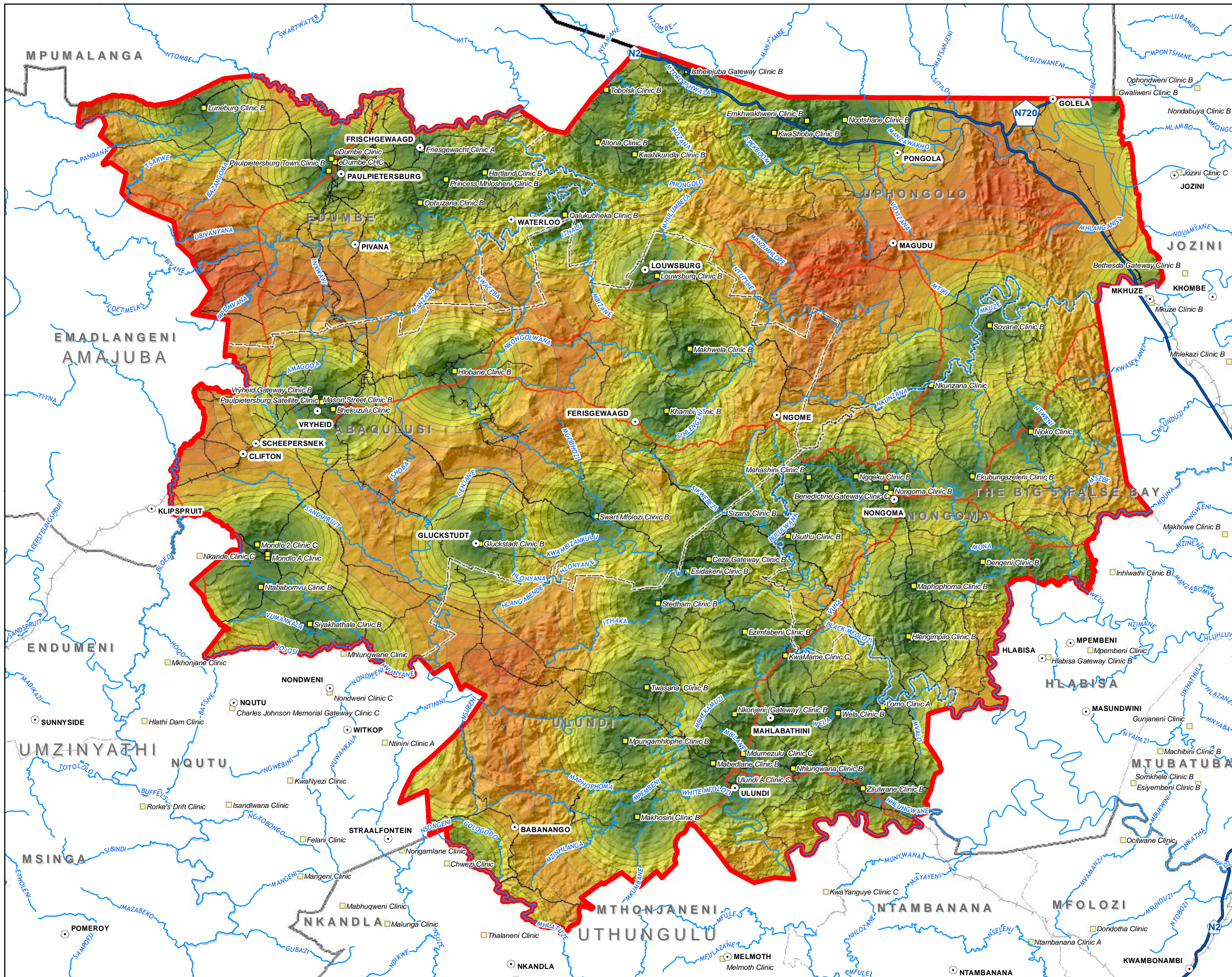
Table 8: Proposed Housing Projects

Project Name	Local Municipality	Project Type	Instrument	Total Units
Bhekumthetho	Abaqulusi M	Rural	Rural	1 000
Bhekuzulu Phase 6-B	Abaqulusi M	Urban	PLS	1 078
Coronation	Abaqulusi M	Urban	PLS	1 200
Coronation Aids	Abaqulusi M	Institutional	PLS	500
Frischgewaagd	Abaqulusi M	Urban	PLS	3 094
Mzamo	Abaqulusi M	Urban	PLS	500
Vryheid Ext 16	Abaqulusi M	Conditional Approved	PLS	1 016
Baxedene	Nongoma M.	Rural	Rural	1 400
Holinyoka	Nongoma M.	Rural	Rural	1 100
Maye/Dabhasi	Nongoma M.	Rural	Rural	1 000
Siyazama	Nongoma M.	Rural	Rural	1 000
Ekudubekeni	Ulundi M	Rural	Rural	1 600
Ekushumayeleni	Ulundi M	Rural	Rural	1 600
KwaXimba	Ulundi M	Rural	Rural	2 000
Nsukazi	Ulundi M	Rural	Rural	1 000
Ntsabekhuluma	Ulundi M	Rural	Rural	2 000
Ulundi HIV / AIDS	Ulundi M	institutional	PLS	1 000
Ulundi L ext	Ulundi M	urban	PLs	954
Zondela	Ulundi M	Urban	PLS	873
Ncotshane Pongola	Pongola	Urban	PLS	1 100
Dumbe lindelani	Dumbe M	Urban	PLS	200

Source: ZDM Draft Integrated Development Plan 2012-2016

3.3.4 Health Facilities

The spatial distribution of health facilities (Clinics and hospitals) are depicted on **Map 13 and 14** respectively. The standards for provision of and access to Health Facilities was derived from standards developed by the Erstwhile KZN Planning Commission and published in a document Titled “Guidelines for Planning of Facilities in KwaZulu-Natal”. There are various standards throughout the country for provision of social facilities and even the KZN standards are not considered as realistic by all departments. Subsequently it is necessary for the District to decide on a set of standards acceptable within the ZDM.



ZULULAND DISTRICT MUNICIPALITY

SPATIAL DEVELOPMENT FRAMEWORK

LOCALITY OF HEALTH FACILITIES (CLINICS)

LEGEND

- Place Names
- Clinics
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Zululand District Municipality
- Local Municipalities
- District Municipalities

Distance from Clinic (km)

1
2
3
4
5
6
7
8
9
10
12.5
15
17.5
20
25
30

0 2.5 5 10 15 20

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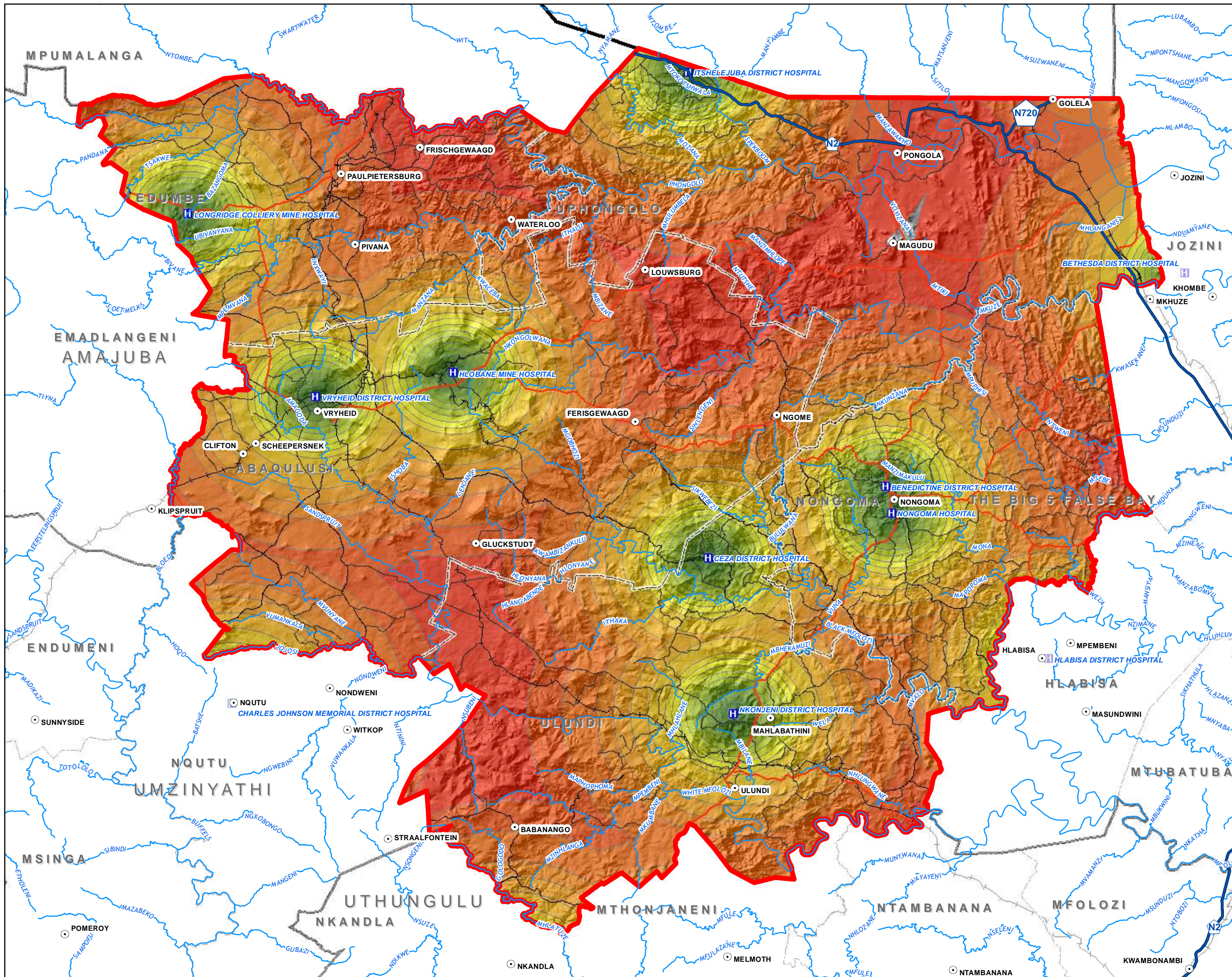
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ZULULAND DISTRICT MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK

LOCALITY OF HEALTH FACILITIES
(HOSPITALS)

LEGEND

- Place Names
- Hospitals
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Zululand District Municipality
- Local Municipalities
- District Municipalities

distance

1
2
3
4
5
6
7
8
9
10
12.5
15
17.5
20
25
30
40

0 2.5 5 10 15 20
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Table 9: Standards for Provision of Health Facilities

Facility	Provision Standard	Access Standard
Clinic	1 Clinic for every 12 500 persons	None prescribed, thus standard of maximum 5 km access distance used
Hospital	1 Hospital for every 100 000 persons	None prescribed, thus standard of maximum 20 km access distance used

Source: KZN Planning Commission

Clinics

Map 13: Access to Clinics depicts the distribution of clinics within the District. There is a relatively even distribution of clinics especially within the areas owned by the Ingonyama Trust Board in Nongoma and Ulundi. This can be attributed to the mode of transport which is mainly pedestrian within these areas. The municipalities of uPhongolo, aBaqulusi, eDumbe and the western parts of Ulundi consist mainly of commercial farms and subsequently the population densities are much lower in these areas. These areas are also utilising vehicle transport which makes facilities much more accessible.

Hospital

The District has 7 Government Hospitals within its boundaries and has access to another on the eastern boundary from Mkhuze. Refer to Map 14: Hospitals for a depiction of the following hospitals:

- Vryheid District Hospital (aBaqulusi LM)
- Hlobane Mine Hospital (aBaqulusi LM)
- Longridge Mine Hospital
- Ceza District Hospital (Ulundi LM)
- Nkonjeni District Hospital (Ulundi LM)
- Nongoma Hospital (Nongoma LM)
- Mahlabathini (Ulundi LM)
- Itshelejuba (uPhongolo LM)
- Benedictine District Hospital

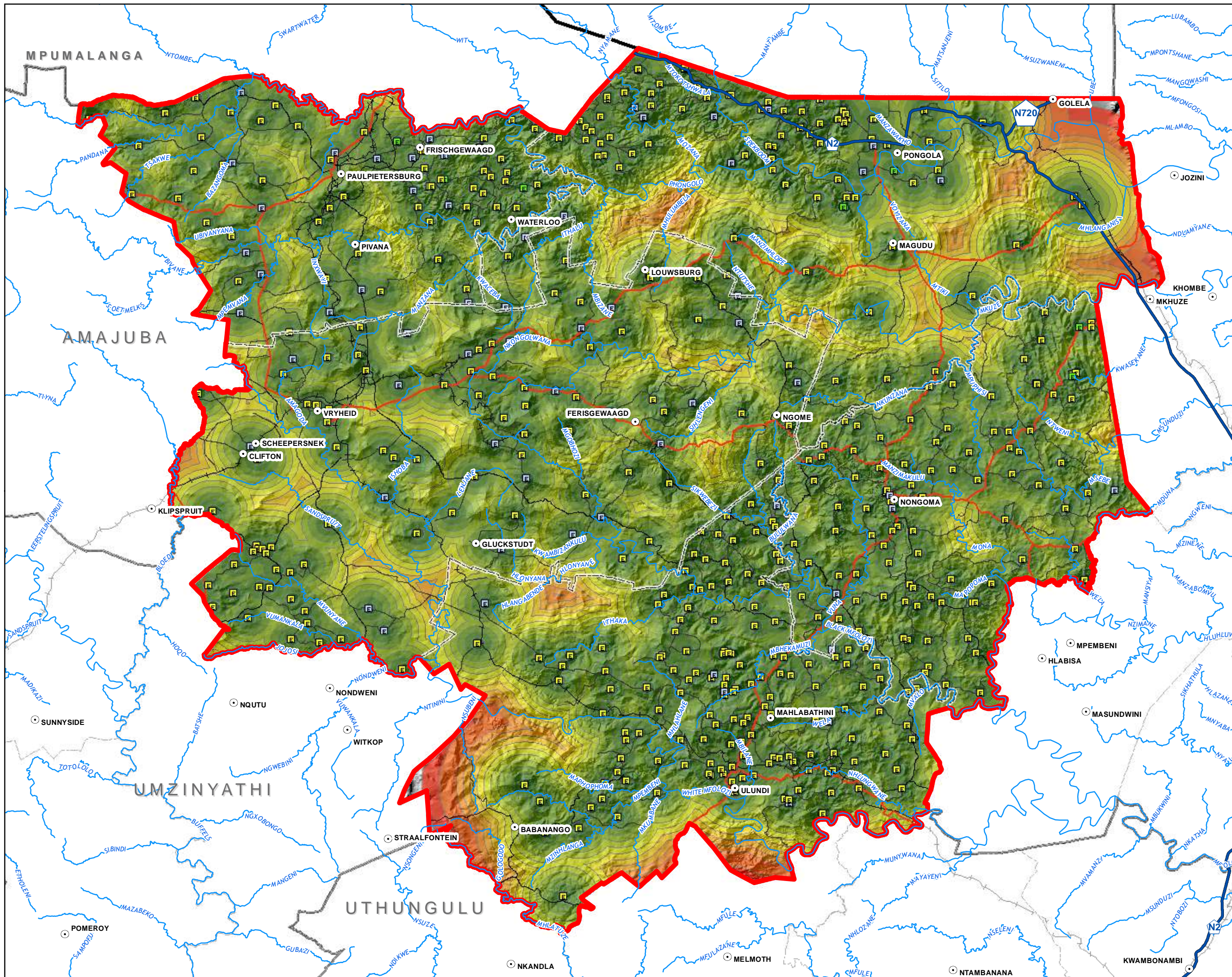
The District also has access to the following Hospitals which are situated in the adjacent Municipalities:

- Bethesda District Hospital
- Nquthu District Hospital
- Hlabisa District Hospital

3.3.5 Education Facilities

Zululand is served only by primary and secondary education facilities. These facilities are depicted on **Maps 15: Primary Schools**, and **Map 16: Secondary Schools**.

The spatial distribution of educational facilities (Basic Educational Facilities) are based on standards derived from the standards developed by the Erstwhile KwaZulu-Natal Planning Commission and Published in a document Titled “Guidelines for Planning of Facilities in KwaZulu-Natal”. Each Province has its own standards for provision of educational facilities. Basic Education Facilities (Primary and Secondary Schools) are in general provided in abundance with the challenge of providing quality education at the existing schools rather than to increase access to educational facilities.



ZULULAND DISTRICT MUNICIPALITY

SPATIAL DEVELOPMENT FRAMEWORK

LOCALITY OF SCHOOLS (PRIMARY AND COMBINED)

LEGEND

Place Names

Schools

- Combined School
- Intermediate School
- Primary School

National Roads

Regional Distributor

District Distributor

District Collector

Rivers

Railway Lines

Zululand District Municipality

Local Municipalities

District Municipalities

Distance from Schools (km)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 12.5
- 15

0 2.5 5 10 15 20

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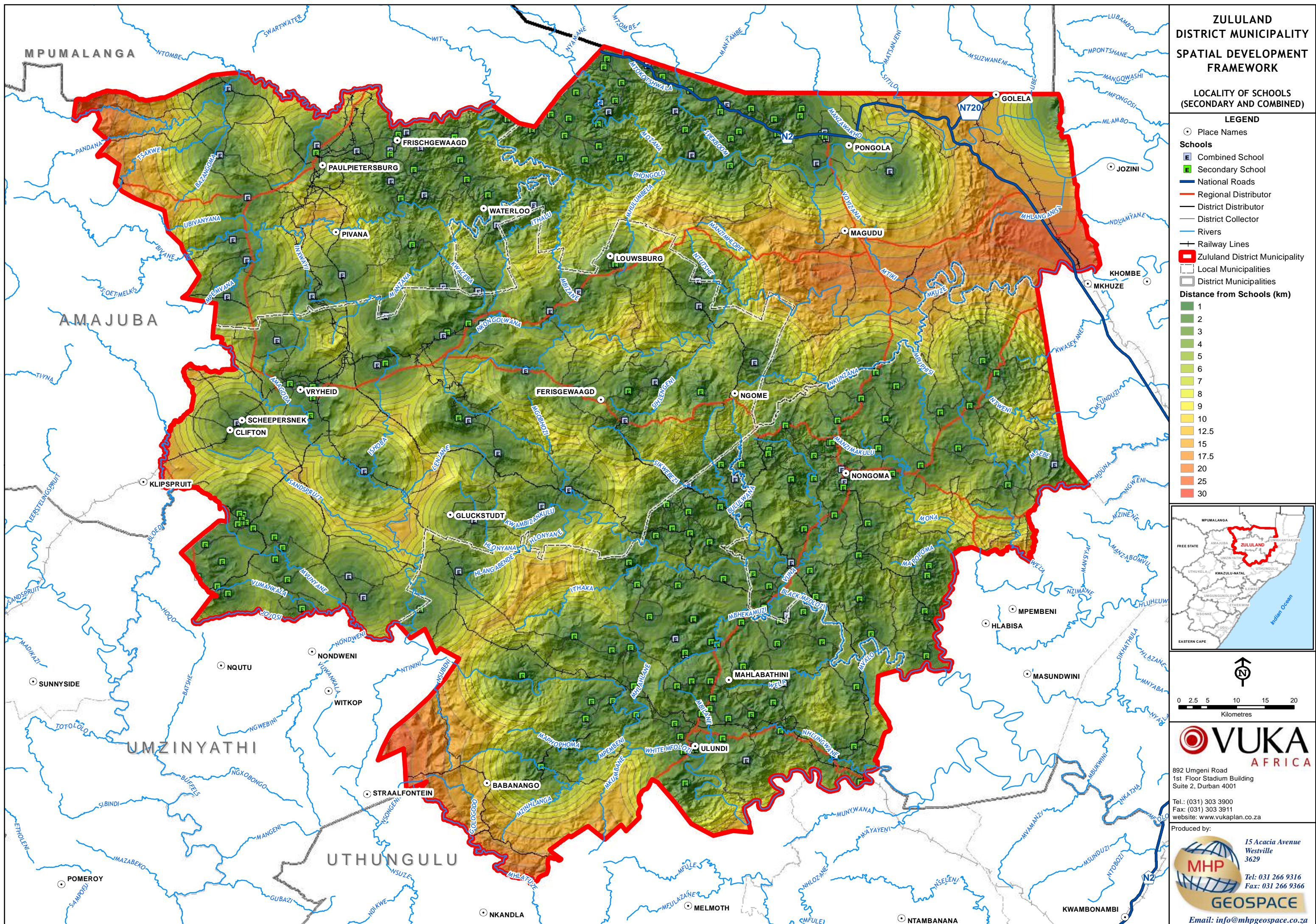


Table 10: The standards for provision of educational facilities

Facility	Provision Standard	Access Standard
Primary School	1 Primary School for every 750 Households	Maximum walking distance of 5 km
High School	1 High School for every 1000 to 1500 Households	Maximum walking distance of 5 km

Source: "Guidelines for Planning of Facilities in KwaZulu-Natal" (KZN Planning Commission)

The District is very well serviced in terms of primary schools, as is depicted on **Map 15: Primary Schools**. Access to Primary Schools are expressed in distance from households ranging from closer than 1km to distances in excess of 15 km. there are very few areas in the municipality that does not have access to a primary school within 5km distance. The areas not within a distance of 5km from a primary school is situated on the north eastern corner of the district at Golela, as well as in the south west corner on the boundary between Babanango and Straalfontein (Nquthu LM).

Areas not serviced by a primary school within 5km radius is situated in areas where population densities are relatively low and the population not predominantly pedestrianized.

Access to Secondary Schools is also expressed within distances from 1 to 15 km radius. In similar fashion to the primary schools, the north eastern and south western areas of the municipality is not as well serviced as the other areas, with a large area not serviced along the R66 just south of Magudu.

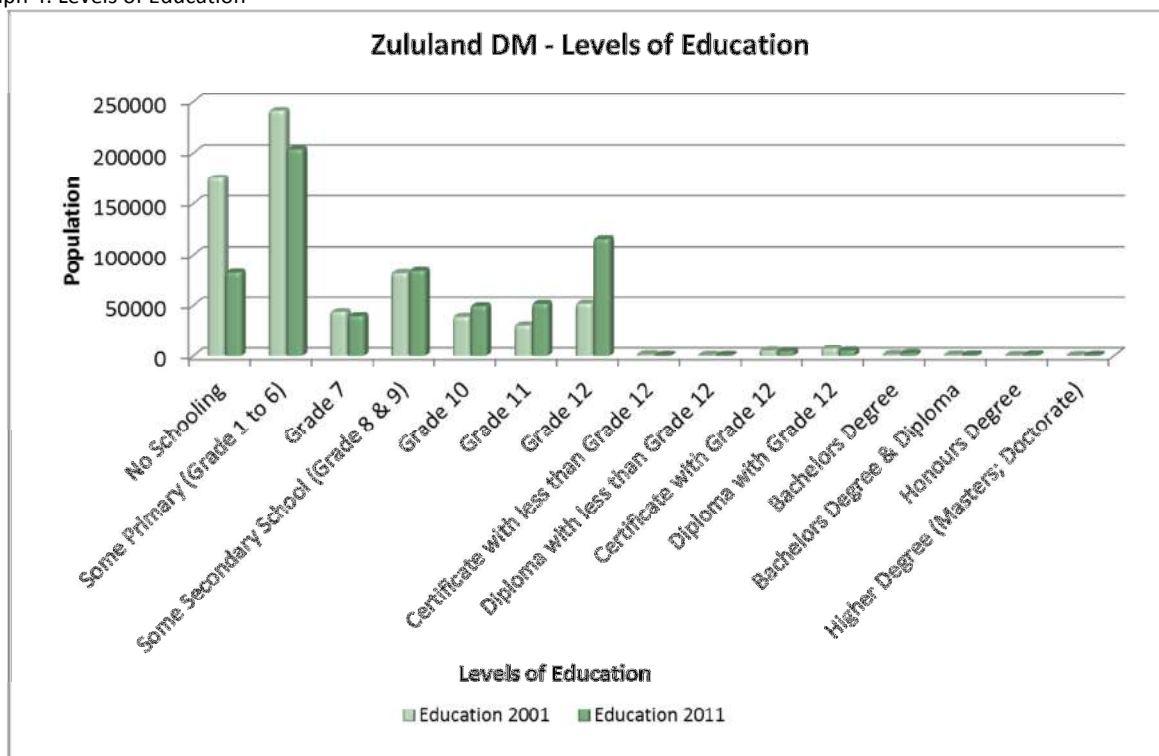
The challenges not apparent from the concentric circle analysis, is localised accessibility challenges presented by topography and water bodies which prohibit access. Maintenance, upgrading and quality of these facilities are other challenges not considered when counting/surveying facilities. The topography and density of settlements amongst other factors therefore influences the ability to service certain areas effectively in the future.

3.3.6 Levels Of Education

The graph below depicts the levels of education within the Zululand District Municipality. In both 2001 and 2011 the largest number of the population had some primary education, although in 2001 an alarmingly large part of the population had no schooling at all, and in 2011 most of the population has some primary school education going up to grade 6. The graph does suggest that the levels of education increased, and that efforts to improve levels of education are fruitful.

Unskilled & semi-skilled labour can be used for labour intensive projects such as infrastructure implementation, but in order for the communities to benefit from opportunities such as tourism, or other opportunities presented by the unique locality of the area, it might be possible or required that additional training be presented to the communities to empower them to exploit the opportunities presented.

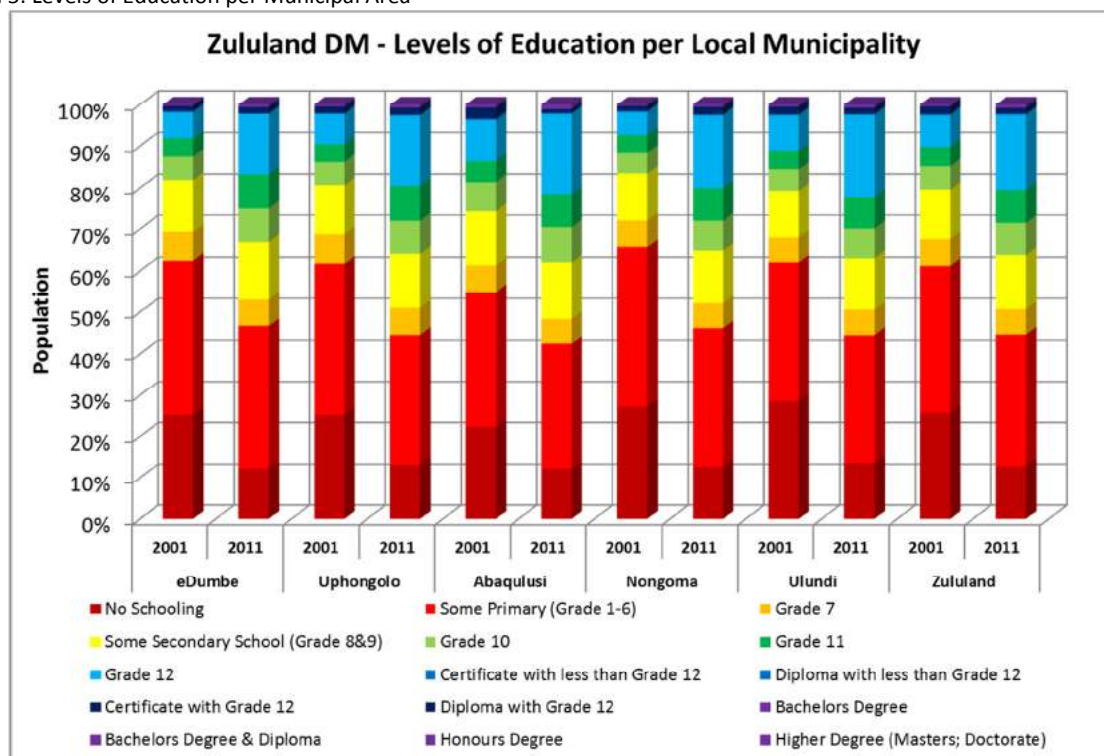
Graph 4: Levels of Education



Source: Stats SA Census 2001 & 2011

When comparing the education levels within the different municipalities, in 2001 Nongoma and Ulundi Municipalities had the highest percentage in population with no schooling as well as some primary education, in comparison to 2011 uPhongolo and Ulundi have the highest percentage of population with no schooling and uPhongolo and Nongoma have the highest percentage in population with some primary training. This can be attributed to the fact that these have larger rural components within the Ingonyama trust areas, with lower access to quality education. It is clear that an overall increase in education levels was experienced which indicates successful implementation of education programmes.

Graph 5: Levels of Education per Municipal Area



Source: Stats SA Census 2001 & 2011

3.3.7 Libraries

The KZN Librarian services provided the following standards for provision of Libraries:

Table 11: Standards for provision of Libraries

Facility	Provision Standard	Access Standard
Public Library	1 Public Library for every 60 000 Persons.	Maximum walking distance of 3 km

Although this is the official standard, the KZN Librarian Services indicated that these levels of provision are not at all achievable, and is not cost effective. In a densely populated city such as Durban this might be achievable, but in rural KZN it is difficult to provide a number of cost-effective libraries within the limited budget. The situation is constantly assessed and libraries are then provided in close proximity to a concentration of schools, urban areas, where the accessibility to the library is the highest, and the largest number of people can be reached.

The table below depicts the number of Libraries present within each Municipality:

Table 12: Libraries Per Municipality

Municipality	Libraries
aBaqulusi	4
eDumbe	2
Nongoma	1
Ulundi	1
uPhongolo	2
Total	10

Source: KZN Librarian services

3.3.8 Police Services

According to **Map 17: Access to Police Stations**, Zululand is serviced by 14 Police Stations. The standards for provision of Police Stations are as follows:

Table 13: Standards for Provision of Police Stations

Facility	Provision Standard	Access Standard
Police Station	1 Police Station for every 25 000 households	Accessible within 20 km radius

The table below depicts the required Police stations vs the existing police stations.

Table 14: Police Stations: Existing and Required per Municipality.

Local Municipality	Required	Existing
Abaqulusi Municipality	5	6
eDumbe Municipality	2	1
Nongoma Municipality	5	1
Ulundi Municipality	5	4
uPhongolo Municipality	3	2

Please refer to Map 17: Overleaf for a depiction of the Locality of the Police Stations.

MOBILE CLINICS AND EMERGENCY MEDICAL RESPONSE SERVICES

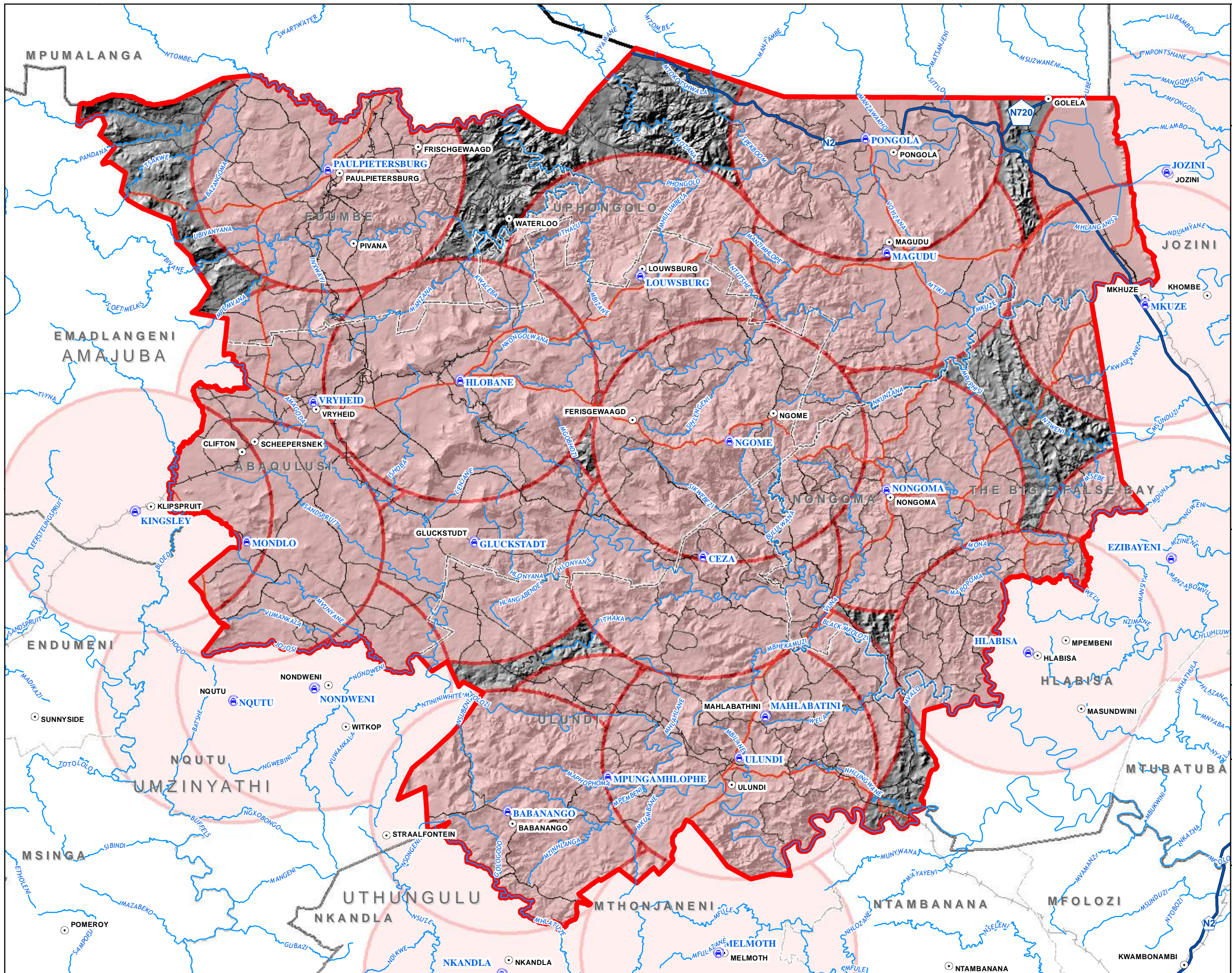
Although Social facilities refer to all Social Infrastructure, **Map 18: Social Facilities** further only depict Emergency Medical Response Services (EMRS), as well as mobile clinic base stations.

There are two mobile clinic base stations at the following localities:

- Paulpietersburg.
- Vryheid.
- Boundary of uPhongolo and eDumbe LM.

There are only two Emergency Medical Response Services (EMRS) within the district and located at the following localities:

- Paulpietersburg.
- Mondlo

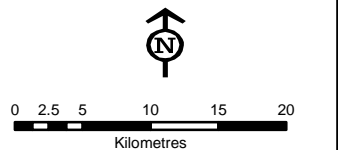


ZULULAND DISTRICT MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK

POLICE STATIONS

LEGEND

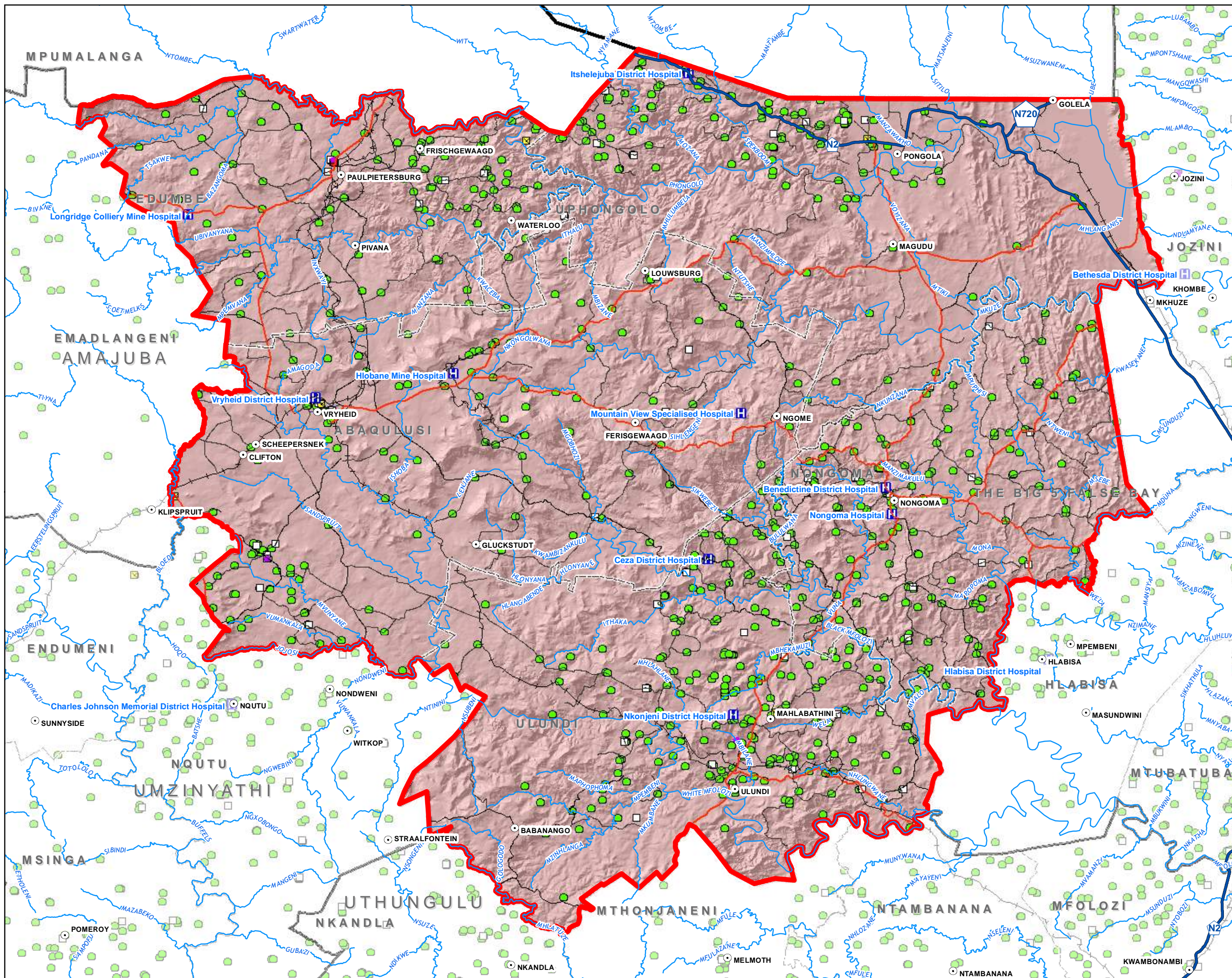
- Police Stations
- Place Names
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Police Station Buffer (20km)
- Zululand District Municipality
- Local Municipalities
- District Municipalities



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ZULULAND DISTRICT MUNICIPALITY

SPATIAL DEVELOPMENT FRAMEWORK

SOCIAL FACILITIES

LEGEND

- Hospitals
- CHC
- Clinics
- EMRS
- Mobile Base
- PHC
- Schools
- Place Names
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Zululand District Municipality
- Local Municipalities
- District Municipalities

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3.3.9 Community Halls

The locality of the community halls could not be accurately plotted, although the Zululand Draft Integrated Development Plan 2012 – 2016 provides statistical information regarding the availability of the halls. Please refer to the table below.

Table 15: Community Halls/Centres: Existing and Required Facilities Per Municipality

Local Municipality	Required	Existing
Abaqulusi Municipality	12	8
eDumbe Municipality	5	3
Nongoma Municipality	12	2
Ulundi Municipality	12	10
uPhongolo Municipality	7	6

Source: Draft ZDM IDP 2012-2016

The exact localities of community halls have not been captured, although the areas where community halls have been provided and where they are required have been sourced from the Draft ZDM 2012-2016 IDP. These are depicted in the tables below:

Table 16: Traditional Authorities with Community Halls

<ul style="list-style-type: none"> ▪ Buthelezi ▪ Hlahlindlela ▪ Matheni ▪ Mavuso ▪ Mbatha ▪ Mlaba ▪ Mpungose ▪ Msibi 	<ul style="list-style-type: none"> ▪ Mthethwa ▪ Ndebele ▪ Ndlangamandla ▪ Nobamba ▪ Ntshangase ▪ Simelane ▪ Usuthu
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Source: Draft ZDM IDP 2012-2016

The table below depicts area where community halls are still required.

Table 17: Traditional Authorities without Community Halls

<ul style="list-style-type: none"> ▪ Ndlangamandla Ext ▪ Disputed Area ▪ Khambi 	<ul style="list-style-type: none"> ▪ Khambi Ext ▪ Mandhlakazi ▪ Zungu
------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------

Source: Draft ZDM IDP 2012-2016

3.4 Physical Resources

3.4.1 Transportation Network

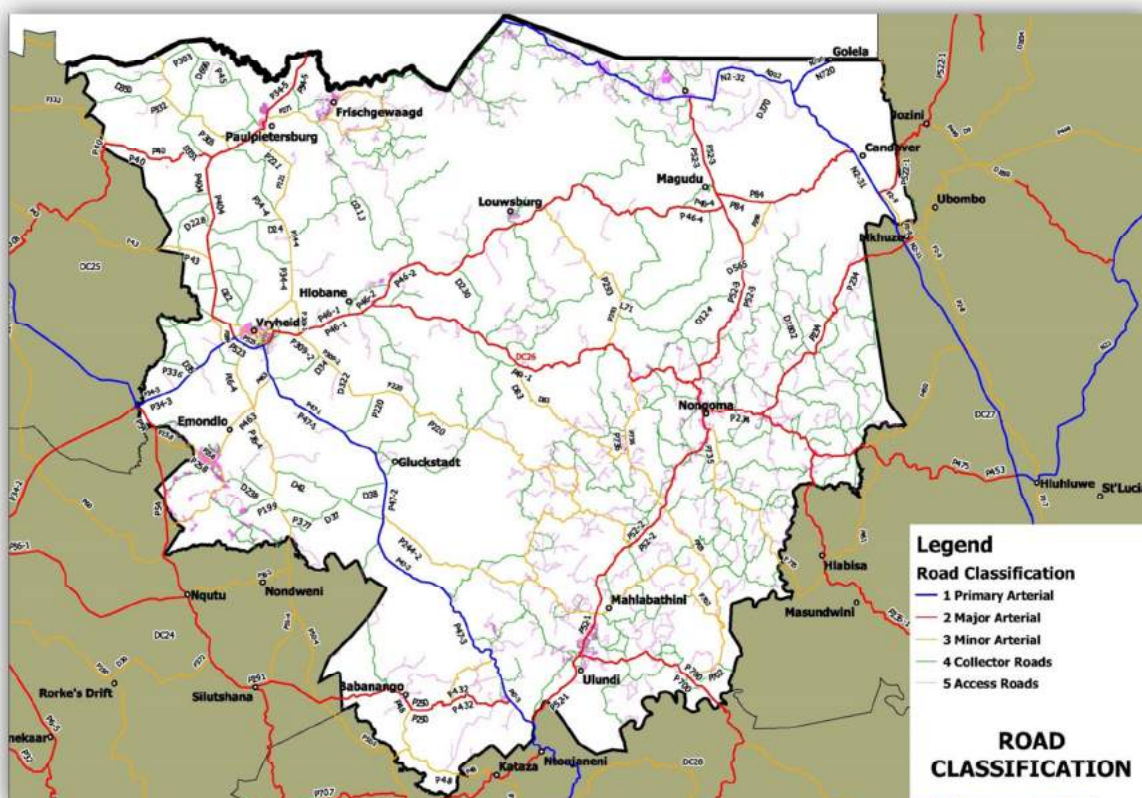
The following modes of transportation are present within the District:

- Road
- Rail
- Air

3.4.1.1 Road Infrastructure

The road infrastructure within the urban areas of the District is well developed. The rural roads are not maintained on a regular basis and results in low accessibility of the rural areas. The Draft ZDM 2012-2016 IDP evaluated the accessibility of roads for the residents. These are depicted in the table below. As indicated above, maintenance is problematic, and the fact that the below table depicts the distance of the population to roads, it might be rural roads that are inaccessible. Please refer to Map 19: Road Infrastructure for a depiction of the existing road infrastructure. Also refer to the below image for a Depiction of the RIFSA Road Classifications by the KwaZulu-Natal Department of Transport.

Figure 9: KZN Roads RIFSA Classification



Source: KwaZulu-Natal Department of Transport

Table 18: % Population within accessible distance from road infrastructure

Municipality	<1km	1 – 2.5km	>2.5km
aBaqulusi	95 %	1 %	5 %
eDumbe	89 %	8 %	2 %
Nongoma	99 %	0 %	1 %
Ulundi	94 %	1 %	5 %
uPhongolo	95 %	3 %	2 %
Average	94.4 %	2.6%	3%

Source: ZDM PTP

The table above depicts that on average 94.4% of the municipality is situated within 1km from a road and is possible of being serviced by public transport facilities.

The ZDM IDP further highlights a number of roads that is of strategic importance to the District and needs to be upgraded.

In order of priority these roads are:

1. P700 Ulundi to Hluhluwe-Umfolozi Park is considered key to unlock the tourism and industrial development potential of the region.
2. R66 Ulundi to Nongoma link road will strengthen the status of these towns as the main service centres in the Southern part of the District.
3. Granting of N2 Status to the Belgrade uPhongolo Road will benefit not only the uPhongolo Municipality, but the whole Zululand District Municipality.
4. Nongoma Vryheid link road
5. Nongoma uPhongolo link road.

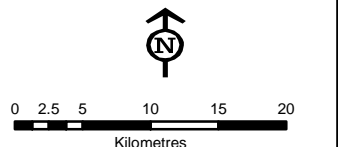
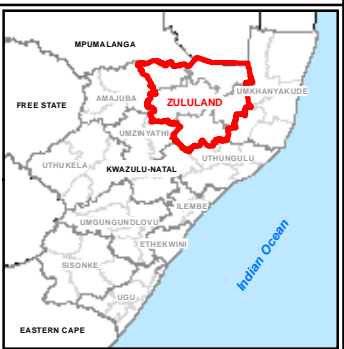


ZULULAND DISTRICT MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK

TRANSPORTATION NETWORK

LEGEND

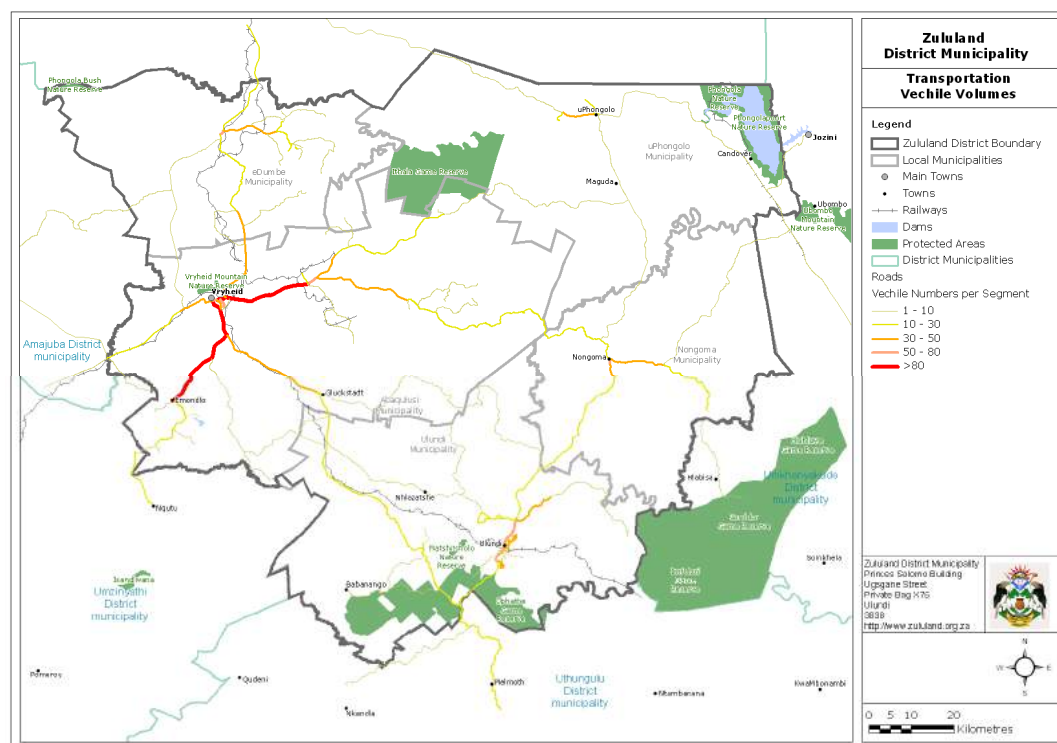
- Place Names
- Rivers
- Railway Lines
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Local Municipalities
- Zululand District Municipality
- District Municipalities



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3.4.1.2 Rail Infrastructure

The main rail corridor links the Mpumalanga coal fields to the Richardsbay Port from where coal is exported. From Mpumalanga Province the rail corridor links the following areas:

- Paulpietersburg
- Vryheid East
- Ulundi
- Richards Bay

In addition to the coal train there are approximately 17 general freight trains on the line transporting ferro-chrome, granite, chrome, steel and timber. There are no passenger trains on the rail, and the trains only stop to change crews at designated places.

3.4.1.3 Air Transport

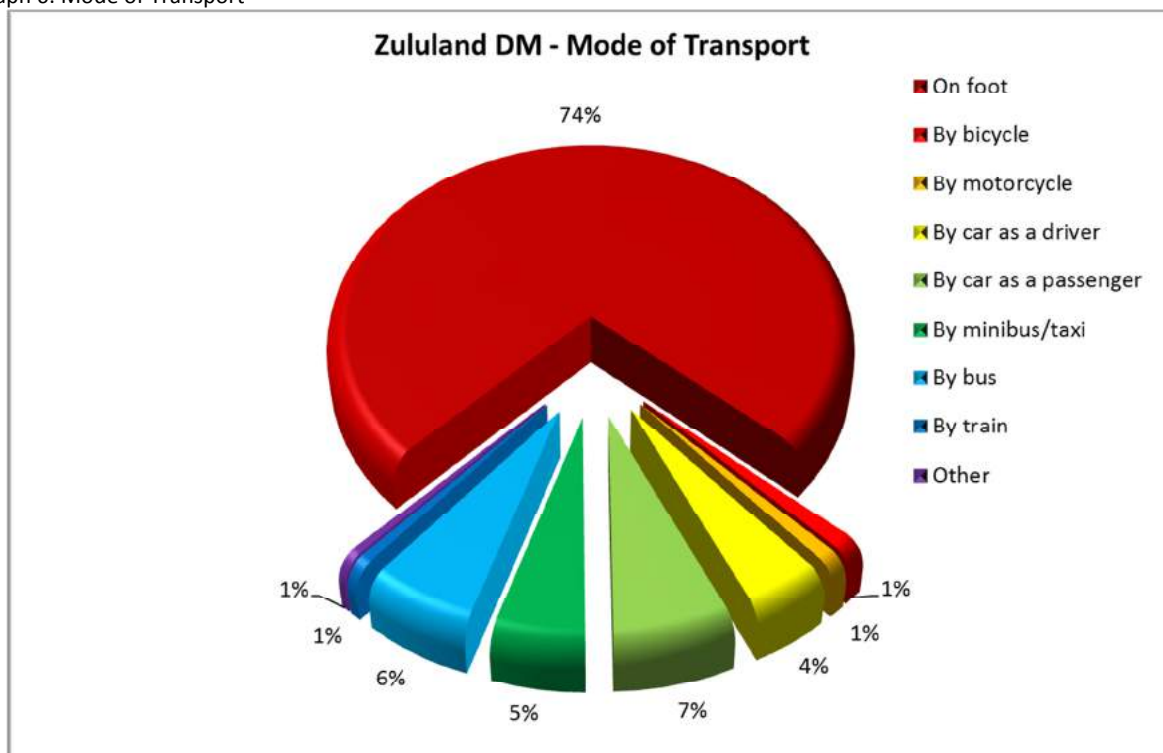
There are two airports in the District Situated in Ulundi and at Vryheid. The Ulundi Airport, which is being transferred to the management of the Zululand District is to be utilised as a catalytic intervention and key driver to implement the District's IDP and LED programmes.

3.4.2 Mode Of Transportation

From the statistical distribution of modes of transports mainly utilised by residents it is evident that the largest portion of the Zululand population (74%) are pedestrianized. This trend depicts two possible scenarios, namely the lack of funds to utilise public transport, and/or the lack of an adequate public transport system, due to remoteness and inaccessibility of the rural areas. Further to walking, transport by car as a passenger, transport by bus, by minibus taxi and by car as a driver are the next most popular modes of transport.

With the high dependency on the lower order nodes, it is necessary to ensure proper transport infrastructure exist, especially with the view of creating economic growth in the district, which positively affects the population. Should the residents not have proper access to opportunities; economic development initiatives will not be successful.

Graph 6: Mode of Transport



Source: Stats SA Census 2001

The SDF in conjunction with the transport planning of the municipality should aim to address the needs of the communities, by identifying possible transportation and connection routes, as well as inter modal transfer facilities.

3.4.3 Water Services

The accessibility to water infrastructure is illustrated on **Map 20: Water Infrastructure**. This map indicates that the densely populated areas as well as the rural areas of Ulundi, Nongoma and Parts of uPhongolo are well serviced with water infrastructure. The orange dots on the map depict the household points, and limited backlogs can be observed throughout the District, although large backlogs are clearly visible within the Nongoma Local Municipality specifically. There are a total of 10 regional water schemes within the District which are listed in the table below.

Table 19: Regional Water Schemes in ZDM

- | | |
|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Coronation • Hlahlindlela • Khambi | <ul style="list-style-type: none"> • Simdlangentsha East • Simdlangentsha Central • Simdlangentsha West |
|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|

- Mandlakazi
- Nkonjeni

- Usuthu
- Candover

Source: ZDM WSDP

The WSDP contains a list of planned upgrading and service installations, over the next 5 years.

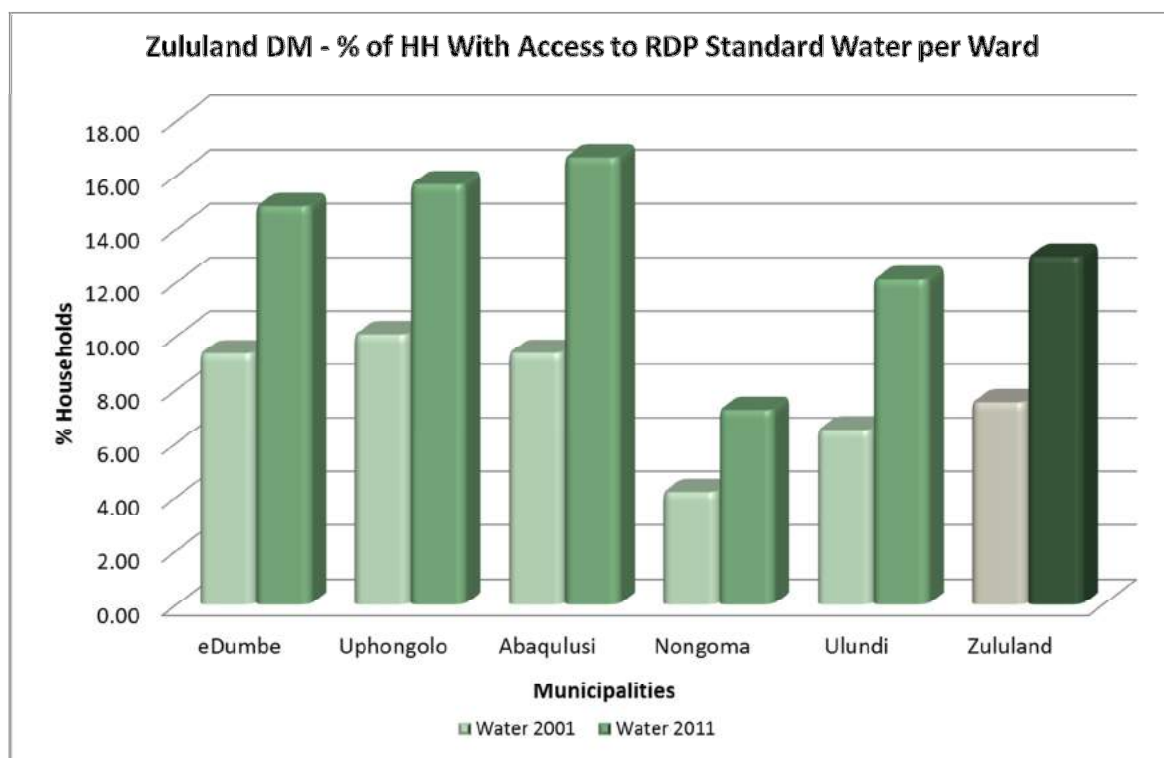
The plan further indicates water sources such as boreholes and springs. The Draft ZDM 2012-2016 IDP contains a summary of the current water services backlogs for the 5 municipalities, and is depicted in the table below.

Table 20: Water Services Backlog per Municipality

Municipality	Water Backlog within Municipalities (%)	Water Backlog Share within the District (%)
aBaqulusi	24.53	17.49
eDumbe	24.73	7.34
Nongoma	62.83	42.3
Ulundi	34.82	24.3
uPhongolo	19.64	8.58
Totals	35.49%	100%

The graph below depicts the percentages of households per ward which have access to RDP standard water according to the 2001 and 2011 census statistics. Although it is unclear how the data contained in the ZDM Draft IDP has been derived, the trends depicted are the same, where in 2001 Nongoma LM has the greatest need for water services and uPhongolo LM has the lowest need for water services, therefore provision of services throughout the district was on an equal basis. According to the 2011 census data Nongoma still has the greatest need for water services and aBaqulusi has the lowest need for water services. The access to the minimum RDP standard of water is relatively low throughout the district.

Graph 7: Access to RDP Standard Water



Source: Stats SA Census 2001 & 2011

Total backlog for water supply provision across the district is at 13% of the households and is 14% for sanitation supply. This is a marked improvement on the back log estimated by both Census information and the DWAF NIS system.

The Zululand District Municipality Water Services Development Plan (WSDP) categorises the types of water services provided as follows:

Communal supply at the minimum prescribed levels listed	This service level is the 'basic' supply which conforms to RDP standards of provision
Controlled volume supply	This would include yard tanks that are filled daily or low pressure connections either as yard or house connections. The amount of water discharged on a daily basis is therefore known.
Uncontrolled volume supply	These are usually high-pressure connections either as yard taps or house connections, and are uncontrolled but metered. Payment is therefore received for this water service.

Source: Zululand WSDP (2012)

Zululand District Municipality has adopted a Free Basic Water Services policy which is implemented as follows:

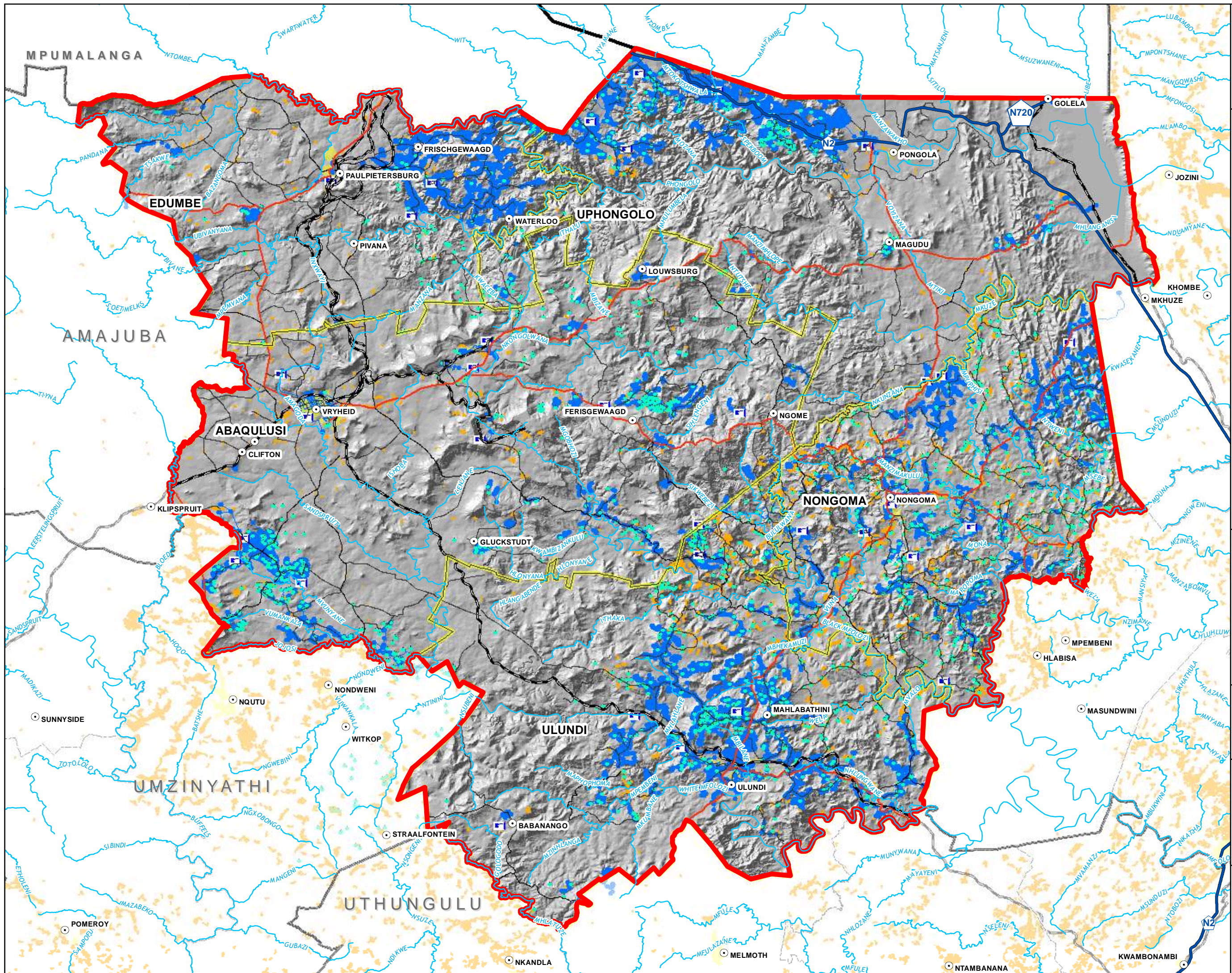
- All households will receive six kilolitres of potable water free of charge for domestic use.
- Industrial, commercial and institutional consumers do not qualify for free basic services.
- All water supplied from standpipes and rudimentary systems will be free.

The table below depicts how this policy is made applicable to the water users.

Table 21: Free Basic Water Policy

Service Level Number	Level of Water Service	Definition	Free Basic Water Policy
DW1	Full pressure conventional house connection	Direct unrestricted full pressure (24m) connection to the reticulation system, metered and billed	Stepped block tariff (with first block at zero charge free to all households)
DW2	Yard tank (RDP standard)	Restricted (to 200l per day) individual erf connection with tank in yard	All water at no charge
DW3	Communal street tap (RDP standard)	Unrestricted full pressure standpipe not further than 200m from dwellings (shared by a number of consumers)	All water at no charge
DW4	Rudimentary system	Formalised supply: <ul style="list-style-type: none"> • Borehole equipped with hand pump • Protected spring • Communal standpipe further than 200m from dwellings 	All water at no charge

Source: Zululand WSDP (2012)

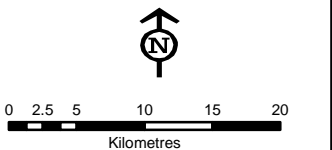


**ZULULAND
DISTRICT MUNICIPALITY
SPATIAL DEVELOPMENT
FRAMEWORK**

WATER INFRASTRUCTURE

LEGEND

- Boreholes and Springs
- Water Devices
- Water Treatment Works
- Place Names
- Water Pipelines
- Rivers
- Railway Lines
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Local Municipalities
- Zululand District Municipality
- District Municipalities



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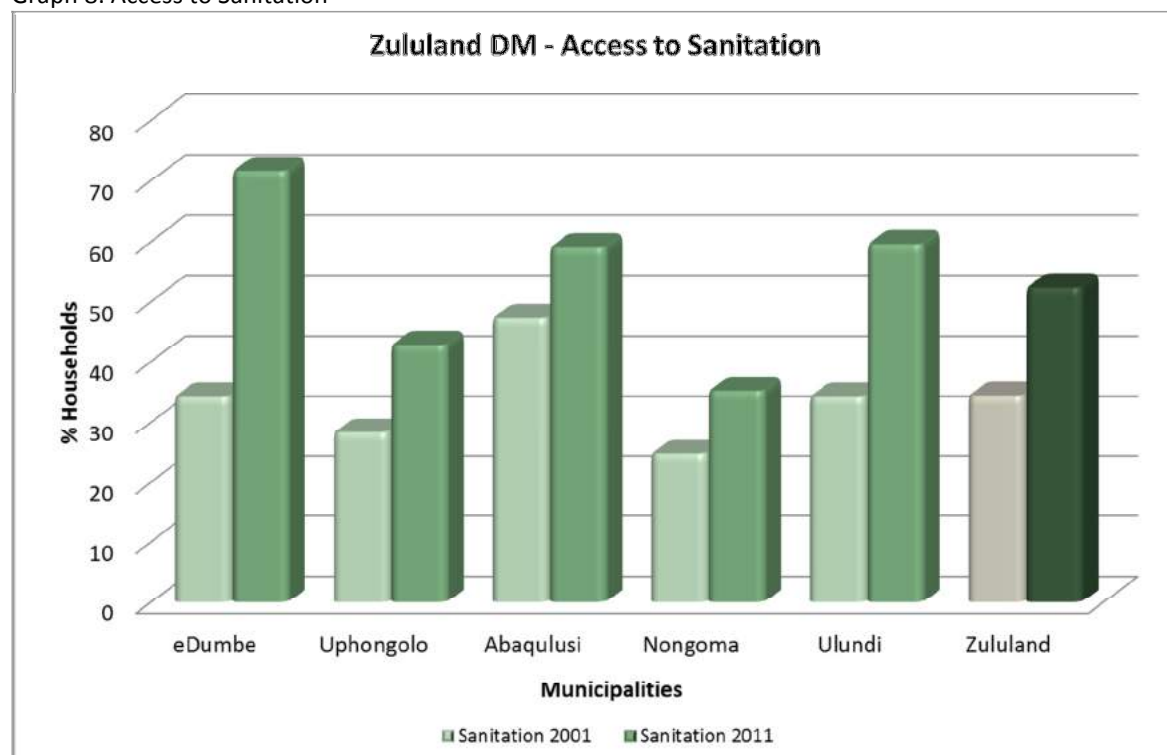
3.4.4 Sanitation Services

The statistical Data from Stats SA distinguishes between all types of sanitation services provided to the communities.

- Flush toilet with sewer
- Flush toilet with septic Tank
- Chemical Toilet
- Pit Latrine with Ventilation
- Pit Latrine without Ventilation

The obvious long term target is to provide all residents with waterborne sanitation and sewer but households with one of the above listed forms of sanitation are considered as serviced. The graph below clearly depicts that less than 50% of the population has access to acceptable sanitation services. According to the 2001 census data ABaqulusi LM has the highest service level and Nongoma the lowest, in comparison to 2011 eDumbe LM has the highest service level and Nongoma the lowest. The ZDM also depicted access to sanitation in the Draft 2012-2016 IDP, which is depicted in the table below the figure.

Graph 8: Access to Sanitation



Source: Stats SA Census 2001 & 2011

The backlogs as depicted by the Zululand District Municipality are depicted in the table below with eDumbe being the highest serviced Municipality, and Nongoma the municipality with the lowest level of services.

Table 22: Sanitation Services Backlog per Municipality

Municipality	Sanitation Backlog
aBaqulusi	18.61
eDumbe	5.1
Nongoma	64.04
Ulundi	49.27
uPhongolo	26.94

Source: ZDM IDP 2012-2016

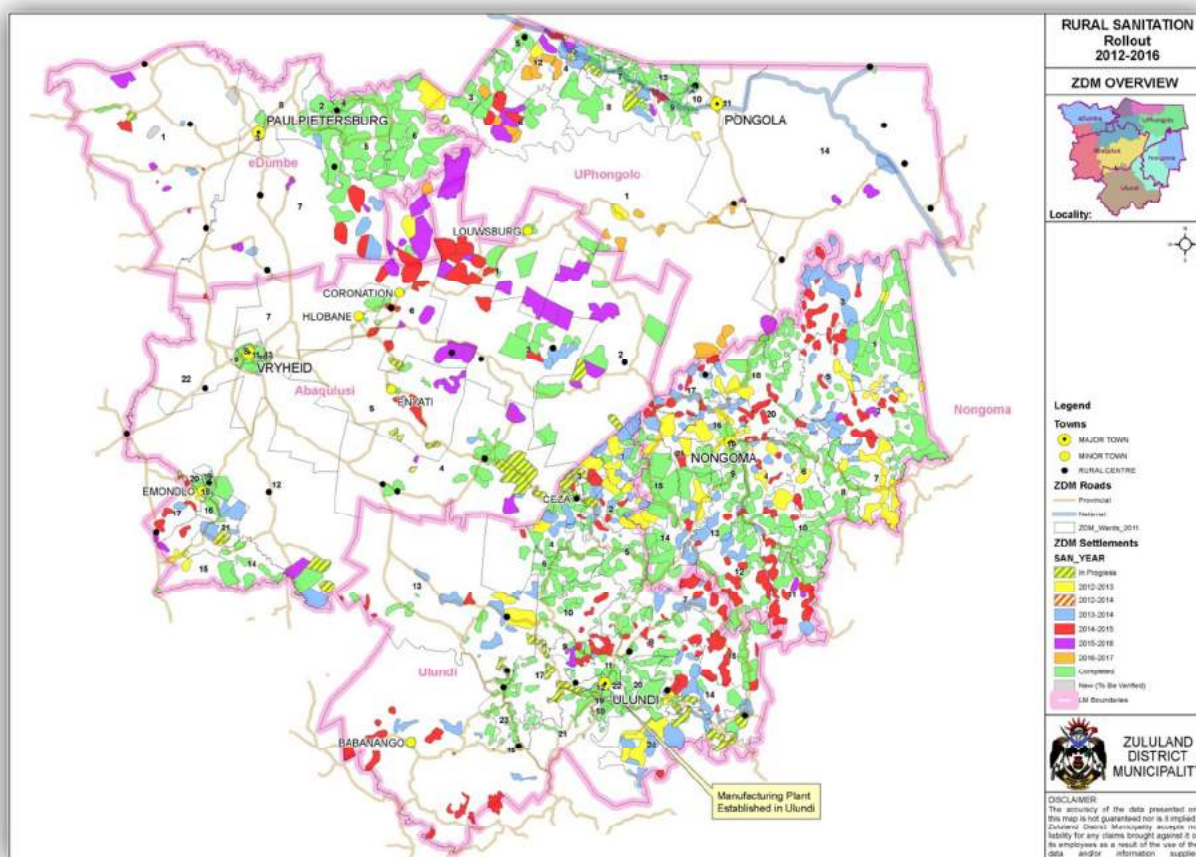
Map 21: Sanitation Network depicts the following aspects:

- Sewer Pipelines;
- Pump Stations;
- Treatment Works;
- VIP Toilets;

When considering that the map depicts the household points in orange, it can be seen that there are a large number of households that does not have access to proper sanitation facilities throughout the District with the highest concentrations of non-serviced households residing in the Nongoma, Ulundi and uPhongolo Local Municipalities.

The WSDP does however contain a roll-out plan, for basic sanitation services, of which the timeframes and localities are depicted on the image below.

Figure 10: Rural Sanitation Roll-out Programme



Source: ZDM WSDP

Table 23: Free Basic Sanitation Policy

Service Level Number	Level of Sanitation Service	Definition	Free Basic Sanitation Policy
DS1	Water borne sewage	Unrestricted connection to municipal sewerage system	Included in free basic water allocation
DS2	Septic tank or similar facility	On-site disposal (self-treatment)	No charge
DS3	Conservancy tank	Localised sewage temporary storage facility	No charge to selected households in specific areas as determined by the municipality,

			aligned to free basic water policy for service level DW4
DS4	Ventilated improved pit (VIP) latrine	Dry pit with sufficient capacity on-site disposal based on set standards	No charge

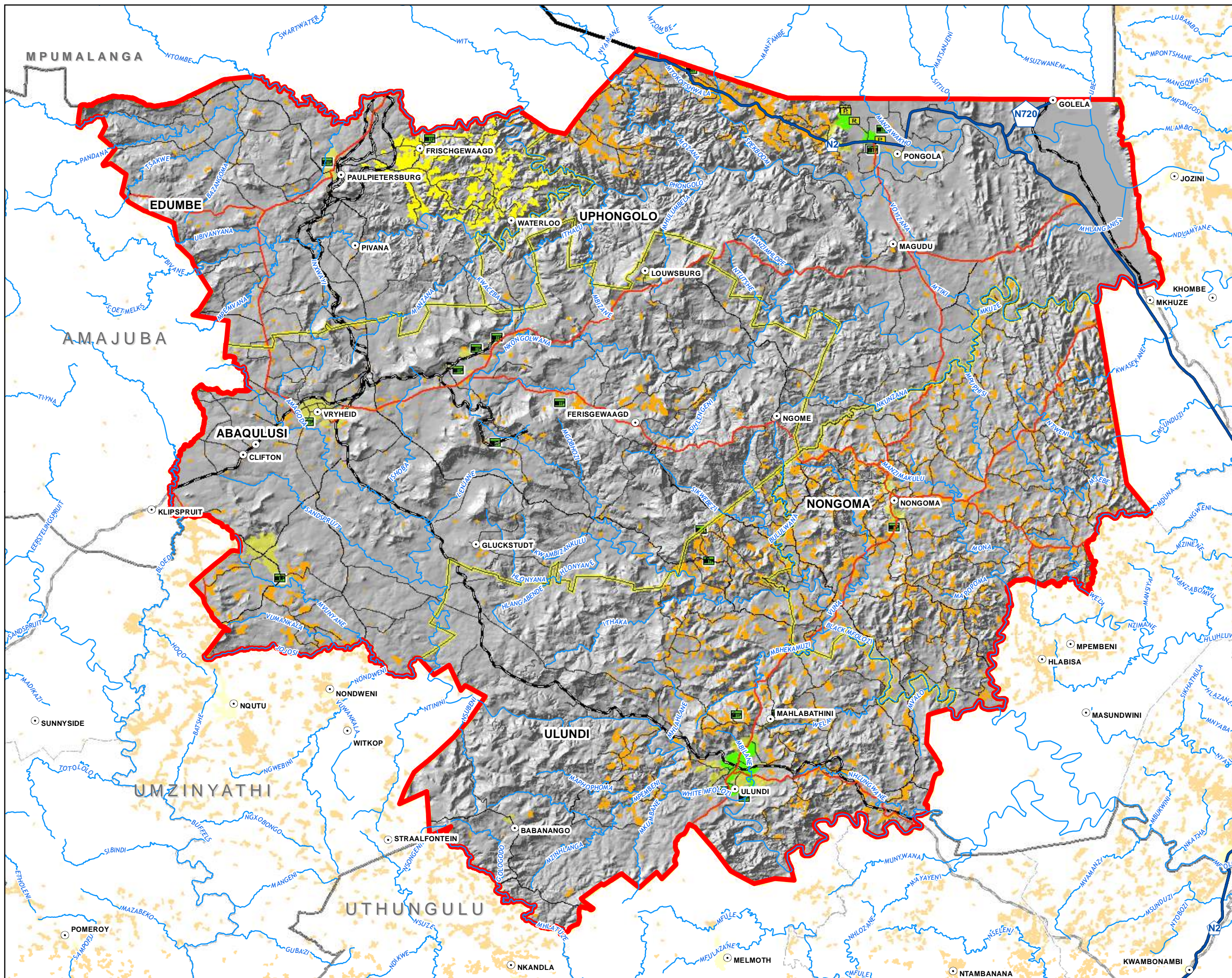
Source: Zululand WSDP (2012)

Unfortunately very little information is available regarding water requirements for industrial activities within the municipality, and the ZDM does not differentiate between provisions of volumes of water for residential or for industrial/commercial uses.

The Data from Stats SA identifies the following types of sanitation services levels"

<ol style="list-style-type: none"> 1. Flush toilet (connected to sewerage system) 2. Flush toilet (with septic tank) 3. Chemical toilet 4. Pit latrine with ventilation (VIP) 5. Pit latrine without ventilation 	Acceptable service levels – dependant on budgetary constraints.
<ol style="list-style-type: none"> 6. Bucket latrine 7. None 	Unacceptable service level.

Source: Stats SA – Census 2011



ZULULAND DISTRICT MUNICIPALITY

SPATIAL DEVELOPMENT FRAMEWORK

SANITATION NETWORK

LEGEND

- Place Names
- VIPs
- Sewer Components
- Pump Station
- Treatment Works
- Sewer Pipelines
- Rivers
- Railway Lines
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Local Municipalities
- Zululand District Municipality
- District Municipalities

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3.4.5 Electricity Network

Map 22: Electrical Infrastructure depicts the electrical infrastructure within the District, which includes Eskom Stations, as well as Eskom Lines. When comparing the locality of the lines to the household points it is clear that the district is very well serviced with regards to electricity infrastructure.

The table below depicts the level of services for the various municipalities. Nongoma has the highest rate of services, whilst the uPhongolo Lm has the lowest level of electrification.

Table 24: Level of Electrification per Municipality

Municipality	Access to Electricity
aBaqulusi	45
eDumbe	57
Nongoma	70
Ulundi	56
uPhongolo	24

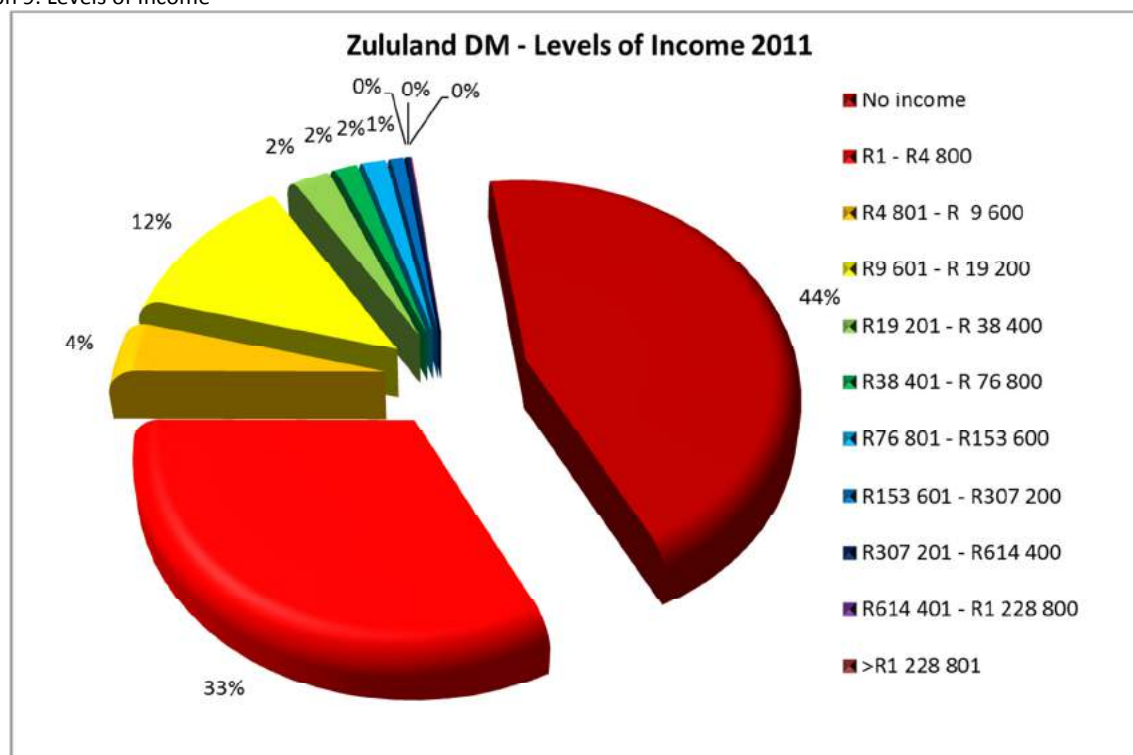
Statistically, access to electricity was measured according to the energy used for lighting purposes.

3.5 Financial Resources

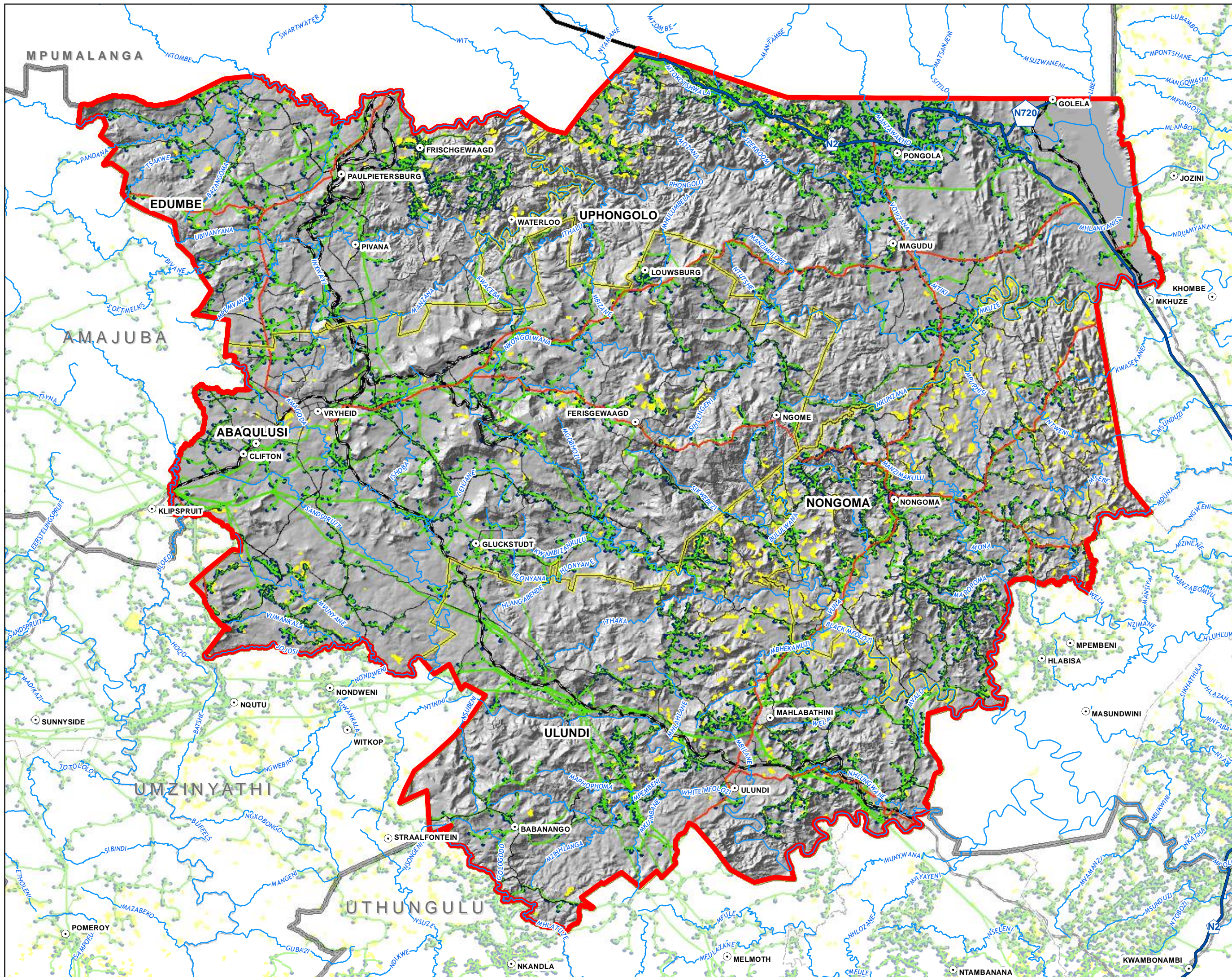
3.5.1 Income Distribution

The graph below depicts the income distribution within Zululand District Municipality. With an overall low income level as is the case in Zululand, it is very difficult for the various municipalities to build a proper tax base, which can be utilised for provision & Maintenance of services. The graph depicts that 44% of the Households have no income at all, and that only 19% of the households earn above R9,600-00 per month. There is a subsequent high social grant dependency. Only a small portion of the population qualifies for payment of taxes which leaves a huge burden on the current tax payers to fund the grants as well as the maintenance of services.

Graph 9: Levels of Income



Source: Stats SA Census 2011



**ZULULAND
DISTRICT MUNICIPALITY
SPATIAL DEVELOPMENT
FRAMEWORK**

ELECTRICITY NETWORK

LEGEND

- Eskom Stations (December 2011)
- Eskom Lines (December 2011)
- Place Names
- Settlement Boundaries
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Rivers
- Railway Lines
- Zululand District Municipality
- Local Municipalities
- District Municipalities

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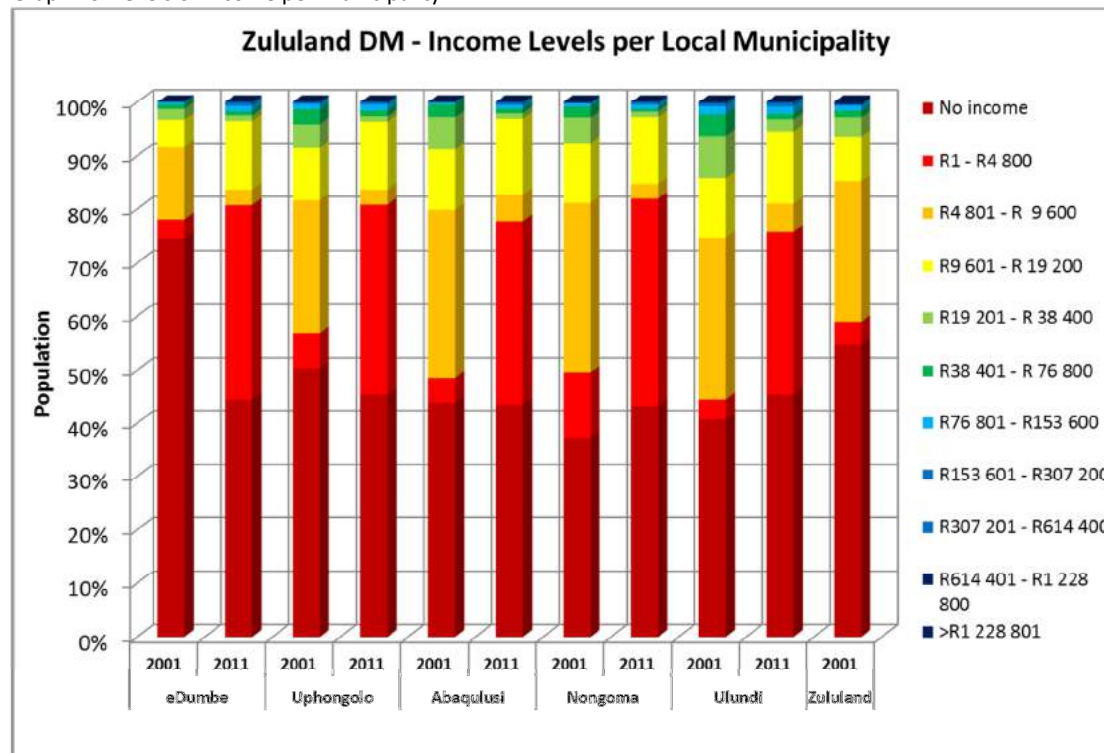
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Without external funding, the municipality will not be able to implement nor maintain any new services. It is therefore essential that the municipality implement initiatives to grow its tax base through successful implementation of economic development initiatives.

The graph below provides a comparison of the income levels between the various municipalities. The uPhongolo, Ulundi and eDumbe Municipalities have the highest number of households with no income at over 40%. uPhongolo LM is the strongest financial entity with just over 20% of the households having no income. This depicts that Ulundi LM has a 20% stronger tax base in 2011 in comparison to the other municipalities.

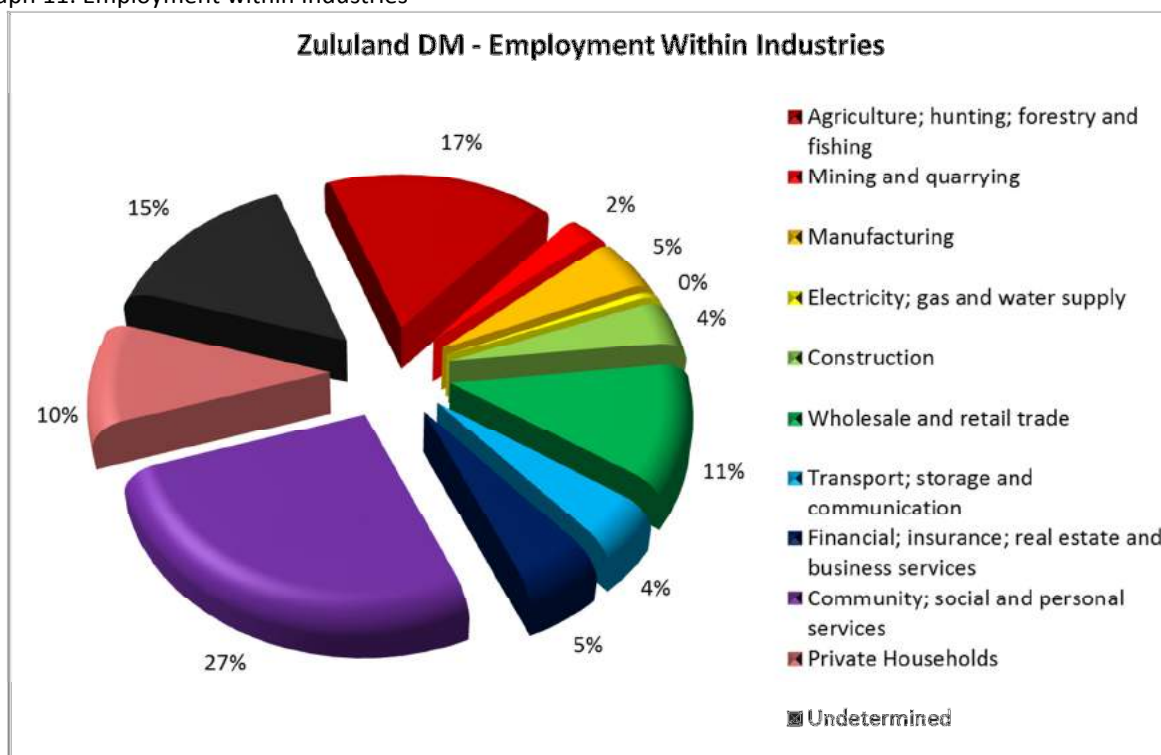
Graph 10: Levels of Income per Municipality



Source: Stats SA Census 2001 & 2011

The biggest employment sector in the district municipality is the Community, Social and Personal sector which relates to the high dependency on government services provided to the communities. Thereafter it is the Agriculture; Hunting, Forestry and Fishing Sector (17%) depicting the highly rural nature of the district. Following that is the Wholesale and Retail Trade Industries (11%) followed by Private Households (10%) which also depicts the dependency of the rural areas for work in the domestic environment. The remaining sectors are aimed at the smaller urban areas.

Graph 11: Employment within Industries



Source: Stats SA Census 2011

3.5.2 Business Sector Analysis

The Zululand District Municipality is unfortunately isolated from the national economy due to its location in relation to transport routes and its distance from major centres. Further, raw materials required for manufacturing purposes are scarce and includes basically materials related to coal mining and agricultural activities including maize, beef, timber and sugar production. There is further no beneficiation of the products.

The area still has a unique character offering a range of opportunities for economic development. Most importantly the area of the Zululand District Municipality is viewed as the symbolic core, also referred to as the “warm heart”, and of the wider area referred to as Zululand. This represents specific marketing opportunities as the district is home to a rich cultural diversity and numerous sites of historical significance, specifically relating to the Zulu nation. The town of Ulundi, the base of the Zululand District Municipality, historically also served as the capital of KwaZulu and still serves as the capital of KwaZulu-Natal together with Pietermaritzburg. The below Sections depicts the status quo of the various business sectors within the District.

3.5.2.1 Government Sector

It is noted that the government sector has a strong presence in the District and makes a major contribution the Gross Value Added (GVA). This sector is best represented in the Ulundi and Nongoma Municipalities where various regional offices and facilities of provincial government are located. It is assumed that the contribution of this sector would have been negatively impacted on by Ulundi losing its status as Provincial Capital in the last decade.

3.5.2.2 Agricultural Sector

The land cover of the Zululand District Municipality area is almost equally split between communal areas and privately owned commercial farming land. Generally speaking there is not a large quantity of high potential land available for cultivation in the district. However, the area is characterised by a diverse range of habitats which lend themselves to a wide range of agricultural and conservation enterprises.

In general terms good agricultural potential exists in the western highlands including the eDumbe and most of the Abaqulusi municipalities. High potential in the Pongola valley is as a result of irrigation opportunities that have been developed in this area. Current land cover reflects the potentials.

The communal areas of Ulundi and Nongoma are however not as fortunate and the agricultural potential (cultivation) is marginal to poor except for to high lying plateaus in each district, but these make up a small portion of the total area. Selected locations in the two Umfolozi river valleys provide potential for the development of irrigation schemes. Given the high temperatures in these valleys and the moderate winters, these areas are perfectly suited for the production of vegetables in the winter or off-season. In the drier valley bushveld areas livestock and game production are high value enterprises provided this type of activity is accompanied by careful veld management.

Given the medium quality and mixed resources in the district there is however considerable opportunities to expand production, investigate alternative production systems, transform the industry and improve cooperation between farmers.

Features of the agricultural economy include:

- Historically a strong beef sector with a conversion of substantial areas to game farming (specifically in the Louwsburg-Magudu-Pongolapoort Corridor);
- Sugar cane production in the north-eastern parts of the District around Pongola; and
- Timber production in the southern parts of Ulundi and northern areas of eDumbe.

3.5.2.3 Tourism Sector

The Zululand area is home to a wide range of historical, cultural and natural assets being uniquely located in the “heart of the Zulu Kingdom”. These assets provide the District with good tourism potential.

In certain areas of the District substantial work has been done to develop the tourism sector and its assets, however, much still remains to be done for the benefits of the sector to impact significantly on the socio-economic conditions of the communities of Zululand. The area faces major challenges in achieving this. Some of the key challenges include the distance of Zululand from major centres, the ceasing of regular flights to the Ulundi airport (it is understood this will be resumed in March 2012), the quality of road infrastructure in the District, the lack of coordination in tourism marketing and others.

It has long been contended that the development of key anchor projects and access routes will open up opportunities in an underdeveloped tourism sector. This includes finalising the construction of the Nongoma – Pongola link road and the large scale development of the Pongola Poort Dam area and the eMakhosini Heritage Park.

The Local Economic Development Strategy (2004) proposed some development strategies which are outlined below:

- The development and upgrading of game reserves, dams and nature reserves
- The establishment and marketing of arts and craft centres
- The need for tourism information tools, e.g. brochures, information offices and signage
- Development of festivals and events
- A travellers’ centre at Ulundi
- The development of the Emakhosini Valley
- The upgrade of roads
- The uQweqwe area, approximately 25km from Babanango attracts substantial French interest every year understood to be the site where Prince Glenn Flanagan was captured, and does not provide any basic facilities to tourists.
- Every year the Zulu Reed Dance is celebrated at Nsibaya/Enyokeni. There are a number of tourism development options that could be pursued with the annual celebration. Providing tourists with a better understanding of the Zulu Royal Family is only one of the opportunities presented.

- The road between Nongoma and Pongola (R66) has to be tarred (only about 27 km) to open up the district to tourism. It is understood that more than 30 tour buses enter the district at Golela every day that do not spend time and money in the district.
- The linkage between Nongoma and Ulundi via the R66 (Tangami Spa, Swart Umfolozi and Vryheid) should be improved.
- Access road to Ithala Game Reserve, via the Klipwal Mine. The Klipwal Mine (the only Gold Mine in KZN) is only about 3 km from the northern boundary of the Ithala Reserve.
- The R69 (Rooirante Road) between Magudu and the Pongolapoort dam is another very important link road.
- The P700 link to Empangeni/Richards Bay.
- An important link between Paulpietersburg, Wakkerstroom and Luneburg.
- About 20km of untarred road between Nongoma and Vryheid to be upgraded.

3.5.2.4 Commercial Sector

Established urban centres exist within the Zululand District Municipality. The municipalities and the urban centres relating to them include:

Note: The commercial sector in this context is used as a generic term for most businesses included the following sectors (as defined by the Standard Industrial Classification): (1) financial intermediation, insurance, real estate, and business services, (2) wholesale and retail trade (excl. Hotels and restaurants), (3) community, social and personal services.

- Ulundi Municipality – Ulundi town: Ulundi as a town fulfils a major administrative function in the Provincial and District context and is also home to a large urban based population.
- Nongoma Municipality – Nongoma town: Nongoma town is the only urban centre within the Nongoma Municipality which has a population of approximately 230 000 people. Nongoma town is home to a range of public sector and formal and informal commercial sector activities.
- uPhongola Municipality – Pongola: The town has a well-developed commercial sector and CBD which straddles the N2. A comprehensive range of businesses in the town serves the population of the town, the commercial farming sector and the rural population of the municipality, as well as the wider region and the through traffic on the N2.
- Abaqulusi Municipality – Vryheid: The town of Vryheid operates as a service centre for a large rural population, including areas such as eMondlo, Hlobane, and Coronation and areas further afield such as Ulundi and eDumbe. However, its economic base and reason for existence is as a service centre for the primary sector activities of mining and agriculture. This economic base has, however, been eroded in the past two decades with the closure of major mines in Hlobane and Coronation, as well as elsewhere in the District.
- eDumbe Municipality – Paulpietersburg: The local economy of Paulpietersburg is based on the provision of services to the agricultural sector and the surrounding rural population. The town offers a range of commercial and social services, but retains a strong rural town character.

Each of the towns differs substantially in terms of size, functions and character. A small number of other less developed centres are also located throughout the region, but have no significant impact on the spatial economy.

3.5.3 Mining Sector

The mining sector has traditionally been a key driver of the economy in the Zululand District Municipality, and its current contribution to the District GVA is considered substantially less than the 7% indicated in the Quantec data.

Most of the major coal mines in the Abaqulusi and eDumbe Municipality ceased operations in the 1990s as a result of the economics of extraction processes. Over the past decade there has, however, been interest by international and smaller South African mining companies wanting to extract remaining reserves.

In Ulundi the Zululand Anthracite Colliery continues to operate and in Nongoma the exploitation of the Somkhele seam has been a focus in recent years. This mining activity has implications for future economic and spatial development of the area.

3.5.4 Local Economic Development

The Zululand District Municipality developed in 2004 the “Zululand coordinated Local Economic Development Framework” in an attempt to establish structures that can facilitate the structured economic growth of the District Municipality, through the coordination of activities within the various local municipalities.

The objectives of this strategy are the following:

- To reduce income leakage
- To increase investment (both local and external)
- To promote local business development and business interaction
- To increase entrepreneurial opportunities and employment

The principles to lead the development of the strategy support the basic objectives in informing the strategy development and operational planning for future economic development in Zululand. These principles are the following:

- Process approach
- Sustainability
- Collaborative effort / Coordination
- Market based
- Integration

The Zululand District Municipality developed a Local Economic Development Strategy

DISTRICT STRATEGIES	<ul style="list-style-type: none"> • Establishing LED institutions and processes • Changing attitudes • Addressing the fundamentals • Raising the profile of the region • Improving and Promoting Access • Visible Delivery
BUSINESS STRATEGIES	<ul style="list-style-type: none"> • Institutional structuring for delivery • Capacity building and training • Establishing/building agri-industries • Establishing small scale mining • Municipal business strategies
AGRICULTURE STRATEGIES	<ul style="list-style-type: none"> • Institutional structuring for agricultural delivery • Sustainable land reform • Improved market access for agricultural produce • Visible delivery in agricultural sector • Municipal agricultural strategies
TOURISM STRATEGIES	<ul style="list-style-type: none"> • Institutional structuring for tourism • Tourist information inside the District • Tourist information outside the District • Making tourists feel safe and welcome • Community tourism • Visible tourism delivery • Municipal tourism strategies

Following the development of the LED Strategy the following projects are being implemented in the District:

- Ulundi Tourism Hub
- Construction of New Office Block
- Restaurant
- Kitchen
- Toilet Block, and External works
- P700 Nodal Development
- Servicing twenty nine (29) commercial sites i.e. Sewer reticulation, water and electrification.
- Laundromat Centre
- Mona Market Regularization
- Fencing the entire market

4 Spatial Objectives And Strategies

To enable the development of a Spatial Development Framework, a set of principles needs to be adhered to during development. This will assist with conflict resolution between the importance of different land uses and indicate preferred land uses above another. The following sections deals with the principles set out by the Spatial Planning and Land Use Management Bill, as well as the principles set out by the KwaZulu-Natal Provincial Growth and Development Strategy, and based on the current situation in Zululand District combined them into a Logical Framework for strategy implementation in the development of Zululand.

4.1 Spatial Principles

4.1.1 Principles From The SPLUMB

The SDF is guided by the following 5 spatial principles which form the foundation of an appropriate SDF. These principles were formulated as part of the Spatial Planning and Land Use Management Bill, 2012 (SPLUMB).

Table 25: SPLUMB

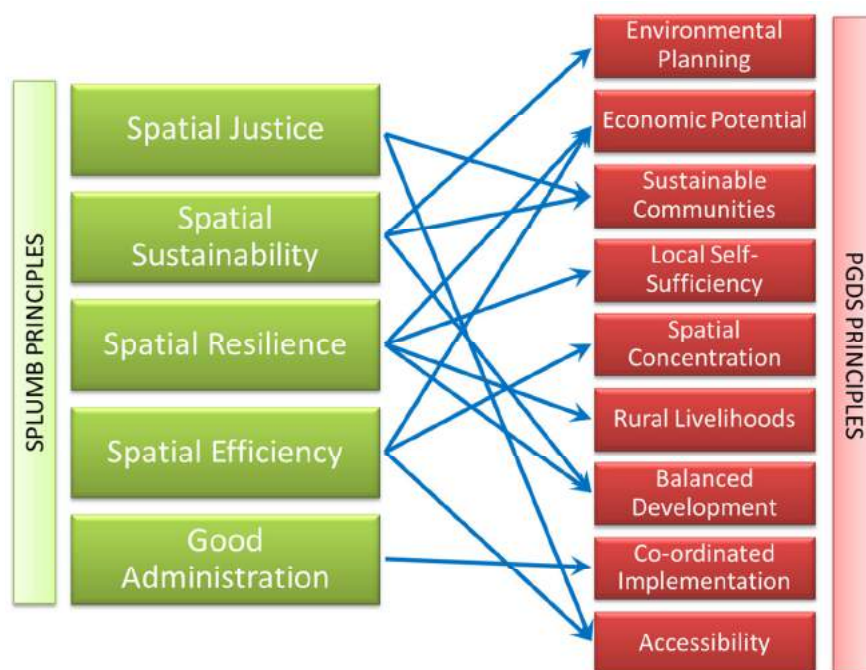
Spatial Justice	<ul style="list-style-type: none"> • Past spatial and other development imbalances are redressed through improved access to and use of land; • Spatial Development Frameworks and policies at all spheres of government address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterised by widespread poverty and deprivation; • Spatial planning mechanisms, including land use schemes, include provisions that enable redress in access to land and property by disadvantaged communities and persons; • Land use management systems are inclusive of all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, informal settlements and former homeland areas; • Land development procedures will include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and • Where a planning tribunal considers an application before it, the planning tribunal's exercise of discretion may not be impeded or restricted on the ground that the value of land or property is affected by the outcome of the application;
Spatial Sustainability	<ul style="list-style-type: none"> • Promote land development that is within the fiscal, institutional and administrative means of the country; • Ensure protection of the prime and unique agricultural land, the environment and other protected lands and the safe utilisation of land; • Promote and stimulate the effective and equitable functioning of land markets; • Consider all the current and future costs to all parties for the provision of

	infrastructure and social services in land developments; <ul style="list-style-type: none"> • Promote land development in locations that are sustainable and limit urban sprawl; • Result in communities that are viable;
Spatial Efficiency	<ul style="list-style-type: none"> • Land development optimises the use of existing resources and infrastructure; • Decision-making procedures are designed with a view to minimising negative financial, social, economic or environmental impacts; and • Development application procedures are efficient and streamlined and time frames are adhered to by all parties;
Spatial Resilience	<ul style="list-style-type: none"> • Flexibility in spatial plans, policies and land use management systems is accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks;
Good Administration	<ul style="list-style-type: none"> • All spheres of government ensure an integrated approach to land use and land development that is guided by the spatial planning and land use management systems as embodied in this Act; • No government department may withhold their sector input or fail to comply with any other prescribed requirements during the preparation or amendment of Spatial Development Frameworks; • The requirements of any law relating to land development and land use are met timeously; • The preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, to include transparent processes of citizen participation and all parties to have the opportunity to provide inputs on matters affecting them; and • Policies, legislation and procedures must be clearly set out and inform and empower citizens.

Source: Spatial Planning and Land Use Management Bill (2011)

In order to show alignment between national planning policy and provincial planning policy, the image below highlights how the strategic Goals of the KZN Provincial Growth and Development Strategy aligns with that of the SPLUMB and through addressing one set of principles, the other is also addressed.

Figure 11: SPLUMB Principles - Acknowledging PGDS Principles



Source: Vuka Africa

4.2 Spatial Development objectives and key development strategies

As indicated before, the core spatial challenges of the Spatial Development Framework would be to ensure spatial variety, equity, efficiency and sustainability. However, current practices does not always promote these concepts and it is therefore vital to identify in which manner current trends impact/does not impact on the achievement of these responsibilities and the eventual realization of the Spatial Development Vision.

The table below outlines the logical framework between the Spatial Development Drivers, the principles that needs to be adhered to, and the objectives that needs to be reached and the strategies to achieve these development objectives. The section further aims to provide a framework for conflict resolution between various land uses. Subsequently the Spatial Drivers as well as the Spatial principles are presented in order of Most important to least important, which will guide decision making when conflict in land use principles present itself.

Table 26: Spatial Development Objectives

PGDS Goals	PGDS Strategic Objectives	ZDM IDP Goal	ZDM IDP Objective (5 Years)	SDF - LAND DEVELOPMENT OBJECTIVES
1. Job Creation	1.1. Unleashing the Agricultural Sector	1.9. Investigate the feasibility of Fresh Produce Markets and Abattoirs. (1.9.)	a) Investigate the feasibility of Fresh Produce Markets and Abattoirs.	<ul style="list-style-type: none"> •To promote the agricultural development and use of prime agricultural land.
	1.2. Enhance Industrial Development through Trade, Investment			<ul style="list-style-type: none"> •To promote the development and key potential industrial areas.

	& Exports					
	1.3. Expansion of Government-led job creation programmes	2.1.1.				
	1.4. Promoting SMME, Entrepreneurial and Youth Development	2.2.1 To improve the economy of the district, through the creation of job opportunities and additional economic activities (2.2.1)	a)	To effectively contribute & coordinate LED in the District	•Promotion of private sector investment in rural areas within diverse economies	
			b)	To create LED awareness in the District	•To identify key Economic Investment Nodes and Areas.	
			c)	To apply for funding for LED		
		2.1.2 To Promote Tourism in the District (2.1.2)	a)	To create effective Tourism structures and have effective institutional arrangements in place.		
			b)	To ensure tourists/ potential tourists are aware of our product		
			c)	To make Zululand the favourite tourism destination		
			d)	Safety and Signage		
			e)	Tourism Routes		
	1.5. Enhance the Knowledge Economy				•To promote the development of knowledge economy facilities and infrastructure (eg. ICT technology, Research and Education Facilities)	
	2. Human Resource Development	2.2. Early Childhood Development, Primary and Secondary Education				•To promote sufficient distribution of and access to educational facilities.
		2.3. Skills alignment to Economic Growth	3.1.1. To transform the organisation to comply with the	a)	To comply with Employment Equity Legislation	

		Employment Equity Act (3.1.1)		
	3.2. Youth Skills Development & Life-Long Learning			
3. Human & Community Development	3.3. Poverty Alleviation & Social Welfare	2.5.1. The social upliftment of the communities in ZDM (2.5.1)	a) To reduce poverty by implementing Community Development Projects	•To spatially target interventions toward key areas of poverty concentration .
	2.6. Enhancing Health of Communities and Citizens	1.8.1. To deliver an effective and efficient environmental municipal health service (1.8.1)	a) To deliver an effective environmental municipal health service	•To promote sufficient spatial distribution of and access to health facilities.
		2.3.1. To reduce the impact of HIV/AIDS (2.3.1)	a) To create HIV/AIDS awareness and education	
	2.4. Enhance Sustainable Household Food Security			•To systematically improve access to land and proper land management practices in Traditional Authority areas .
	2.5. Promote Sustainable Human Settlements			•To develop and maintain flexibility in spatial plans, policies and land use management systems to accommodate and ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks •To identify key human settlement intervention areas.
	2.6. Enhance Safety & Security	1.5.1. To Plan, coordinate and regulate Fire Fighting	a) To ensure that fire fighting is well planned and executed in the	

		Services in the district. (1.5.1)	District	
			b) Regulation and coordination of Fire Fighting Services	
		1.6.1. To deal with Disasters efficiently & effectively in the district (1.6.1)	a) To review and facilitate the district Disaster Management plan	
			b) To create awareness of hazards and disasters	
	1.7. Advance Social Capital	2.4.1. To develop and empower Youth, Gender and people living with Disability (2.4.1).	a) To strategically plan development and empowerment initiatives for youth and gender	
4. Strategic Infrastructure	2.5. Development of Harbours			
	2.6. Development of Ports	1.2.1. To viably operate & maintain a Regional Airport that contributes to the growth & development of the district (1.2.1)	a) To implement identified activities in airport implementation plan as aligned to budget	
	1.3. Development of Road & Rail Networks	1.3.1. To facilitate the provision of a well-developed district road network (1.3.1)	a) To establish the status quo of roads within the Municipal Area and to take responsibility of the assigned district roads	
		1.3.2. To facilitate the Regulation of Passenger Transport Services	a) To clarify the DM's role in the Regulation of Passenger Transport Services	
	1.4. Development of ICT Infrastructure			
	1.4.1. Improve Water Resource	1.1.1. To progressively provide a cost	a) To provide cost effective water (including free basic water)	To ensure the optimal use of existing resources and infrastructure.

	Management & Supply	effective, reliable water services at a good quality to all potential consumers in the district (1.1.1)	b) To provide cost effective sanitation (including free basic sanitation services)	
			c) To reduce Water Loss	
			d) To improve on the quality of water delivered	
			e) To provide effective Customer Care	
			f) To ensure compliance with relevant water legislation	
			g) To effectively utilise grant allocation for water and sanitation	
			h) To deliver and regulate water services in a structured manner	<ul style="list-style-type: none"> •To promote the establishment of varied service delivery standards and strategies between various settlement typologies.
5. Environmental sustainability	1.1.2. Develop Energy Production and Supply			
	1.2. Increase Productive Use of Land			<ul style="list-style-type: none"> •To consider environmental, social and economic balance in all land development considerations.
	1.3. Advance Alternative Energy Generation			
	1.4. Manage pressures on Biodiversity			<ul style="list-style-type: none"> •To preserve the municipality's biodiversity and rehabilitate environmentally sensitive areas. •To ensure that the quality of water from rivers, streams and wetlands is suitable for the maintenance of biodiversity and the protection of

				human well-being.
	1.5. Adaptation to Climate Change			<ul style="list-style-type: none"> •To consider the potential impacts of Climate Change on long term spatial structure.
6. Governance & Policy	1.6. Strengthen Policy and Strategy Co-ordination & IGR			<ul style="list-style-type: none"> •To prepare, maintain and adhere to comprehensive municipal spatial planning policies and strategies. •To ensure sectoral and spatial integration in all land improvement and development. •To ensure full legislative compliance in all aspects of land development.
	1.7. Building Government Capacity	1.7.1. To develop capacity in the organisation for effective service delivery (3.2.1)	a) To comply with Skills Development Legislation	<ul style="list-style-type: none"> •To develop institutional capacity towards effective land management •To implement streamlined development application and decision making procedures
	1.8. Eradicating Fraud & Corruption			<ul style="list-style-type: none"> •Fair and transparent Processes
	1.9. Promote Participative, Facilitative & Accountable Governance	5.1.1. To promote good governance, accountability & transparency (5.1.1)	a) Policies & bylaws	
		5.1.2. To manage risk to the Municipality effectively and efficiently(5.1.2)	a) To operate the organisation at a minimum risk level	
	5.2. Actively Promoting Spatial			<ul style="list-style-type: none"> •To discourage settlement and development
7. Spatial Equity				

	Concentration			sprawl.
	5.3. Facilitate Integrated Land Management & Spatial Planning	5.2.1. To continuously promote integrated & co-ordinated planning and development within the District (5.2.1)	a) To promote integrated development planning (including the spatial reflection thereof) in an environmentally responsible manner	<ul style="list-style-type: none"> •To promote and develop residential & employment opportunities in close proximity to each other. •To promote diverse combinations of land uses in support of each other. •To ensure that rural and urban development are in support of each other.

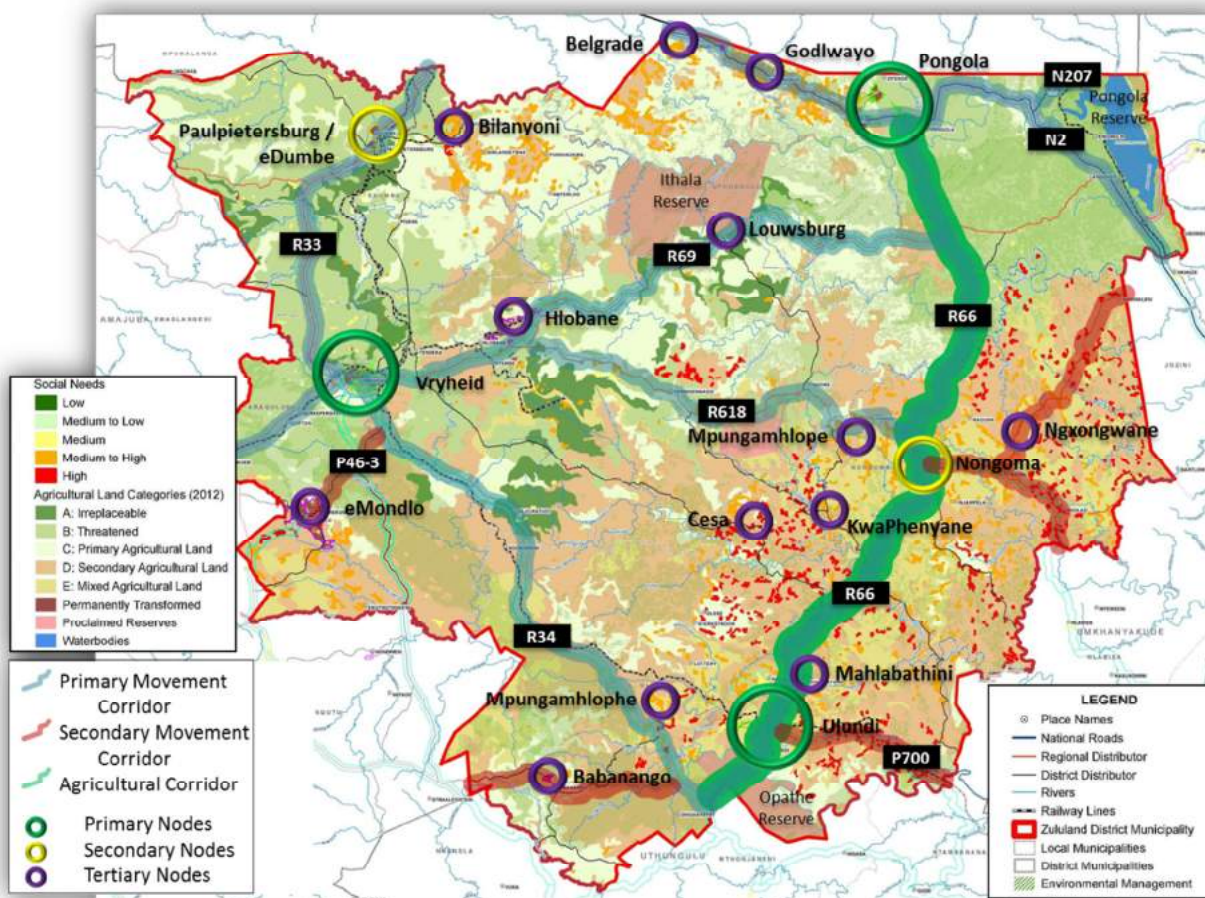
Source: Vuka Planning Africa

5 Spatial Development Framework

5.1 Spatial Development Concept

The Image below depicts the conceptual spatial framework and the relation of the various proposed land uses, nodes, and corridors in relation to each other. These will be discussed in more detail in following sections. The combination of the elements discussed in the sections below results in the draft Spatial Development Framework Plan, as well as the proposed overlays relating to Biodiversity, Land Capability and Settlement Clusters.

Figure 12: Conceptual Spatial Development Framework



Source: Vuka Planning Africa

5.1.1 Informants

The above map and Draft Zululand Spatial Development Framework has been compiled utilising the following informants.

Table 27: Informants

Environmental Management Informants	<ul style="list-style-type: none"> • Biodiversity Priority Areas • Critical Biodiversity Corridors • Protected Areas
Social needs Informants	<ul style="list-style-type: none"> • Population Density • Dependency Ratio • Provincial Index of Multiple Deprivation
Agricultural Potential Informants	<ul style="list-style-type: none"> • Land Capability • Existing Land Use • Agricultural Potential
Nodes and Corridor Informants	<ul style="list-style-type: none"> • District Economic Advantages • PSEDs Development Corridors • PSEDs Hierarchy of Nodes

Source: Vuka Planning Africa

The following sections provide an overview of the influence of the above informants on the various municipalities.

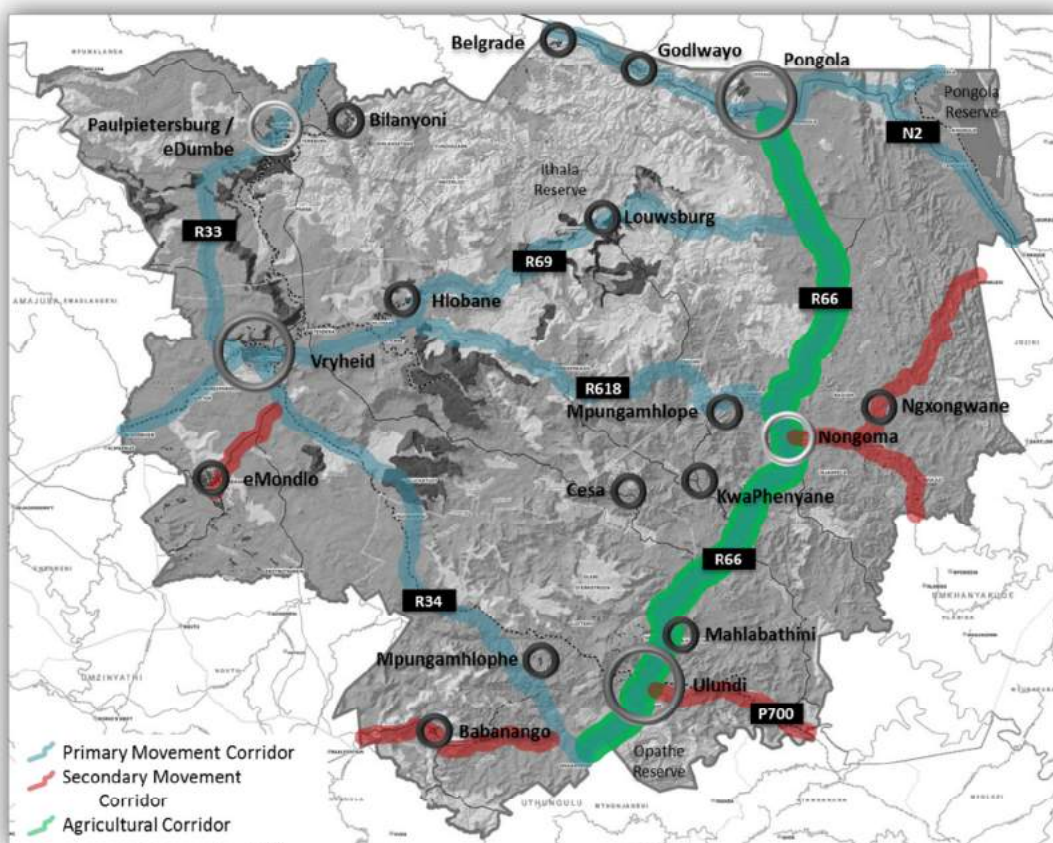
5.2 Corridor Development

One of the major structuring elements determining the existing and future concentration of development, activity and investment in a municipality are the corridors. A mixture and a hierarchy of the mentioned corridors should be provided to facilitate different levels of developmental and movement functions.

In the Status Quo a number of corridors and movement routes have been highlighted from previous strategic documents. It is proposed that in addition to these routes, a number of additional routes be targeted for inclusion in the Spatial Development Framework.

The following sections highlight the proposed routes and corridors as well as the interventions to be implemented on the various routes. The image below depicts the locality of the routes to be discussed.

Figure 13: Movement Corridors



Source: PSEDS

5.2.1 Rifsfa Classification

Within the rural municipalities, access to communities are more often than not, provided by non-proclaimed, community established gravel roads which does not have a designation or legal status.

The fact that they are informal does not detract from the fact that they provide an essential service with which the communities cannot do without. As a result of this the National Department of Transport embarked on an exercise to classify roads based on their functionality. This will also impact on the maintenance responsibilities which will be shared with the Province by Local and District Municipalities.

The revised approach to the classification of roads in South Africa is predicated on the following principles:

- Work from the bottom end of the road hierarchy upwards.
- Base the classification on:
 - The primary function of the road – recognizing the different roles of the road i.e. provision of mobility and/or accessibility or a combination of these factors.
 - Whether the specific road is "intra" or "inter" the administrative area of a specific authority.
- The approach should foster local participation and the delivery mechanism should be at as low a level as practical, i.e. responsibility should be assigned to the lowest level most intimately affected.
- The classification should be attuned to the current realities and needs in the country.

Table 28 : Rfisa Classification

Functional Class	Description
Class 1	Roads, which form the principal avenue of communication: - i. Between and through major regions of South Africa ii. Between provincial capitals and key towns which have significant national economic/social interaction iii. Between South Africa and adjoining countries, and iv. Whose main function is to provide access to major freight terminals, including ports.
Class 2	Roads not being class 1 whose main function is to form an avenue of communication: i. Between important centers and between class 1 roads and key towns within a specific province, on a province -wide basis. ii. Between important centers, within a specific province which have a significant economic, social tourist or recreation role (e.g., tourism and resource development).
Class 3	Roads other than class 1 or 2 roads, whose main function is to provide the principle arteries for intra-metropolitan traffic and freight movements.
Class 4	Roads, which are not class 1,2 or 3, are roads whose main function is to carry inter-municipality social, commercial and industrial traffic within specific metropolitan and district municipality areas.
Class 5	Roads whose primary function is to collect and distribute all traffic within local municipality areas including developing townships and to provide access to the wider road network, as well as the abutting properties.
Class 6	Roads, often undesignated, whose function is to provide the only access to scattered rural settlements and communities of up to 500 persons and which primarily serve local social services as well as access to markets and generally form the first phase of the journey for commuters and migrant workers. These roads will often form part of a rural infrastructure development framework.
Class 7	This category comprises special purpose public roads which cannot be assigned to any other class above and which are provided almost exclusively for one specific activity or function such as recreational, forestry, mining, national parks or dam access, for example.

Source: Road Infrastructure Strategic Framework for South Africa, 2002

As indicated the above classifications will have an impact on the maintenance responsibilities and activities associated with a road. These classifications have not yet been made applicable to the roads within the ZDM. The current “Classification” of roads is discussed in the sections below.

It is further necessary to distinguish between a movement corridor and a development corridor, as different functions and development approaches are applied to these roads. The term “activity corridor” or “Development Corridor” is used for short sections of road that:

- exhibit intensity of activity along them;
- are supported by nodes and residential land usage thus providing thresholds of activity to sustain economic and social development;
- are short and compact since a long section of road cannot sustain high order economic and social activity particularly in rural areas.

A movement corridor on the other hand provides for high accessibility and flow constant flow of movement between nodes and areas situated some distance from each other.

5.2.2 Movement Corridors

The main movement corridors within the Zululand District Municipality include the routes as displayed below. To identify these routes, the SDFs of the Individual Municipal SDF's were identified and then evaluated in terms of its contribution towards the accessibility and movement of the District. Corridors that provided access to only individual areas and did not contribute to the overall movement structure, were excluded.

The table and image below identifies the proposed Hierarchy of movement routes within the District.

Table 29: Description of Corridor Developments

Municipality	Primary Corridor	Secondary Corridor	
Nongoma	R66	P234 & R618	P735
aBaqulusi	P34-3 & P46 (R69) P47 (R34) P404 (R33)	P463 P258 P253 P34-4 D1303 D1309 P199	P523 P274 P220 P49-1 P49-2 P293
uPhongolo	N2 & N720	P52-3 (R66)	P46-4 (R69)
Ulundi	R34 & R66	R68	P700
eDumbe	P34-5 (R33) P404 (R33)	P271 P229	P34-4 P221

Source: Individual SDF documents of Municipalities

The combination of the above corridors ensures connectivity between all Municipalities within the District.

Public interventions envisaged in this area relate to:

- Constant Inter Governmental communication and co-ordination relating to the development of the Major Economic Corridors and its impact on the Zululand District Municipality.
- Tarring of roads which will provide transport services access to the remote regions, and open up additional economic opportunity in opening the areas. Accessibility is of key importance.
- Developing a localized Corridor Development Strategies, this will focus on spatial structure, infrastructure provision and attracting both public and private sector investment.
- Ensure multimodal transport integration occur along these roads at key points.

This route provides development opportunities that must be explored, and development should be encouraged along these primary routes.

5.2.3 Agricultural Corridors

The PSEDS identifies an agricultural corridor traversing the Municipality in a North South Direction, along the R66 from Ulundi to Pongola. The following public interventions are envisaged in this area:

- Establishing / Expanding Agro-Processing facilities:
Additional income generating opportunities are needed within areas of economic need. Agro processing, especially within an area situated on an agricultural corridor provides the potential for additional income. Agro Processing entails the turning of primary agricultural products into other commodities for market – in other words, beneficiation of primary agricultural commodities.
- To involve communities in agro-processing the following option can be considered:

Establishing small-scale, appropriate and sustainable processing businesses that are flexible require little capital investment and can be carried out in the home without the need for sophisticated or expensive equipment.

- c) Expansion of trade opportunities related to agricultural activities – formal and informal.

5.3 Nodal Development

The following Nodes have been identified within the District. For ease of reference the nodes are listed in the table below per Local Municipality.

More detail on the functions and economic base of these nodes are provided in separate section following the table.

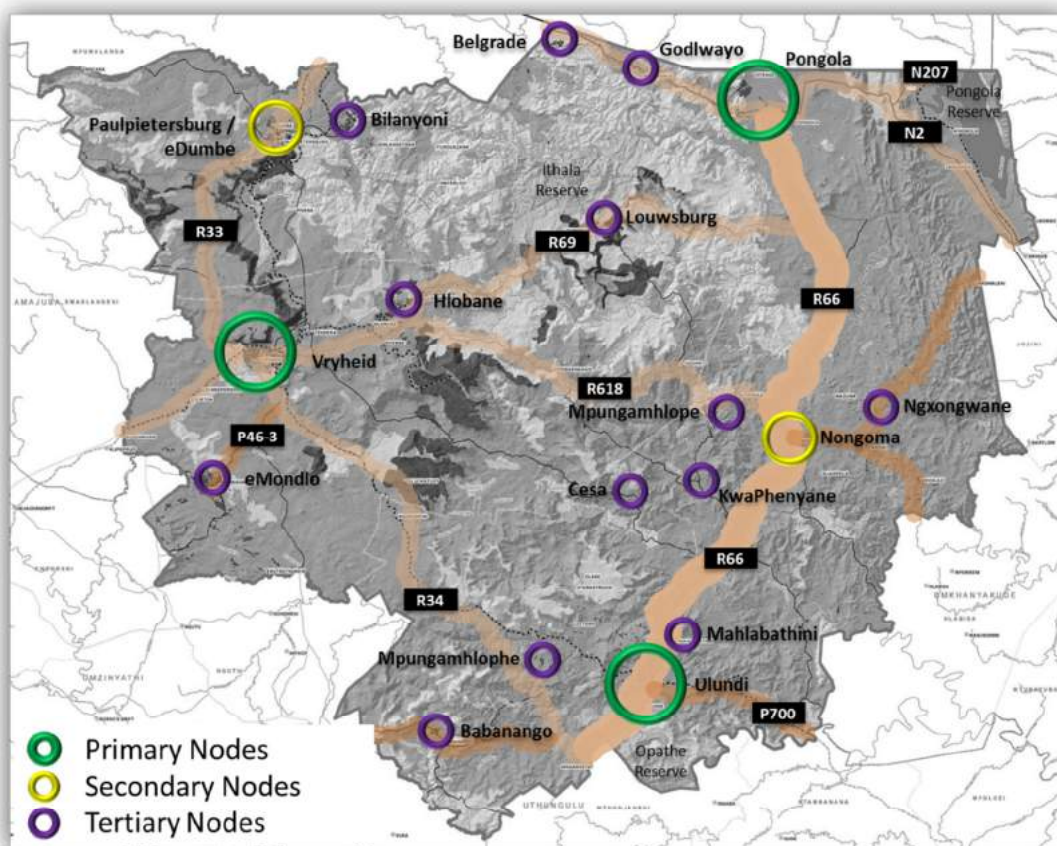
Table 30: Proposed Nodes

Municipality	Primary Development Nodes	Secondary Development Node	Tertiary Development Nodes
aBaqulusi Local Municipality	<ul style="list-style-type: none"> Vryheid 		<ul style="list-style-type: none"> eMondlo Hlobane Louwsburg
Ulundi Local Municipality	<ul style="list-style-type: none"> Ulundi 		<ul style="list-style-type: none"> Babanango Ceza Mpungamhlophe Nqulwane
uPhongolo Local Municipality	<ul style="list-style-type: none"> Pongola 		<ul style="list-style-type: none"> Belgrade Godlwayo
Nongoma Local Municipality		<ul style="list-style-type: none"> Nongoma 	<ul style="list-style-type: none"> Kwaphenyane Maphophoma Mahashini Ngxongwane
eDumbe Local Municipality		<ul style="list-style-type: none"> Paulpietersburg/eDumbe 	<ul style="list-style-type: none"> Bilanyoni / Mangosothu

Source: Vuka Planning Africa Inc.

The locality of these Nodes is depicted in the Image below:

Figure 14: Locality of Nodes



Source: Vuka Planning Africa

5.3.1 Primary Nodes

The following Primary nodes have been identified in the District Area.

Although fulfilling similar roles within the municipal context, in terms of scale of economic activities, the basis of the economies of the three nodal areas are very different.

Pongola – the economy of Pongola is based on large scale commercial production of Sugarcane. The uPhongolo natural features further allow for eco-tourism opportunities in the highly sensitive areas adjacent the Pongola Poort Dam, and the areas between the R69 and the N2.

Ulundi – Ulundi, as the current seat of the Zululand District Municipality, and the former seat of KZN, has a strong public service oriented economy. This allows for other supporting commercial and residential activities to be present within the Municipality.

Vryheid – In comparison to Pongola and Ulundi, Vryheid has a much larger commercial and services sector, although the economy is also dependant on agriculture, and mining.

These nodes are mainly centres which should provide service to the sub-regional economy and community needs. These centres were identified as Third Order Development nodes within the PSEDs. The following functions are envisaged for these centres.

- Secondary Economic Growth Areas
- Promote as Secondary Node in support of Corridor Development
- Promote Compact Urban Development & Combat Urban Sprawl
- Promote Focused Investment & Managed Growth
- Promote Densification (Brown Agenda) & Infill Development
- Provide Economies of Scale for Effective & Affordable Service Delivery
- Infill where High Levels of Services are Available (Restructuring Nodes)
- Increased Residential Density (number of dwellings)
- Promote Socio-Economic Upliftment
- Promote provision of sufficient Bulk Infrastructure Services (Demand & Supply)
- Priority spending on Infrastructural Upgrading Needs (New & Maintain)
- Promote Effective & Efficient Public Transportation Systems linked to Multi Modal Facilities

5.3.2 Secondary Development Nodes

The following 2nd order nodes have been identified in the District Area.

- Paulpietersburg
- Nongoma

These nodal areas do not provide services or economic advantages significant on Provincial Level, but fulfil very important service delivery functions within the local economies of the municipalities and are the only areas providing commercial choice to the residents of the respective municipalities.

These nodes were identified as fourth order nodes within the KZN PSEDS. Key strategic interventions specifically targeted at these nodes and their directly surrounding areas might include:

- Focused investment in areas of Poverty Concentrations
- Promote Integration (Green Agenda)
- Integration in terms of Mixed Densities & Uses
- Improve Transportation linkages to Nodes
- Promote Social-economic Integration
- Eradicate Backlogs & Promote Basic Service Infrastructure & Delivery
- Promote Socio-Economic Upliftment
- Promote provision of sufficient Bulk Infrastructure Services (Demand & Supply)
- Priority spending on Infrastructural Upgrading Needs (New & Maintain)
- Rural Service Delivery Point
- Promote & Establish PPP's
- Promote Cultural & Community Based Tourism

5.3.3 Tertiary Development Nodes

The following third order nodes have been identified within the various local municipalities

A total of 14 third order nodes have been identified throughout the district. The functions of these nodes consist of basic government service delivery to the surrounding communities with very limited commercial opportunities. The services sector within these areas is basically non-existent.

5.4 Intended Future Land Uses

5.4.1 Urban Areas

5.4.1.1 Residential

Residential neighbourhoods are to be strengthened within the Primary and Secondary Nodes. Where the need for rural housing is identified outside urban areas, it needs to be designed and constructed in such a way as to create densities and in line with the WSDP to ensure that sustainable communities are created and that services are provided cost effectively.

5.4.1.2 Industrial

The aBaqulusi Local municipality is best situated on main distribution routes and equipped with Industrial Land and Infrastructure to be developed as an industrial hub. A large Industrial Area is situated on the north eastern side of the town of Vryheid. Industrial Activities can also be linked to the proposed reviving of the Mining Sector.

Although limited, Pongola also has industrial infrastructure which can be aimed at developing and growing the agro processing industry.

5.4.2 Environmental Management Areas (Environmental Informants Map)

The environmental management areas were identified utilising the following criteria:

- Formally Protected Areas (Ithala Reserve, Pongola Reserve, Opathe Reserve)
- Environmental Corridors (Provided by Ezemvelo KZN Wildlife and included in the KZN SDF)
- Bushland (<70cc)
- Dense Bush (70-100cc)
- Forest
- Woodland

The locality of the above environmentally sensitive areas is discussed in the sections below.

5.4.2.1 Abaqulusi

The municipality has two distinct areas of environmental significance. It is acknowledged that development cannot be prevented within these areas, but that very strict land use controls should be developed to ensure the protection of the environmental features within these areas.

Firstly the Environmental Corridor identified by the KZN SDF is situated on the northern and western boundaries of the municipality.

Other environmental resources include the sensitive areas on the eastern boundary of the Municipality.

5.4.2.2 Edumbe

This municipality has the least environmental sensitive areas, and only a small portion of the municipality is affected by the environmental service corridors as identified by the KZN SDF. With the high level of agricultural potential, this allows for the expansion of the agricultural sector within the municipality.

5.4.2.3 Nongoma

The largest grouping of environmental sensitive areas in Nongoma is situated on the southern boundary of the municipality, although small pockets of environmental sensitive bush and woodlands are scattered throughout the municipal area.

5.4.2.4 Ulundi

The largest part of the Ulundi Municipal Land Scape contains environmentally sensitive areas. These areas includes the following:

- The Environmental Corridor running along the R34 connecting.
- The Opathe Game Reserve.
- A grouping of dense bush land and woodlands situated in the northern parts of the municipal area north of Dlebe and Mahlabathini.

The largest population densities are situated away from the environmental Sensitive area. The presence and influence of the homesteads might also be the reason for the lack of sensitive eco-systems within the populated areas.

5.4.2.5 Uphongolo

The uPhongolo Municipality has percentage wise the largest area of environmental sensitive areas.

The Environmental Corridor, identified by the Provincial SDF is traversing the municipality in an east west direction, connecting the Ithala Game Reserve to the Pongola Poort Dam, and basically divides the municipality into a northern and southern part which has two distinctly different situations as far as environmental capability is concerned.

The Southern part is characterised by highly sensitive environment of bushlands and woodlands. Currently these areas are largely utilised for eco-tourism activities which includes game farming, and lodges. This is reconcilable with the sensitive areas, and subsequently similar developments will be encouraged throughout this area.

The area north of the Environmental Corridor contains the main residential activities within the municipality and contains Pongola Town, Ncotshane and the rural settlements situated on Ingonyama Trust Land, west of Pongola Town. The two nodal areas in the Trust land areas, identified as secondary nodes in the Municipal SDF, are Belgrade and Godlwayo.

5.4.3 Rural Communities (Social Informants Map)

Rural settlements are identified on the Social Informants Map where large communities developed outside nodal and urban areas. The base data from the Department of Rural Development and Land Reform combined with the Eskom Household Study were utilised to plot households, which were then also classified in terms of social needs. These needs were based on the Minimum Level of Living data from the Kwazulu-Natal Provincial Spatial Development Framework.

The sections below depict the locality of the large groupings of households and the level of social needs. These will guide the implementation of interventions aimed at Social Needs.

5.4.3.1 Abaqulusi

Although small rural settlements are scattered around the municipal area, two significant areas are identifiable in the areas around Emondlo and Frischgewaagd. The Frischgewaagd area is to some extent owned by the Ingonyama trust board, but large numbers of households are residing outside areas owned by the Trust.

5.4.3.2 Edumbe

Large Settlement Clusters are situated around Bilanyoni and stretches towards the east. Although ownership details are not known, these settlements are either situated on private or government owned land as it is not registered to the Ingonyama Trust Board.

5.4.3.3 Nongoma

The Nongoma Rural Landscape is characterised by dispersed rural settlements situated along movement routes. All land within the municipality is further registered with the Ingonyama Trust. This is also where the largest concentration of households living below the minimum level of living is residing. It is obvious that the largest amounts of social upliftment investments will be spent within this municipality.

5.4.3.4 Ulundi

The Ulundi Municipal area can basically be divided into two portions with the eastern part of the municipality containing most of the rural settlement clusters. Most of the land is registered in the name of the Ingonyama Trust Board.

5.4.3.5 Uphongolo LM

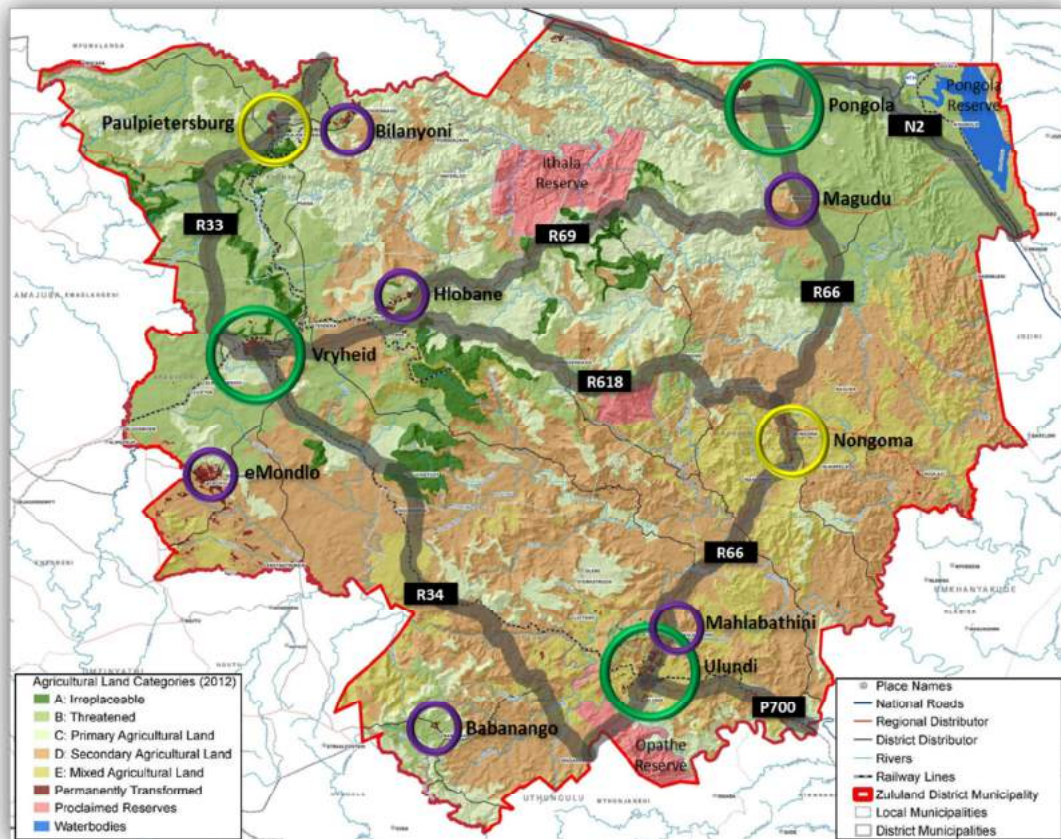
The largest rural settlements are situated on the northern and western boundary of the municipality, near the towns of Belgrade and Godlwayo. All of the lands on which these settlements reside are registered in the name of the Ingonyama Trust Board.

5.4.4 Agriculture (Agricultural Potential Map)

5.4.4.1 Agricultural Only

The intension is to identify areas with agricultural potential in order to expand the agricultural Sector. This will also address the protection of vulnerable agricultural land. The locality of the different levels of agricultural potential is depicted on the image below.

Figure 15: Agricultural Potential



Source: DAFF

The agricultural activities within the Zululand District can be grouped into four distinct areas which deal with arable agriculture, Forestry, Grazing Activities, and Subsistence Agriculture.

The highest potential agricultural land is situated in the northern half of the district and more specifically in the more evenly sloped areas of uPhongolo, Abaqulusi, and eDumbe Local Municipalities.

In general, the subdivision of prime agricultural land will be discouraged. The development of this land for non-agricultural purposes should only be allowed if:

- The land has already been subdivided to such an extent that it is no longer agriculturally viable;
- The land has already been developed for non-agricultural purposes;
- The proposed development does not compromise the primary agricultural activity of the property;
- The proposed development comprises a secondary activity to supplement a landowner's income;
- It will facilitate the implementation of the Land Reform Programme and Labour Tennant Projects.

The Department of Agriculture Forestry and Fisheries, does not consider anything less than 20 ha as a viable unit, and subsequently subdivision of less than 20ha will not be allowed.

The arable land identified is under severe pressure from settlement expansion and land uses such as mining. Mining activities specifically threatens the areas south of the Hlobane Coronation area where the highest agricultural potential for the district is situated.

As agriculture is one of the main employment sectors in the District and forms a large part of the economic base of three of the five municipalities, it is essential that sound land management approaches be developed and implemented.

The southern parts of the Municipality is characterised by secondary Agricultural Land which coincides with the subsistence agricultural activities. There is still a lot of potential to develop the agricultural sector within these areas, although projects need to be implemented to ensure expansion of the large scale agricultural activities.

It will be necessary to, through a participatory process with traditional authorities and communities undertake a detailed assessment of arable land within the district and more specifically the rural municipalities of Ulundi and Nongoma. It will be necessary to agree on measures to be implemented to on the one hand protect/reserve land, but also on the other, to make it available for intensive agricultural production activities.

Such an investigation should also identify opportunities for irrigation, the development of farming infrastructure (e.g. dams, pipelines, fences and the like). The development of these should be prioritised. With regards to cropping there is a range of options to be considered, which is beyond the scope of this spatial framework to identify. The Bio-Resource Unit information of the National Department of Agriculture Forestry and Fisheries, provides guidelines in this regard. Important opportunities relating to agricultural development to be pursued in the arable areas and areas in close proximity include:

- Implementation of the massification programme of the Department of Agriculture;
- ensuring easy access to relevant extension services;
- input supply opportunities;
- specialist agricultural support opportunities, e.g. ploughing, harvesting etc; and
- Agri-processing opportunities.

Whatever the focus of production activities in the Municipality there should be emphasis on:

- producing firstly for the local market;
- identifying and developing appropriate markets locally; and
- where external markets are to be supplied, established marketing channels must be utilised.

The following sections summarises the agricultural activities per municipality that needs to be supported, and strengthened.

5.4.4.1.1 Abaqulusi

Abaqulusi has the highest potential agricultural land with large portions to the south of Hlobane categorised as Irreplaceable Agricultural Land. This also divides the main agricultural potential categories of the municipality in two, with the higher potential agricultural land situated on the western boundary of the Municipality, and the agricultural potential declining to the east.

Agricultural potential on the southern boundary of the Municipality is categorised as secondary agricultural land which has limited capabilities in terms of arability.

The southern parts of the municipality is categorised as Secondary Agricultural Land. Agricultural Production still takes place on these portions, but can be mixed with different land uses.

5.4.4.1.2 eDumbe

Agricultural Activities in Edumbe Local Municipality consist of arable agriculture as well as forestry activities. The western side of the municipality has the highest potential agricultural land and subsequently agricultural production should be increased and supported within these areas. The eastern side of the municipality (Bilanyoni eastwards) has a mixture of primary and secondary agricultural land, which can be ascribed to the steep terrain features within this area. This also coincides largely with the occurrence of rural settlements.

5.4.4.1.3 Nongoma

The whole municipality of Nongoma has a mixture of Secondary and Mixed Agricultural Land. This can be ascribed to the extreme topographical features, as well as the presence of rural settlements on the more evenly sloped areas. Interventions in these areas should support subsistence farming which will support the war against hunger.

5.4.4.1.4 Ulundi

In similar fashion to the terrain of the southern parts of aBaqulusi and of Nongoma Municipality, Ulundi has extreme topographical features. Combined with the presence of the numerous rural settlements, the largest part of the municipality is categorised as a mixture of secondary and mixed agricultural land. The areas around Babanango are categorised as Threatened Agricultural land and therefore have high agricultural potential. This area is characterised by forestry activities.

5.4.4.1.5 uPhongolo

Although commercial sugarcane production is present in uPhongolo Local Municipality it is due to the presence of the Impala Water board Irrigation Scheme. The eastern, and more evenly sloped areas east of the R66 up to the Pongola Poort dam is classified as threatened, which further relates to the environmental sensitive character of the land. The dryer climate within this area makes it more suitable for grazing and game farming, than for arable agriculture. The proposed game ranching activities area can further be linked to Eco-tourism developments.

The western parts of the municipality is characterised by extreme topographical features, is difficult to farm commercially, and is subsequently characterised as a mixture of Primary and Secondary Agricultural Land.

5.4.4.2 Agricultural Eco Tourism

Agricultural & Eco-tourism areas are generally areas of lower accessibility and higher environmental sensitivity. The general objective is therefore that agricultural activities should continue, and natural resources be conserved. Tourism developments should be limited to natural and culture-based activities, and preferably integrated with farming activities. Large-scale land transformation such as exclusive residential estates shall not be allowed, nor will other forms of accommodation which have no link to the natural resource base and which diminish the agricultural potential and/or biodiversity value. Land subdivision will also be discouraged, but rural housing projects to accommodate the rural poor and farm and tourism workers will be allowed in appropriate locations. Particular attention should be paid to the retention of the integrity of rural landscapes.

The following distinct areas are included in this land use class:

5.4.4.2.1 uPhongolo Local Municipality:

The area situated east of the R66 and west of the Pongola Poort Dam. These areas are classified as “Threatened Agricultural Land”. This is also sensitive environmental areas. This presents an opportunity to facilitate the merging of the two issues by using the land for game farming, thus leaving it in its natural state. Agricultural and conservation activities can therefore coexist in the same space and time.

5.5 Strategic Intervention Areas

The proposed interventions are aligned with the provisions of the KwaZulu-Natal Growth and Development Strategy, where the Strategic Goals have spatial manifestations. The sections below depict the intervention areas for the following Strategic Goals:

- Goal 1: Job Creation;
- Goal 2: Human Resource Management;
- Goal 3: Human & Community Development;
- Goal 4: Strategic Infrastructure;
- Goal 7: Promote Spatial Concentrations

5.5.1 PGDS Strategic Goal 1 – Job Creation

The image below depicts the areas where the strategic objectives from the KwaZulu-Natal Provincial Growth and Development Strategy need to be addressed urgently to allow for overall economic growth of the District.

The following objectives are addressed:

- 1.1 - Unleashing Agricultural Potential
- 1.2 - Enhance Industrial Development through Trade, Investment & Exports
- 1.3 - Improve efficiency of Government-led Job Creation Programmes

The above strategic goals have the collective aim of investing in areas with the potential of obtaining a high “rate of return”. Resources are therefore identified which hasn’t yet reached its full potential and can be developed in order to do so.

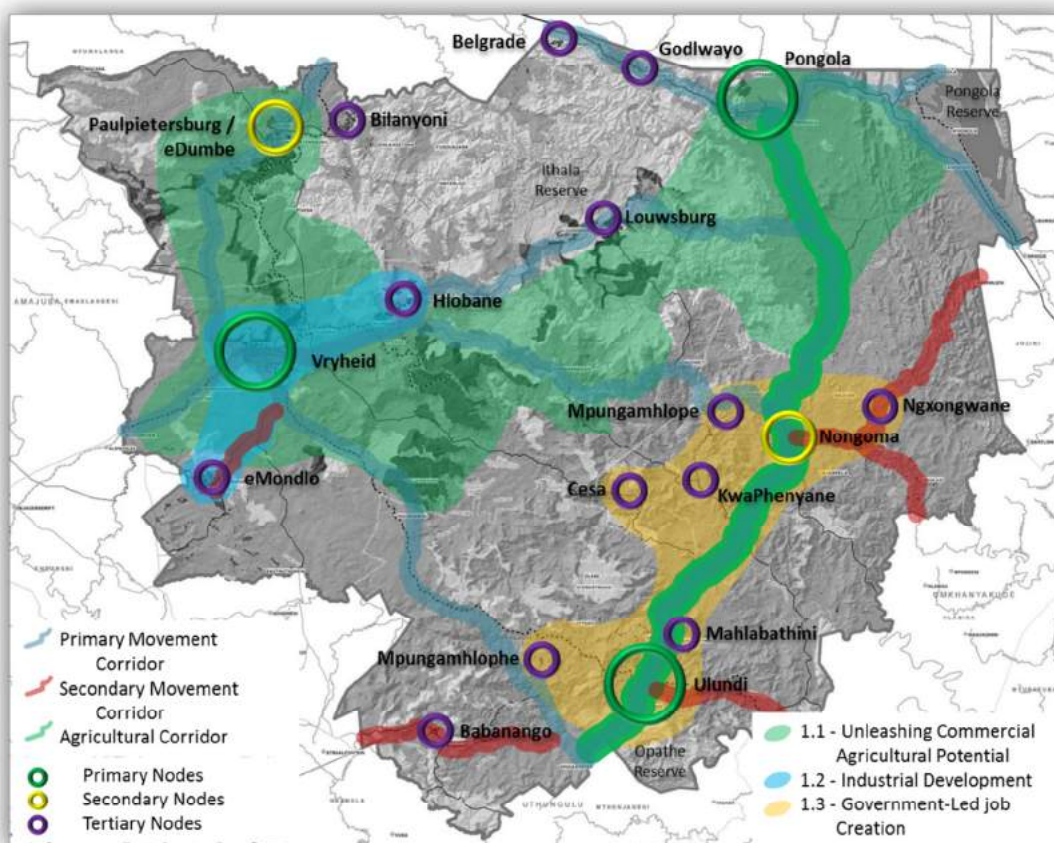
Agricultural potential that can be developed is situated within the municipalities of uPhongolo, aBaqulusi and eDumbe LM, where conditions are favourable for agricultural production.

Industrial Expansion is proposed within the aBaqulusi Local municipality where the best developed infrastructure for Industrial Development exists. This can be linked to agro-processing facilities as well and does not have to be purely Industrial Developments.

The nodal areas of Ulundi and Nongoma are situated within rural areas with extreme topographical Features. Commercial Agriculture is therefore not viable for this area, and it is proposed that government led jobs through labour intensive infrastructure development be utilised in these areas for job creation.

Please refer to the image below for a locality of the proposed intervention areas.

Figure 16: Spatial strategy to address PGDS Goal 1: Job Creation



Source: Vuka Planning Africa Inc.

The image above depicts the Spatial Locality where strategic Interventions are required. The table below highlights the strategies that the PGDS requires is addressed within these areas. These areas have been identified as there is a dire need to address the areas as highlighted by the Strategic Goals below.

Table 31: Strategies to address PGDS Strategic Goal 1: Job Creation

Objectives	Strategy
1.1 - Unleashing Agricultural Potential	1.1.1 Diversification of agricultural production & markets (including niche markets and agri-processing).
	1.1.2 Expansion of irrigation schemes and water use efficiency.
	1.1.3 Strategy for the development of emerging commercial farmers.
	1.1.4 Protection and rehabilitation of agricultural resources.
1.2 - Enhance Industrial Development through Trade, Investment & Exports	1.2.1 Establish District- level agencies to provide effective business and investor facilitation and support to reduce regulatory burden.
	1.2.2 Mandate appropriate institution or 'body' to act as a broker for special projects.
	1.2.3 Targeted identification and release of affordable zoned & serviced land including sector-specific industrial parks
	1.2.4 Improve the functionality of the Richards Bay Industrial Development Zone (IDZ).
	1.2.5 Establish a coordinated provincial funding mechanism for LED.
	1.2.6 Support implementation of the SMME, strategies
3 - Improve efficiency of Government-led Job Creation Programmes	1.3.1 Support enhanced implementation of the expanded EPWP.
	1.3.2 Expedite the roll-out of the Community Work Programme (CWP).

Source: KZN PGDS 2011

5.5.2 PGDS Strategic Goal 2 – Human Resource Development

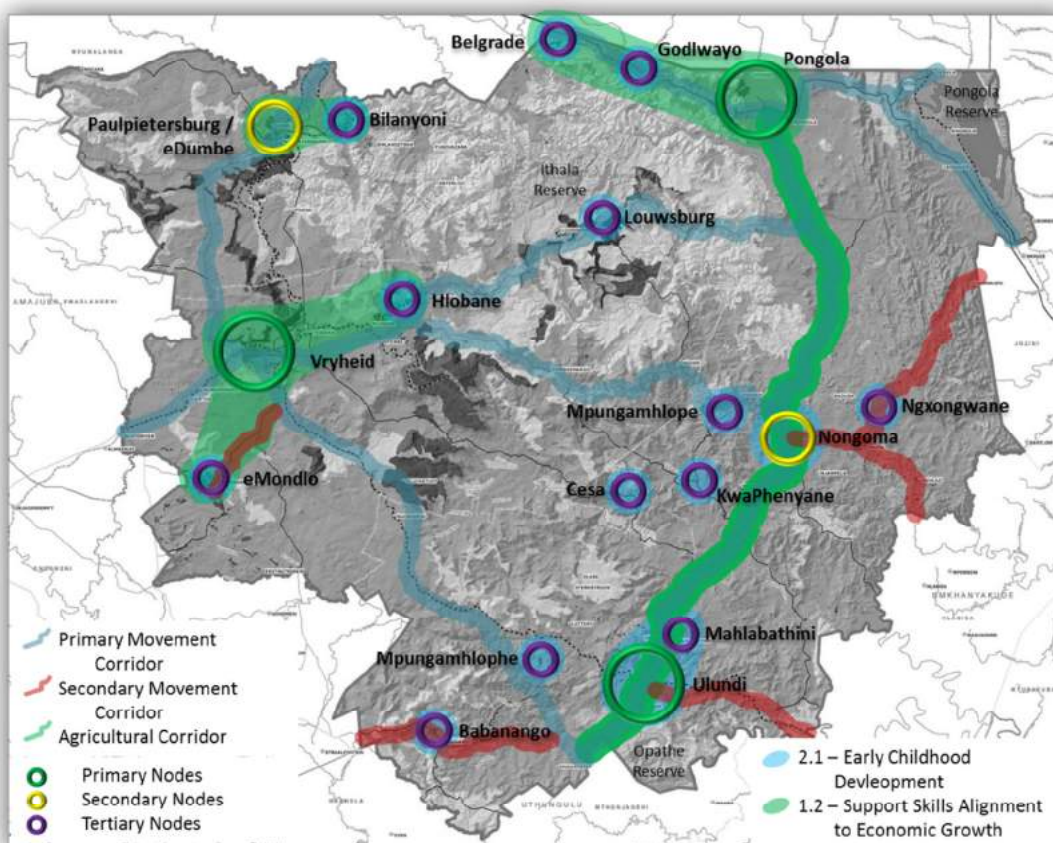
This section and the image below discuss and depict the spatial strategies to address Strategic Objective 2: Human Resource Development. The following objectives are addressed:

- 2.1 - Improve Early Childhood Development, Primary and Secondary Education
- 2.2 - Support Skills Alignment to Economic Growth

The image below depicts the areas of intervention for early Childhood Development, and skills development which should be improved to assist with economic growth within areas. Basically the nodal areas are targeted for early childhood development. The nodal areas were identified within Local Spatial Development Frameworks as distribution points for service provision. Subsequently qualified personnel and the necessary resources should be deployed to areas from where childhood development can be facilitated.

Areas within the aBaqulusi LM (Vryheid Hlobane and Emondlo), eDumbe LM (Paulpietersburg, eDumbe & Bilanyoni) and uPhongolo LM (Pongola, Godlwayo & Belgrade) has economic potential that can only be tapped if the skills of the communities are developed to allow for them to participate in the economy. The economic base within these municipalities is largely private sector driven, and therefore skills development to allow for active participation in this economy is required and could be achieved through tertiary training facilities.

Figure 17: Spatial strategy to address PGDS Goal 4: Human Resource Development



Source: Vuka Planning Africa Inc.

The image above depicts the Spatial Locality where strategic interventions are required. The table below highlights the strategies that the PGDS requires is addressed within these areas. These areas have been identified as there is a dire need to address the areas as highlighted by the Strategic Goals below.

Table 32: Strategies to address PGDS Strategic Goal 2: Human Resource Development

Goal	Strategy
2.1 - Improve Early Childhood Development, Primary and Secondary Education	2.1.1 Review and resource teacher education and capacity development programmes with focus on improving the competence levels of teachers.
	2.1.2 Support effective governance at schools with focus on Principals and management structures.
	2.1.3 Develop and implement schools water, sanitation and electricity programme.
	2.1.4 Develop and implement programme to enhance logistical support to facilities.
	2.1.5 Promote use of new technology to encourage distance learning opportunities.
	2.1.6 Focus on girl child challenges to reduce dropout level of girls.
2.2 - Support Skills Alignment to Economic Growth	2.2.1 Develop skills plans for lead economic sectors per district municipality based on skills demand and implement in partnership with tertiary institutions.
	2.2.2 Assess functionality of technical training institutions.
	2.2.3 Expand school counselling & vocational guidance services.

Source: KZN PGDS 2011

5.5.3 PGDS Strategic Goal 3 – Human & Community Development

This section and the image below discuss and depict the spatial strategies to address Strategic Objective 2: Human Resource Development. The following objectives are addressed:

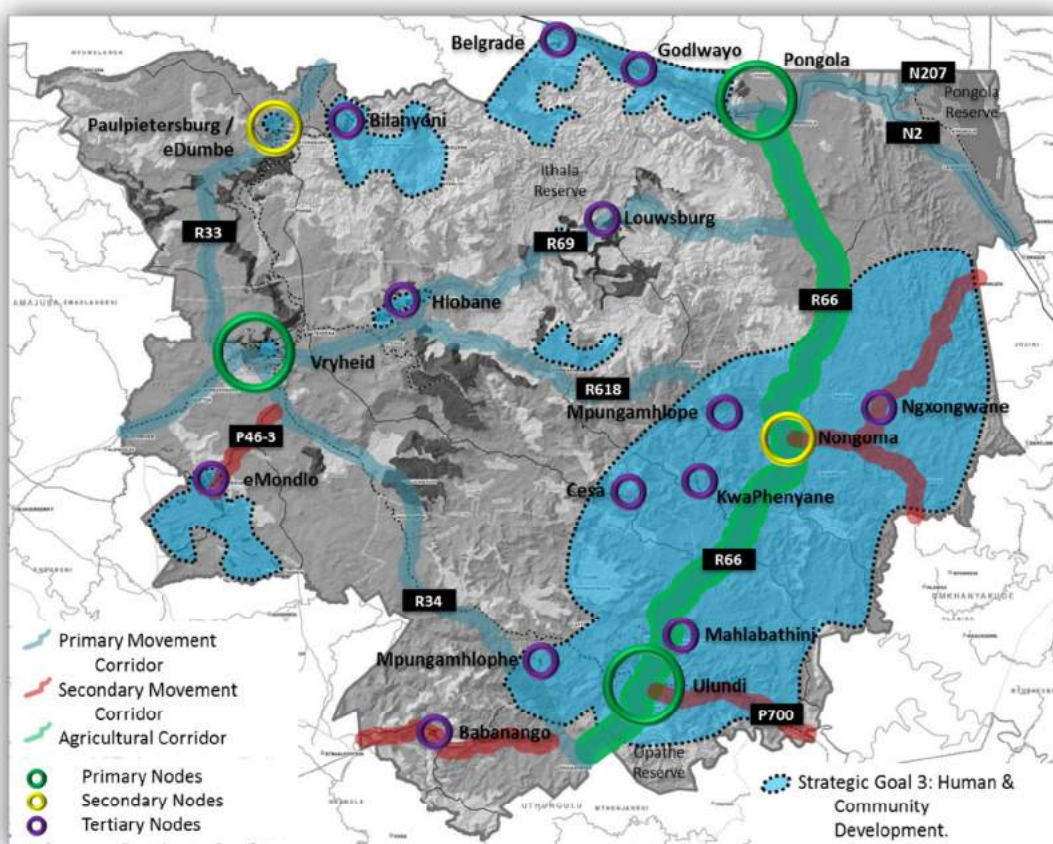
- 3.1 - Poverty Alleviation & Social Welfare
- 3.2 - Enhancing Health of Communities and Citizens
- 3.3 - Safeguard Sustainable Livelihoods & Food Security
- 3.4 - Sustainable Human Settlements
- 3.5 - Enhancing Safety & Security
- 3.6 - Advance Social Cohesion

The above strategic goals are to a large extent applicable to the same geographic area, as these are aimed at developing and improving the lives of communities with the highest levels of deprivation. The areas in need of these interventions are largely situated on Ingonyama Trust Land. Subsequently Large portions of the Ulundi and Nongoma Local Municipalities are earmarked for interventions under this Strategic Goal.

In addition to the identified areas hatched in blue, the nodal areas as well as all new housing projects should be targeted for initiatives related to Human and Community Development. Within achieving this goal, economic development is not possible as the population who participates in the economy needs to be healthy to do so.

The image below identifies the most vulnerable and most deprived areas within the District, but it needs to be noted that all these principles are evenly applicable to urban areas as well. It is therefore necessary that new urban or rural developments should address the strategies outlined in the table below.

Figure 18: Spatial strategy to address PGDS Goal 3: Human & Community Development



Source: Vuka Planning Africa Inc.

Table 33: Strategies to address PGDS Strategic Goal 3: Human & Community Development

Goal	Strategy
Poverty Alleviation & Social Welfare	<p>3.1.1 Promote & Accelerate roll-out of Sukuma Sakhe Programme.</p> <p>3.1.2 Rationalization & alignment of the Community Development Approach.</p> <p>3.1.3 Eliminate corruption and fraud in the Social Grant System.</p> <p>3.1.4 Investigate negative impacts of social grant system.</p> <p>3.1.5 Develop a comprehensive social data-base to facilitate integrated management of grants, education and other support programmes.</p>
Enhancing Health of Communities and Citizens	<p>3.2.1 Development and implementation of Comprehensive Primary Health Care (includes nutrition programmes, technology, equity, address disease burden, address child and maternal mortality).</p> <p>3.2.2 Accelerate HIV/AIDS intervention programmes with specific focus on knowing your status programme.</p> <p>3.2.3 Design equitable access to Health & Special Facilities ... roads and facilities.</p> <p>3.2.4 Promote physical and mental health programmes.</p> <p>3.2.5 Promote awareness programmes against substance abuse, linked to resistance education with focus on preventative and promotive health service.</p>
Safeguard Sustainable Livelihoods & Food Security (Physical capital, human capital, financial capital, social capital & natural capital.)	<p>3.3.1 Developing infrastructure for local production.</p> <p>3.3.2 Support to informal economy - support to local enterprises.</p> <p>3.3.3 Skills development to support local production.</p> <p>3.3.4 One-Home One-Garden.</p> <p>3.3.5 Perma-Culture Concept Practices.</p> <p>3.3.6 Roll-Out of School & Community Gardens.</p> <p>3.3.7 100ha Programme by TC's.</p> <p>3.3.8 Establish early warning systems</p>
Sustainable Human Settlements	<p>3.4.1 The establishment of a joint provincial forum addressing Outcome 8 (human settlements) and Outcome 9 (Responsive, accountable governance) to ensure co-ordinated and integrated development planning i.e. provision of facilities and to reduce household cost (transport, energy, support facilities, communal buying).</p> <p>3.4.2 Implement polycentric nodal development in line with the PSEDS to achieve sustainable livelihoods.</p> <p>3.4.3 Sustainable Human Settlement Strategy and slums clearance programme</p>
Enhancing Safety & Security	<p>3.5.1 Promote Designing for Community Protection through Environmental Design – to ensure safety.</p> <p>3.5.2 Strengthen programmes to curb violence against the vulnerable with focus on women, children and the elderly.</p> <p>3.5.3 Strengthen partnership between civil society, business and criminal justice system at local level (Business Against Crime and the Community Policing Forums).</p> <p>3.5.4 Establish Educational programmes on Safety for Children.</p>
Advance Social Cohesion	<p>3.6.1 Develop a social cohesion strategy for the province (to cover responsible citizenry, moral regeneration, ethics at work etc).</p> <p>3.6.2 Develop Industry-orientated arts & culture programmes.</p> <p>3.6.3 Develop programme on embracing foreign residents</p>
Promote Youth, Gender and Disability Advocacy & The Advancement of Women	<p>3.7.1 Develop programme for Economic Empowerment.</p> <p>3.7.2 Develop programme for Gender Advocacy (youth).</p> <p>3.7.3 Develop programme for Profiling Youth Challenges (Municipal Level).</p> <p>3.7.4 Expand Youth Ambassador Programme.</p> <p>3.7.5 Develop programme to Promote Extramural Activities (sport & cultural).</p>

5.5.4 PGDS Strategic Goal 4 – Strategic Infrastructure

This section and the image below discuss and depict the spatial strategies to address Strategic Objective 4: Strategic Infrastructure. The following objectives are addressed:

- 4.2 - Develop Road & Rail networks
- 4.3 - Develop ICT Infrastructure
- 4.4 - Improve Water Resource Management

The image below identifies the strategic intervention areas that will facilitate the economic growth of the municipality, and assist with other strategic goals such as Human development which cannot occur without the necessary infrastructure.

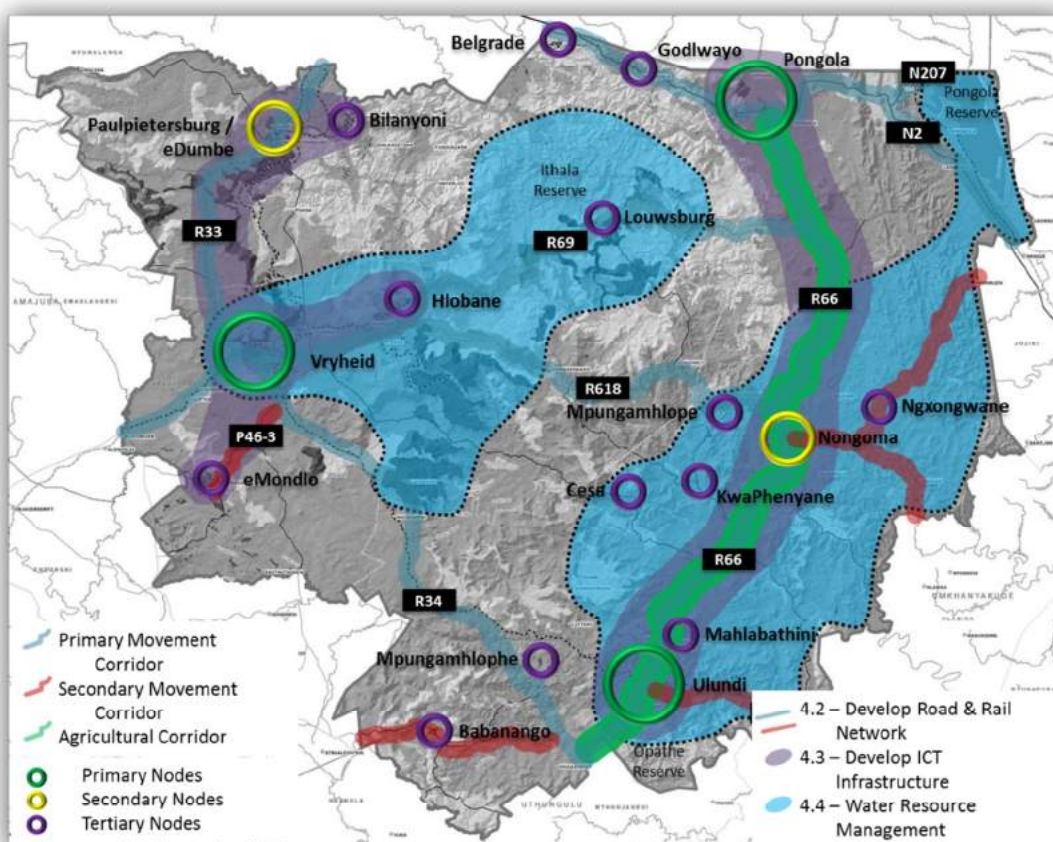
The transportation network is the only manner for transporting economic goods and subsequently an integrated system is required to allow for a fully functional district.

The figure below depicts the most important connections within the Municipality which is critical for accessibility to economic areas, and movement of economic goods.

Information & Communications Technology is critical to ensure competitiveness with economic competitors, and ensuring accessibility to the global markets. It is therefore important that ICT is highly accessible within the Nodal Areas.

Strategic Infrastructure is further aimed at addressing the most pressing needs within the district. Subsequently, water resource management is earmarked within area where the highest need exist.

Figure 19: Spatial strategy to address PGDS Goal 4: Strategic Infrastructure



Source: Vuka Planning Africa Inc.

The image above depicts the Spatial Locality where strategic interventions are required. The table below highlights the strategies that the PGDS requires is addressed within these areas. These areas have been identified as there is a dire need to address the areas as highlighted by the Strategic Goals below.

Table 34: Strategies to address PGDS Strategic Goal 4: Strategic Infrastructure

Goal	Strategy
4.2 - Develop Road & Rail networks	4.2.1 Establish a dedicated freight link: Durban Port to Inland Hub.
	4.2.2 Expansion of Coal Rail Link.
	4.2.3 Extend rural road access & maintain secondary roads.
	4.2.4 Implement the Integrated Passenger Strategy (PRASA) - High Speed Airport Rail Link
	4.2.5 Expand and maintain the timber Branch Lines.
4.3 - Develop ICT Infrastructure	4.3.1 Expand community access to broadband services.
	4.3.2 Increase bandwidth (speed) for economic competitiveness
4.4 - Improve Water Resource Management	4.4.1 Finalise and implement the Provincial Water Strategy.
	4.4.2 Rationalise and extend Water Board jurisdictions to cover the full Province.
	4.4.3 Policy and guidelines on the inclusion of Catchment and River Management in all land use management schemes.
	4.4.4 Research and promote skills development for more localised Water Harvesting (linked to Sustainable Human Settlements)

Source: KZN PGDS 2011

5.5.5 PGDS Strategic Goal 5 – Response to Climate Change

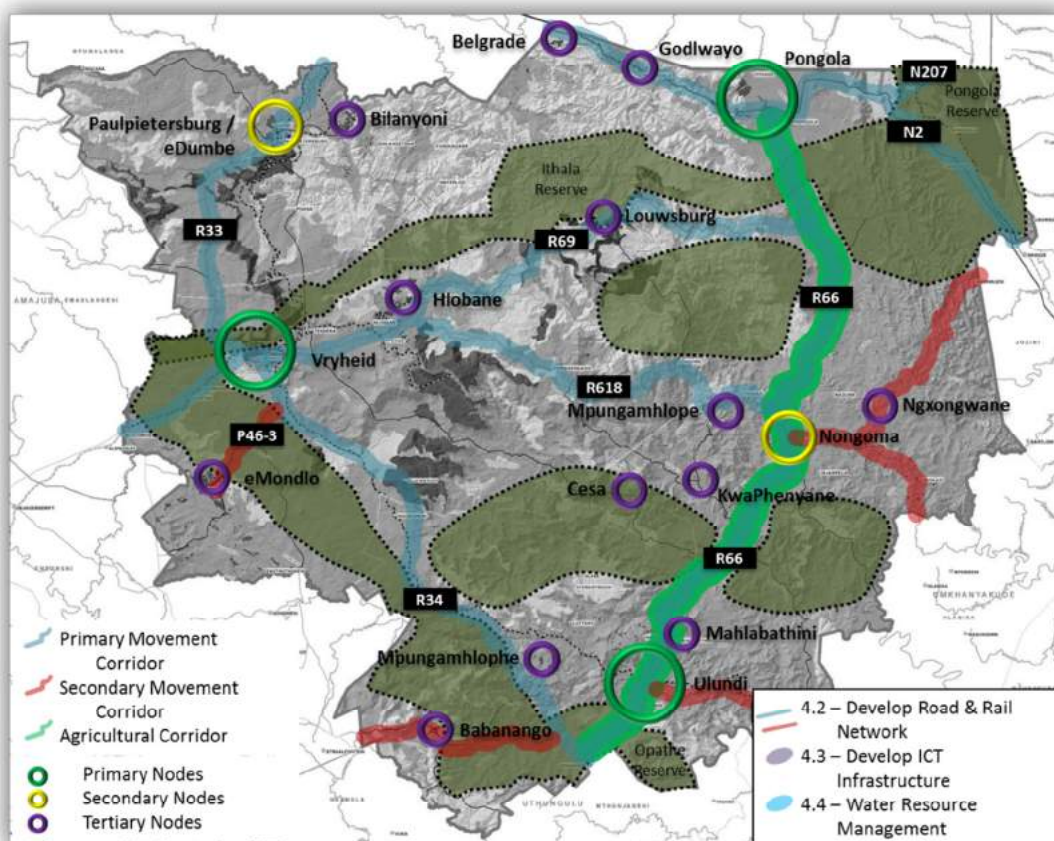
This section and the image below discuss and depict the spatial strategies to address Strategic Objective 4: Strategic Infrastructure. The following objectives are addressed:

- 5.3 – Manage Pressures on Biodiversity

The image below depicts the areas identified earlier as environmentally sensitive, and which is important for maintenance of ecological and biodiversity integrity.

These areas consist of the environmentally sensitive areas identified on the informant maps as well as the environmental corridors identified by the KZN PGDS and Spatial Development Framework.

Figure 20: Spatial strategy to address PGDS Goal 4: Strategic Infrastructure



Source: Vuka Planning Africa Inc.

Although only a single strategy have spatial manifestations the table below depicts all strategies related to Climate Change.

Table 35: Strategies to address PGDS Strategic Goal 4: Strategic Infrastructure

Goal	Strategy
5.1 - Increase Productive Use of Land	<p>5.1.1 Promote Sustainable agricultural land-use practices.</p> <p>5.1.2 Establish a Policy and Regulatory Framework for the Reduction of Land Degradation and enhance Land Care programme.</p> <p>5.1.3 Develop a Provincial Strategic Environmental Framework for the province towards Strategic Planning for Biodiversity Conservation.</p>
5.2 - Advance Alternative Energy Generation	<p>5.2.1 Development of Provincial Alternative Energy Strategy with specific focus on Hydro Electricity potential.</p> <p>5.2.2 Programme of Alternative Energy demonstration projects.</p> <p>5.2.3 Establish a provincial Carbon Credit Programme.</p>
5.3 - Manage pressures on Biodiversity	<p>5.3.1 Formulate regular provincial State of the Environment Reports in order to monitor progressive change in biodiversity.</p> <p>5.3.2 Integrate Coastal Zone Management within the Province.</p> <p>5.3.3 Establish a management agency for the uKhahlamba- Maluti TFCA.</p>
5.4 - Disaster Management	<p>5.4.1 Continuous Research and Monitoring of Climate Change and Variability. (Agricultural Response to Rainfall Variability, Database of environmental change factors creating hotspots due to climate change)</p> <p>5.4.2 Formulation of Provincial Climate Change Disaster Response Plans.</p> <p>5.4.3 Strengthen Provincial and District Disaster management capacity.</p>
5.5 - Environmental Quality	<p>5.5.1 Monitoring of Air Quality at a provincial level.</p>

- | | |
|-------|-------------------------------------------------------------------------------------------------------------------------------|
| 5.5.2 | Co-ordination of the Systematic reduction in Carbon Emissions and other drivers of Stratospheric Ozone Depletion. |
| 5.5.3 | Establishment of localised waste management programmes (including Reduction, Reusing, Recycling and Rehabilitation projects). |

Source: KZN PGDS 2011

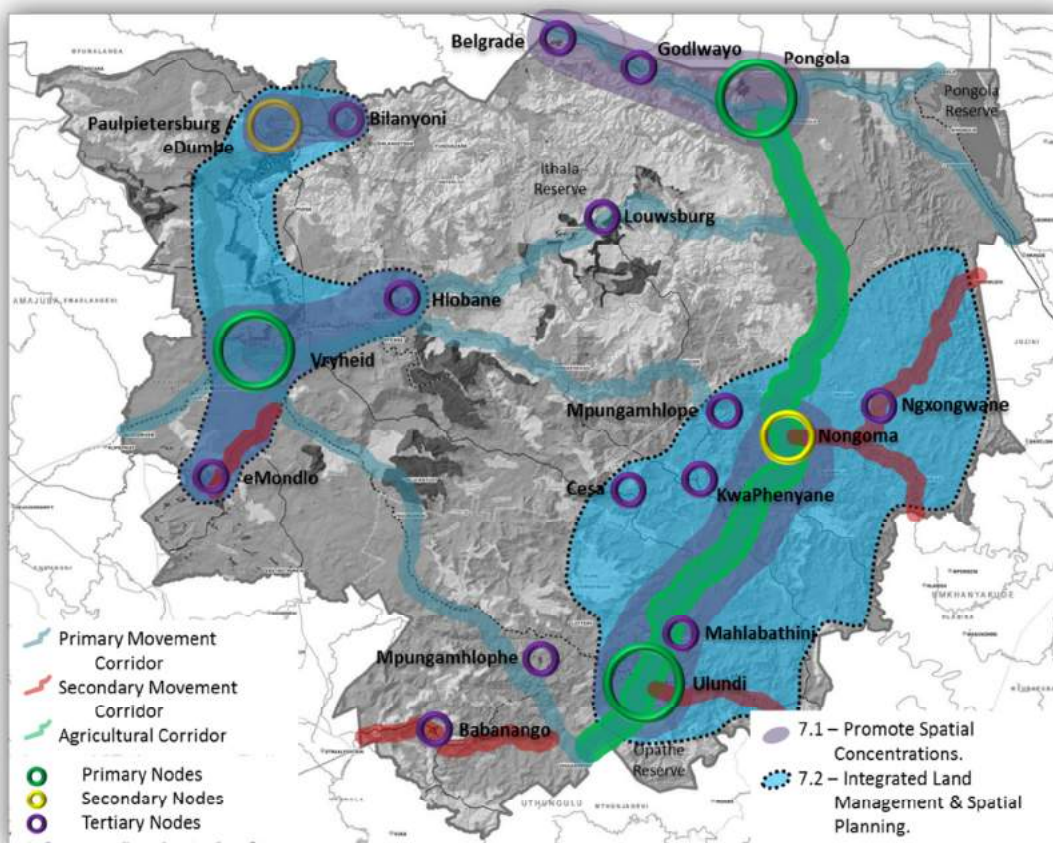
5.5.6 PGDS Strategic Goal 7 – Spatial Equity

This section and the image below discuss and depict the spatial strategies to address Strategic Objective 7: Spatial Equity.

The following objectives are addressed:

- 7.1 – Promote Spatial Concentration
- 7.2 – Facilitate Integrated Land Management and Spatial Planning

Figure 21: Spatial strategy to address PGDS Goal 7: Spatial Equity



Source: Vuka Planning Africa Inc.

The image above depicts the Spatial Locality where strategic interventions are required. The table below highlights the strategies that the PGDS requires is addressed within these areas. These areas have been identified as there is a dire need to address the areas as highlighted by the Strategic Goals below.

Table 36: Strategies to address PGDS Strategic Goal 7: Spatial Equity

Goal	Strategy
7.1 – Promote Spatial Concentration	7.1.1 Establish a hierarchy of Provincial Nodes with clearly defined functions and interventions per node.
	7.1.2 Development of specific sub-regional plans to co-ordinate interventions around priority corridors.
	7.1.3 Continuation of the Small Town Regeneration and Rehabilitation Programme.
	7.1.4 Formalisation of Strategic Rural Nodes.
7.2 – Facilitate Integrated Land Management and Spatial Planning	7.2.1 Alignment of District and Local Municipal Spatial Development Frameworks with the Provincial Spatial Development Framework.
	7.2.2 Formulation of Provincial Planning Norms, Standards and Guidelines.
	7.2.3 Promote development of Ward Based Plans

Source: KZN PGDS 2011

6 Guidelines for formulation of Local Municipality SDF's

To ensure vertical alignment between planning initiatives in the District, it is necessary to provide a Guiding Framework for the formulation of the Local Spatial Development Frameworks. The purpose is to assist Local municipalities with the compilation of their SDF's, as well as to facilitate integration between the two spheres of Municipalities in the planning process.

The guidelines consider the following aspects:

- Development Nodes
- Development Corridors
- Agriculture and Land Reform
- Environmental Considerations
- Water Management
- Land Use Designations and the Linkage to Schemes
- Infrastructure Provision

6.1 Development Concepts

A number of concepts is utilised for the Spatial Restructuring of municipal area, and includes inter alia the utilisation of Nodes and Corridors as focused development areas for the

It is further important that a SDF be a spatial reflection of the municipality's general development objectives as contained in the IDP. In addition to this, the desired future spatial pattern in a municipality should be based on general planning and development principles as influenced by the local contexts.

In order to achieve this, identification of development informants should be derived through a process of overlay analysis utilising a GIS System. In addition to its obvious technological superiority this system will also assist in the development of consistent databases that can be shared by various role-players.

6.2 Development Nodes

The relative importance of development nodes is a reflection of an area's economic development potential and the range of service that should be provided. The nodal hierarchy in the District SDF should therefore be interpreted in a district context. At the local SDF level, the identification and classification of nodes should follow a similar methodology as that of the district but it must be influenced by the various centres in the local economy.

Notwithstanding the broad level of indication of nodes at a district level, it is of the utmost importance at the local level that any identified nodes be clearly demarcated on a cadastral basis. Such demarcation is important in order to:

- Optimise the use of existing bulk infrastructure and social facilities
- Discourage urban sprawl
- Ensure compact and efficient urban areas
- Protect agricultural land with high production potential
- Provide guidance to both public and private sectors investors
- Promote economic, social and environmental sustainability
- Accommodate reasonable future demand for development

6.3 Development Corridors

In addition to the need to promote compact and efficient urban areas it is also essential that spatial planning at a local level addresses the imbalances created by apartheid planning.

A development corridor is an efficient planning tool to address the above. This allows for previously segregated areas that developed separately to be connected and to create opportunities for economic development in previously disadvantaged communities. In addition to this, it can also achieve the correction of spatial imbalances through the identification of alternative development axis. An example would be the road between Pongola and Ncotshane, where there is a need for the two areas to grow towards each other.

Although the main objectives of corridors are to achieve integration, improve access and provide investment opportunities, it should allow for controlled development through the development of local area plans, corridor development plans etc.

6.4 Agriculture and Land Reform

The correct management of agricultural land is a critical element of local SDF's; due to the scarce high potential agricultural land available.

The dataset utilised was provided by the KwaZulu-Natal Department of Agriculture and Environmental Affairs which provides enough detail and guidance on land use to allowance for different types of agriculture to be accommodated in the municipal areas. This should also allow for the accommodation of land reform programmes within the municipal areas.

It is suggested that a system of land designations be employed to guide development of the agricultural activities in the municipal areas.

Further useful information is contained in the erstwhile Provincial Planning and Development Commission's Research document entitled "Guidelines to assist in the Management of Development Pressure in Agricultural Areas or Areas with Agricultural Potential."

6.5 Environmental Considerations and Water Management

The District has a large number of environmentally sensitive areas, inclusive of Biodiversity Corridors identified in the KZN Spatial Development framework. The analysis to identify these areas is unfortunately very broad based analysis and it will be necessary to refine this data within the Strategic Environmental Assessment (SEA), Environmental Management Plans, and the Environmental Management framework processes of the various Local Municipalities and then to feed into the Local SDF and Schemes. Guidelines are available from the National Department of Agriculture and Environmental Affairs for the compilation of the abovementioned documents.

Although the district is not the main water producing district within the Province, it has a number of large rivers and dams important to water provision in the District.

The consideration of impact on water resources, the quantity and quality thereof is critical for local SDF's. In this regard, Water Resource Management Plans should be compiled as one of the sector plans in the IDP and the outcomes integrated into the SDF's.

6.6 Land Designations and the Linkage to Local LUMS

A Spatial Development Framework should provide a visual representation of the desired spatial form in the municipality. It should be noted that the SDF does not confer zoning and legal development rights on land, but should be sufficiently specific to guide investment and land use decisions, and provision be made for the accommodations of the economic activities identified in the District Wide LED Strategy.

Local SDF's are the primary informant to the preparation of the Local LUMS.

6.7 Bulk Infrastructure

The infrastructure investment programmes as contained in the local municipalities IDP should be reflected in the SDF. It should also take cognisance of infrastructure to be provided by the District and Captured in the Water Services Development Plan. The local SDF should further inform the planning of the municipalities capital investment programme.

7 Alignment

The following aspects require alignment to ensure coordinated development efforts between the districts.

- Alignment with Adjacent District
- Alignment of Sector Plans
- Alignment between local municipalities within the district

7.1 Alignment With Surrounding Districts, Provinces and Countries

Zululand District Municipality is surrounded by 5 District Municipalities, and shares a provincial as well as international boundary. The Administrative entities are the following:

- Umkhanyakude DM
- Uthungulu DM
- Umzinyathi DM
- Amajuba DM
- Gert Sibande DM (Mpumalanga Province)
- The Kingdom of Swaziland

The sharing of boundaries requires extensive alignment to ensure that conflicting land use matters don't arise. In this instance the main alignment issues were around development corridors which straddle the boundaries of these districts.

The main corridors linking the district to the adjacent areas as well as their functions are the following:

	Main Function	Connection Adjacent Districts
N2	Movement Corridor Freight Route	East– uMkhanyakude DM North – Gert Sibande DM (Mpumalanga Province)
R66	Movement Corridor	South – Uthungulu DM
R34	Movement Corridor Freight Route	South – Uthungulu DM
R33	Movement Corridor Freight Route	North – Gert Sibande DM (Mpumalanga Province)
R618	Movement Corridor	East - uMkhanyakude DM
N207	Movement Corridor Freight Route	North – Kingdom of Swaziland.
P700	Movement Corridor	East – uMkhanyakude DM

The Spatial Development Framework Maps for the Individual Municipalities are depicted below.

7.1.1 uMkhanyakude DM

Figure 22: uMkhanyakude Spatial Development Framework

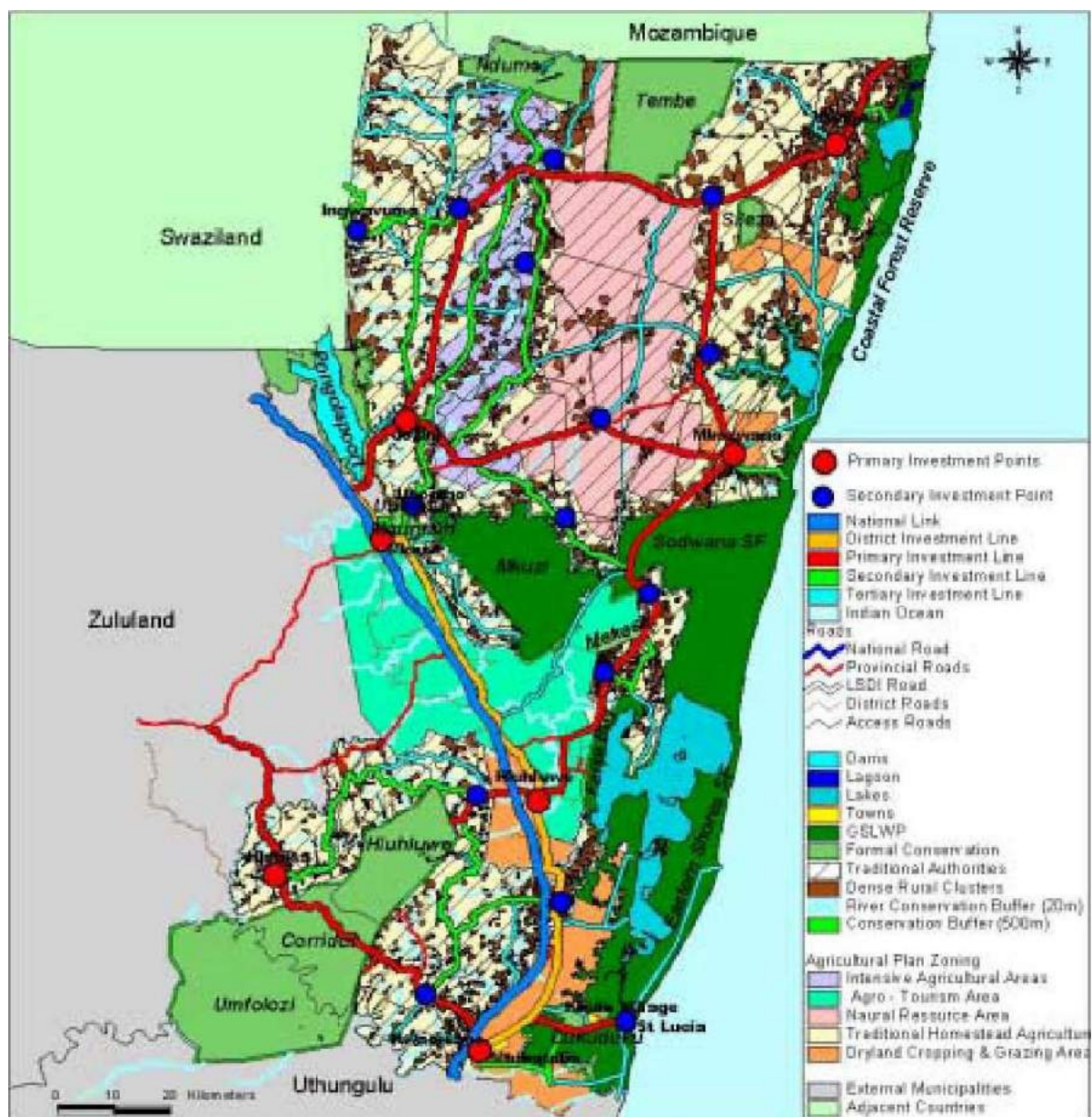


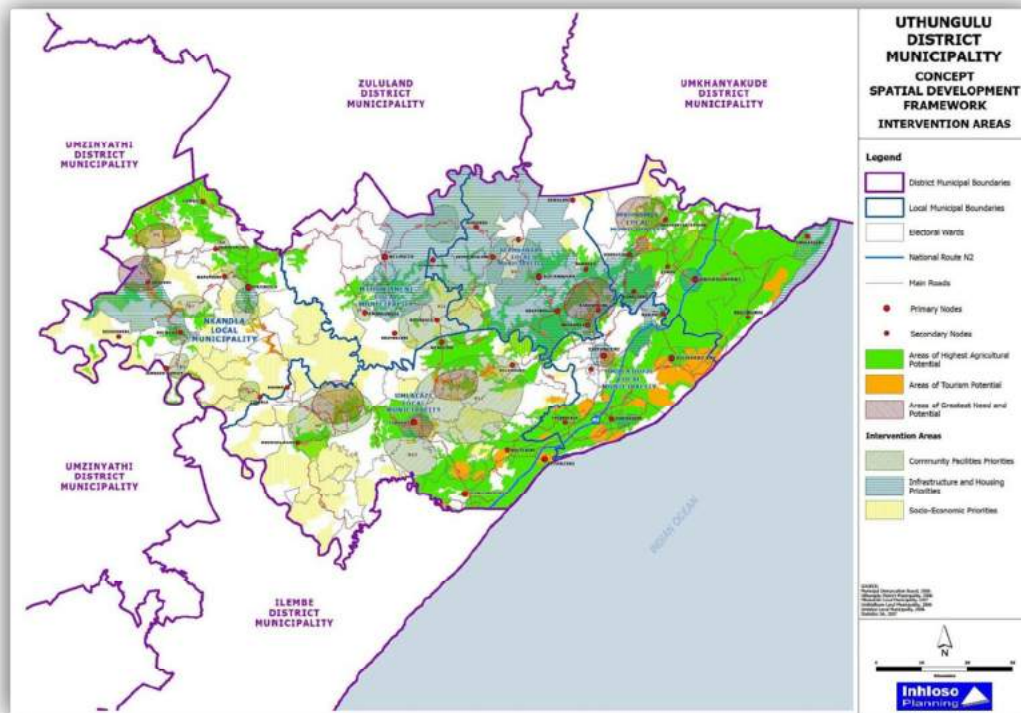
Table 37: Alignment Table - uMkhanyakude DM

Corridor Alignment	N2 and the P700
Adjacent Land use Considerations	Formal Conservation Area Agro-Tourism Area Traditional homestead Agriculture
Cross Border Management / Cooperation	Hluhluwe-Umfolozi Park, Pongola Poort Dam
Potential Contradictions & Conflicts	None Apparent and that is not already mitigated.
Dependencies	Services and Economic Opportunities provided in Mkuze, which is closer than other Nodes in ZDM to rural communities.
Corridor Connections	P700 from Ulundi LM to Mfolozi LM N2 from uPhongolo LM to Jozini LM

Source: Vuka Planning Africa Inc.

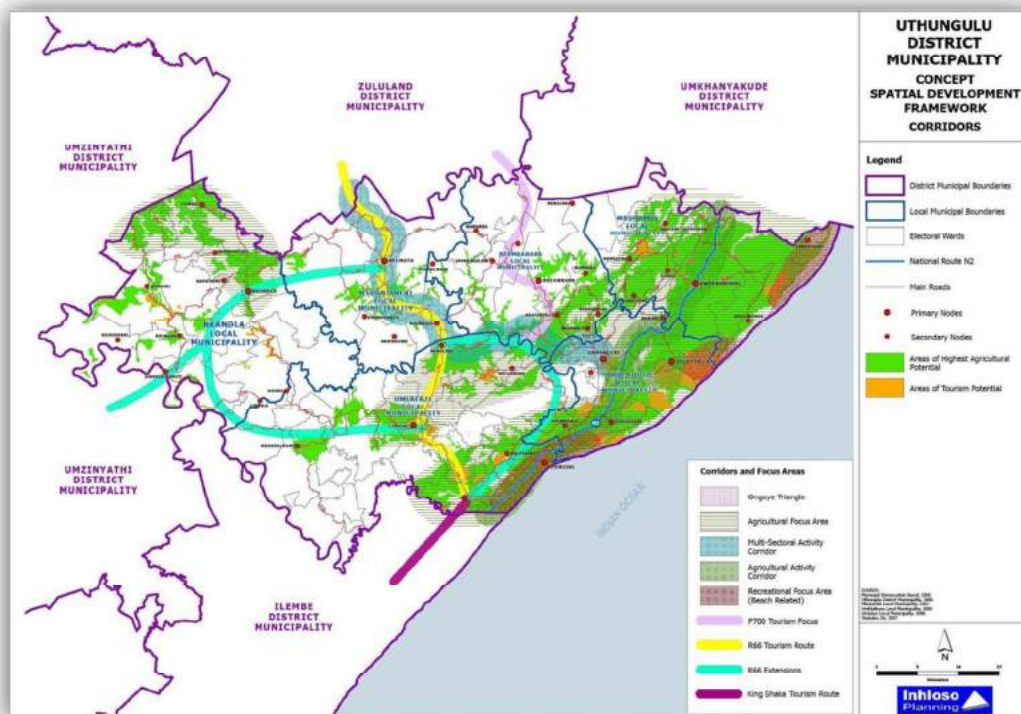
7.1.2 UThungulu DM

Figure 23: UThungulu Intervention Areas



Source: uThungulu SDF Review 2009

Figure 24: uThungulu SDF Corridors



Source: uThungulu SDF Review 2009

Table 38: Alignment Table – uThungulu DM

Corridor Alignment	N2 and the P700
Adjacent Land use Considerations	Housing & Infrastructure Priority Development areas.
Cross Border Management / Cooperation	None
Potential Contradictions & Conflicts	Priority Development Areas Adjacent to Opathe Game Reserve & Sensitive Environmental Areas
Dependencies	None Apparent
Corridor Connections	R66 from Ulundi LM to Mthonjaneni LM P700 Route from Ulundi LM to Ntambanana LM

Source: Vuka Planning Africa Inc.

7.1.3 Umzinyathi DM

Figure 25: UMzinyathi Spatial Development Framework

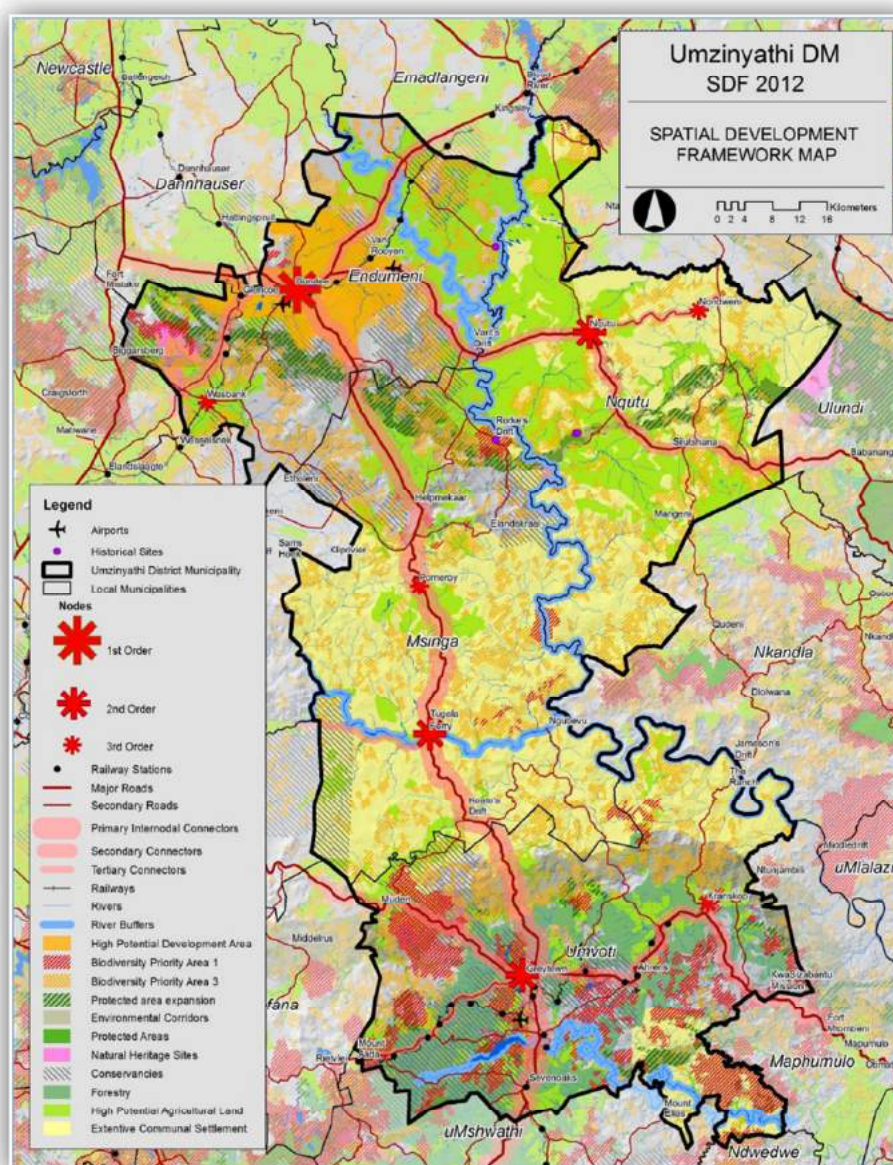
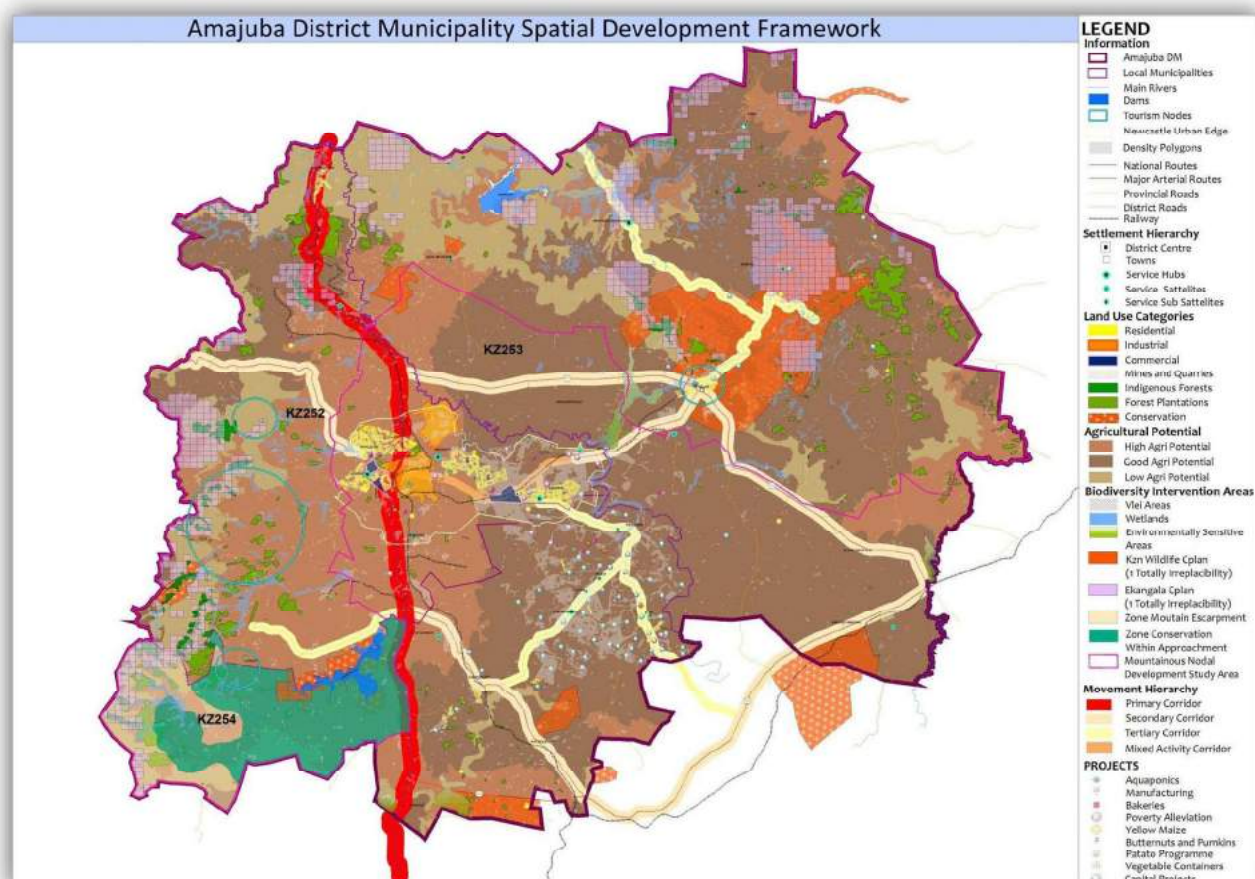


Table 39: Alignment Table – uMzinyathi DM

Corridor Alignment	N2 and the P700
Adjacent Land use Considerations	Largely, High Potential Agricultural Land and Extensive Communal Settlements are situated opposite side of the boundary, between aBaqulusi & Nquthu. Environmental Corridor link between Ulundi LM and Nquthu.
Cross Border Management / Cooperation	Environmental Corridor Identified by the KZN SDF.
Potential Contradictions & Conflicts	Settlement pressures on High Potential Agricultural Land.
Dependencies	None Apparent
Corridor Connections	R69 From Vryheid to Dundee

7.1.4 Amajuba DM

Figure 26: Amajuba Spatial Development Framework



Source: uThungulu SDF Review 2009

Table 40: Alignment Table - Amajuba DM

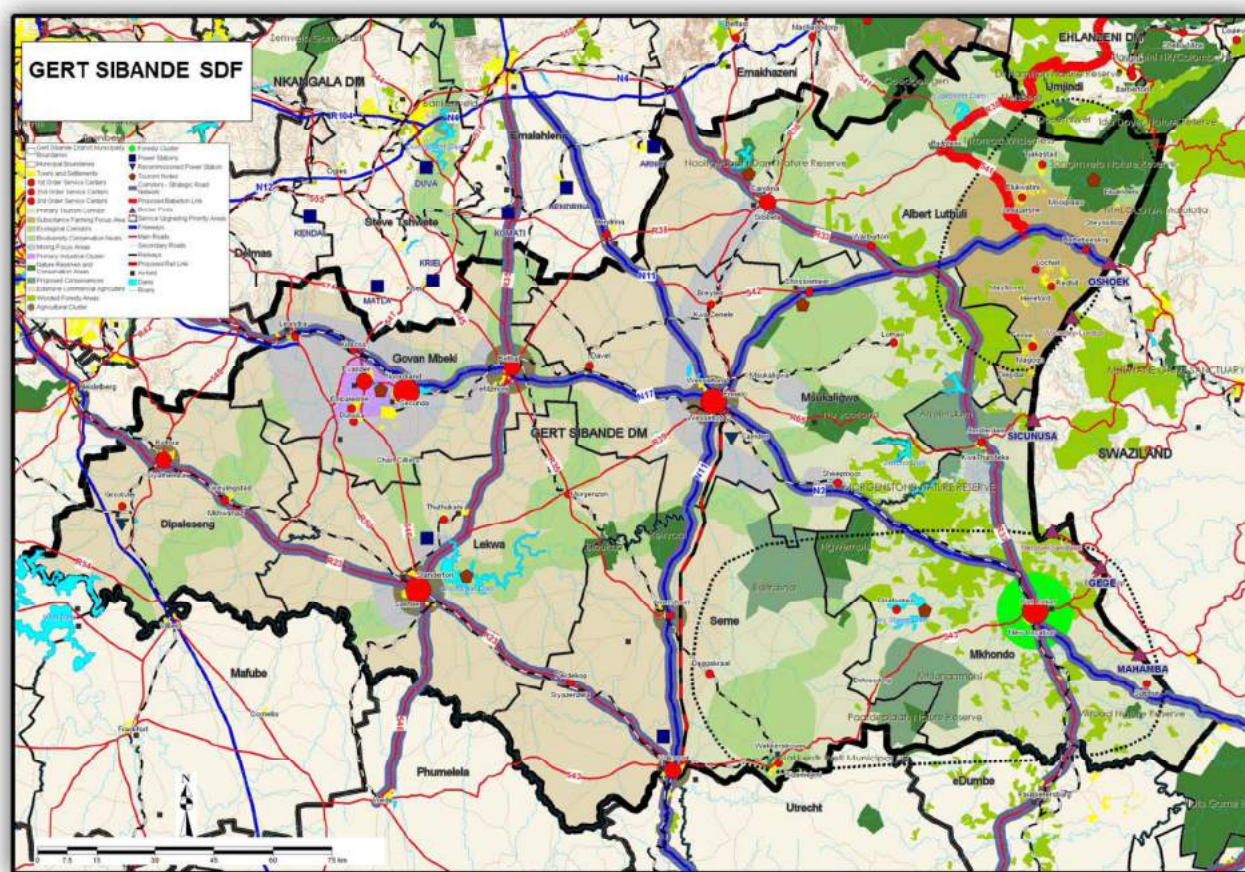
Corridor Alignment	N2 and the P700
--------------------	-----------------

Adjacent Land use Considerations	Formal Conservation Area Agro-Tourism Area Traditional homestead Agriculture
Cross Border Management / Cooperation	Hluhluwe-Umfolozi Park, Pongola Poort Dam
Potential Contradictions & Conflicts	None that is not already mitigated.
Dependencies	Services and Economic Opportunities provided in Mkuze, which is closer than other Nodes in ZDM to rural communities.
Corridor Connections	R69 from Vryheid to Emadlangeni

Source: Vuka Planning Africa Inc.

7.1.5 Gert Sibande DM (Mpumalanga Province)

Figure 27: Gert Sibande DM Spatial Development Framework



Source: Gert Sibande DM SDF (2009)

Table 41: Alignment Table – Gert Sibande DM

Corridor Alignment	N2 and the P700
Adjacent Land use Considerations	Biodiversity Sensitive Areas
Cross Border Management / Cooperation	None
Potential Contradictions & Conflicts	Rural Residential Areas in close proximity to Environmentally Sensitive Areas

Dependencies	Possible services provided to population from Mkhondo Municipality due to Locality of Paulpietersburg / eDumbe to Boundary.
Corridor Connections	R33 from eDumbe to Mkhondo LM

Source: Vuka Planning Africa Inc.

7.1.6 The Kingdom of Swaziland

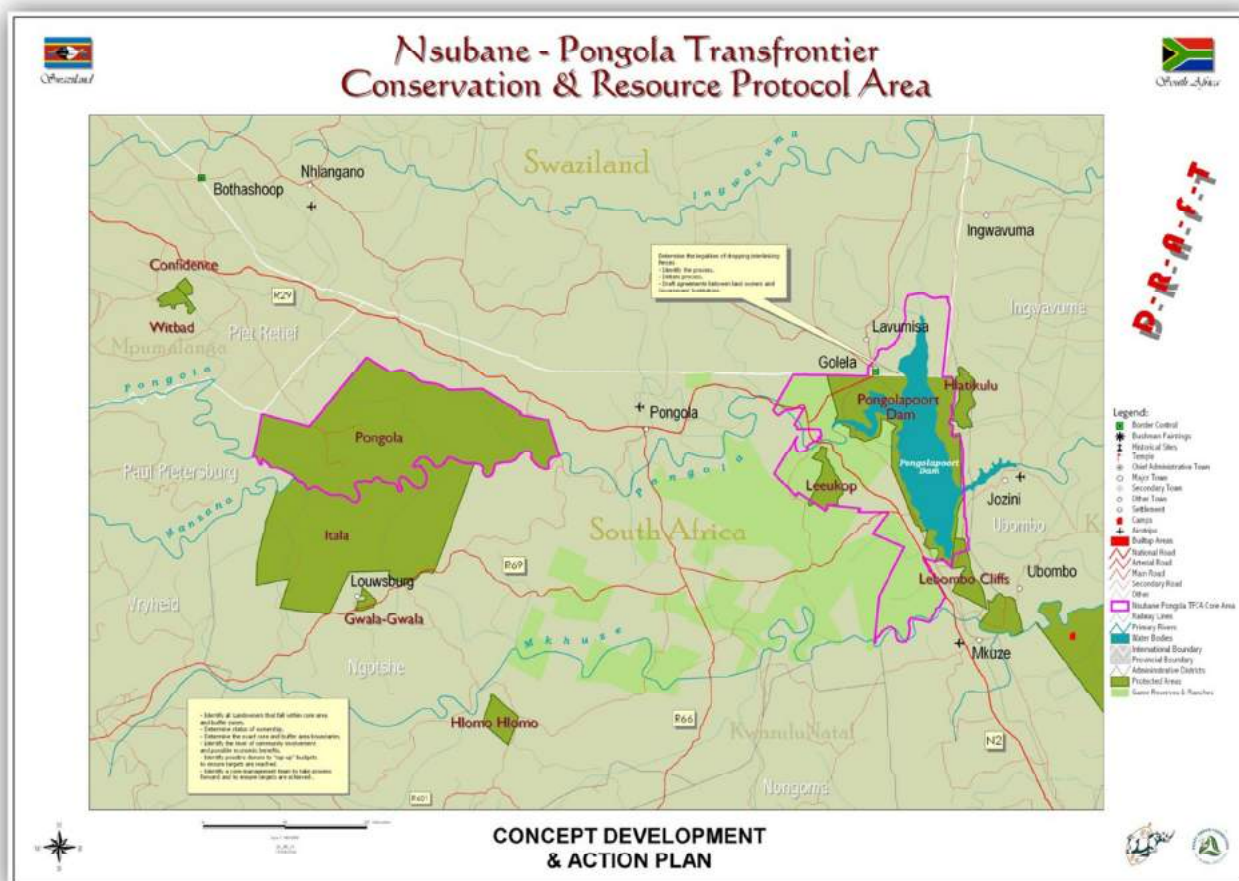
Interaction between The Kingdom of Swaziland and South Africa is limited due to the Closed International Border separating the two. There is however interaction that needs to be managed. The current interactions include the following:

- Golela Border Post;
- Nsubane – Pongola Transfrontier Conservation & Resource Protocol Areas

The Golela Border Post is being upgraded by the Department of Public Works. In addition to the upgrading of the Border post, which will be operating on a 24 hour basis, a large number of medium density residential units are being developed. From this, small economic and tourism opportunities will arise, as the 24 hour border post, and the envisaged additional residents to the area will increase the need for services and basic goods in the area.

Limited information is available regarding the Nsubane – Pongola Transfrontier Conservation & Resource Protocol Area. Although this initiative has been developed and planned for a number of years, finalisation of management areas to be included and management structures to coordinate international implementation has been delayed drastically. The image below depicts the proposed boundaries of the Transfrontier Park. Additional information has been requested from the Piece Parks Foundation and will be made available as soon as information is received.

Figure 28: Nsubane-Pongola Transfrontier Conservation & Rescue Protocol Area.



Source: Piece Parks Foundation

7.2 Alignment with other District Sector Plans

The following district sector plans were analysed and the relevant components incorporated into the SDF:

- Water Services Development Plan
- Indigent Policy
- Integrated Waste Management Plan
- Disaster Management Plan
- Public Transport Plan
- Solid Waste Facility Backlog Study
- Solid Waste Management Master Plan
- ZDM Environmental Management Plan

The following studies were not available and it is recommended that these studies be commissioned.

- Cemeteries and Crematoria Plan
- Integrated Electrification Plan
- Integrated Environmental Management Plan

The analysis of the above reports are critical as these plans are sector plans in the IDP and as such needs to be spatially referenced and considered when considering the SDF.

7.3 Alignment with Local Municipalities

During compilation of the Spatial Development Framework, representatives from the Local Municipalities formed part of the Project Steering Committee. Subsequently, all relevant local issues have been identified and incorporated into the SDF. The nodal areas and corridors were further considered and evaluated in terms of its contribution to overall mobility and accessibility within the district.

7.4 Alignment with Spheres of Government

During compilation of the Spatial Development Framework, representatives from the various Spheres of Government formed part of the Project Steering Committee. Where members were not available to attend PSC meetings, they were engaged on individual basis to obtain information relevant to the SDF compilation.

8 Implementation:

This section deals with the implementation of the SDF by identifying investment areas where implementation of projects needs to address the needs of the District. The two areas where the District has influence and a mandate are with Social Development, as well as the provision of Water and Sanitation Services.

8.1 Social Development

The Zululand District Municipality has a total of R69,741,142-00 for social development purposes and identified a total of 33 projects aimed at Social Development. Specific localities were not identified for each of these projects, as most does not have a spatial component. It is however imperative that these projects are aligned with the investment areas identified under Strategic Intervention Areas.

The projects are the following:

Table 42: Community & Social Expenditure Projects

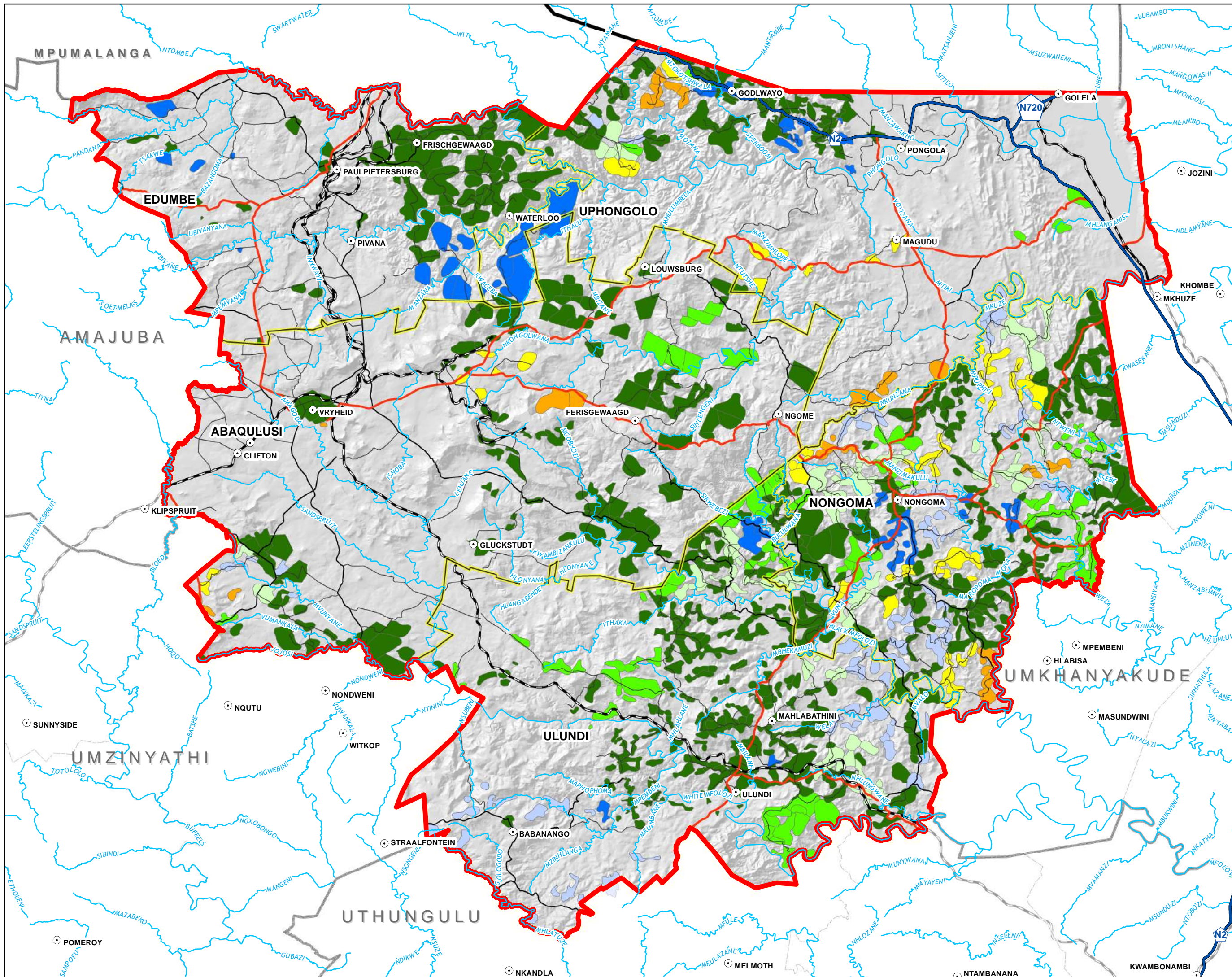
PROJECT	BUDGET
1. Disaster Portfolio Projects	1,336,896
2. Unallocated Projects	8,000,000
3. Poverty Alleviation	2,000,000
4. Local Economic Development (LED)	3,000,000
5. Community Development	2,500,000
6. Community Participation	2,000,000
7. Emergency Water	20,000,000
8. Budget and IDP Community Participation	6,000,000
9. Women's Day Celebration	633,000
10. Annual report back/State of the District Address	700,000
11. Elderly Function	2,000,000
12. Kids Christmas Party	650,000
13. Marathon	600,000
14. SALGA Games	3,000,000
15. Mayoral Cup	600,000
16. LED Ward Projects (R60000 per ward):	
a. Abaqulusi	1,320,000
b. Edumbe	480,000
c. Pongola	840,000
d. Nongoma	1,260,000

e. Ulundi	1,440,000
17. Widows & Orphans	1,780,000
18. Tourism Portfolio Project	356,506
19. Youth Day Celebration	550,000
20. Youth Summit	280,000
21. Women Summit	300,000
22. Ingoma Dance Competition	316,500
23. Music Festival	1,000,000
24. Water Loss Reduction	3,342,240
25. External Bursaries	625,000
26. Sports Development	600,000
27. Indigenous Games	300,000
28. Gender Conference	211,000
29. Disability Programmes	450,000
30. Princess Mandisi Health Care Centre	450,000
31. Youth Affairs (Drivers licenses)	70,000
32. School Uniforms	250,000
33. Widows and Orphans Event	500,000
Total Community and Social Expenditure	69,741,142

Source: Zululand District Municipality

8.2 Water Services Development Plan

The Project list from the Zululand Water Services Development Plan, as updated by the Zululand District Municipality has a total of 448 Sanitation Projects, 272 Rudimentary Water Schemes, and 1,531 Rural Water Service Schemes to be implemented over the following 5 years from 2013 to 2017. A Number of these projects are being implemented currently. A list of the projects and budgets, as well as a plan depicting the systematic implementation plan of these services is attached overleaf. The table below provides a summary of the projects and budgets tentatively allocated for the following financial years. Please refer to Map 23: WSDP Sanitation Roll-Out and Map 24: Rudimentary Water Schemes.



ZULULAND DISTRICT MUNICIPALITY

SPATIAL DEVELOPMENT FRAMEWORK

SANITATION IMPLEMENTATION PROJECTS

LEGEND

- Place Names
- Rivers
- Railway Lines
- National Roads
- Regional Distributor
- District Distributor
- District Collector
- Local Municipalities
- Zululand District Municipality
- District Municipalities
- Sanitation Implementation Year
- Completed
- 2013/14
- 2014/15
- 2015/16
- 2016/17
- 2017/18
- In Progress

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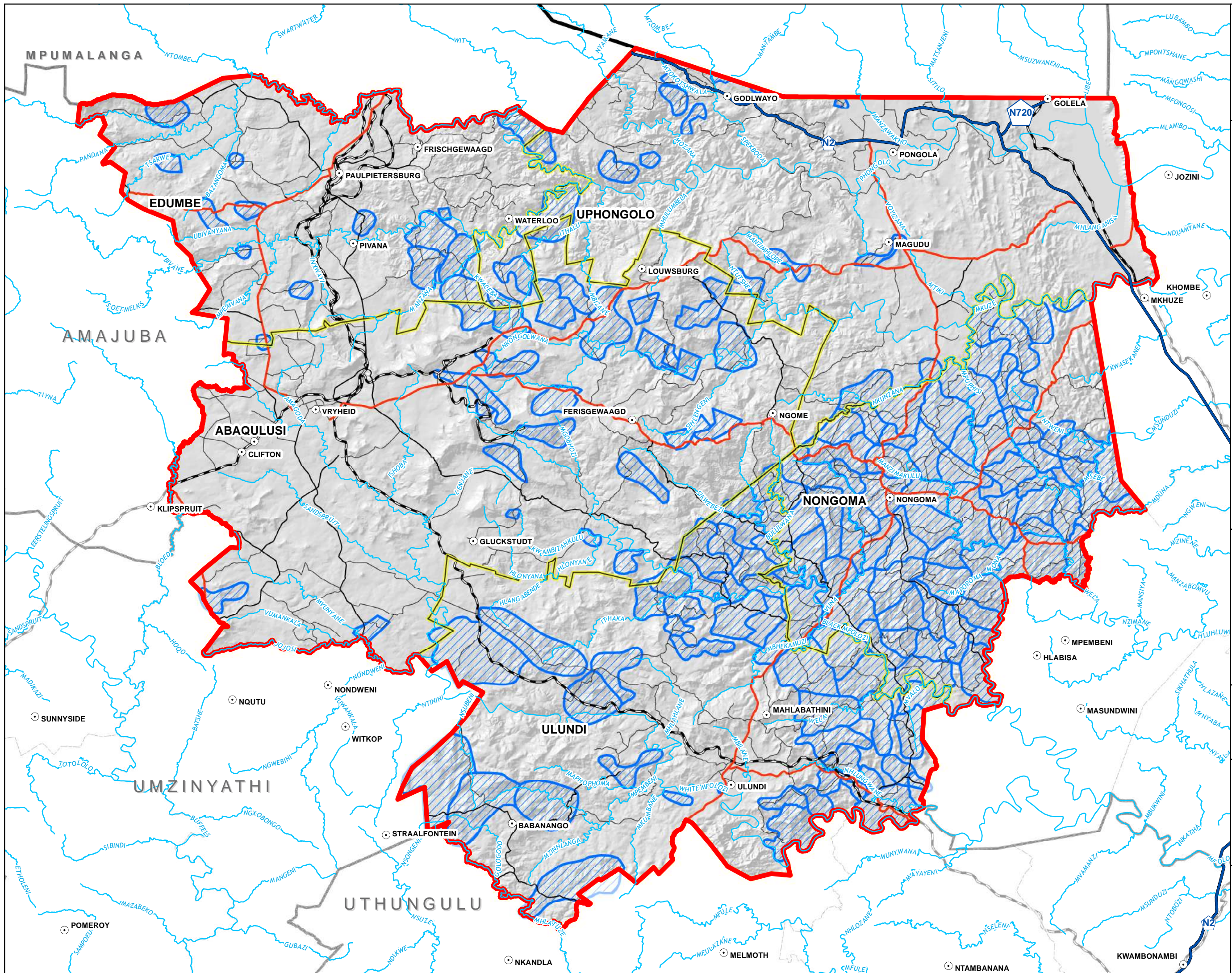
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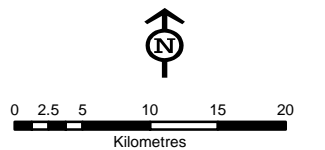
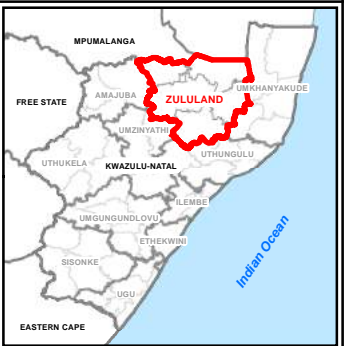
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**ZULULAND
DISTRICT MUNICIPALITY
SPATIAL DEVELOPMENT
FRAMEWORK**

**RUDIMENTARY
WATER SCHEMES**

- LEGEND**
- Place Names
 - Rivers
 - Railway Lines
 - National Roads
 - Regional Distributor
 - District Distributor
 - District Collector
 - Rudimentary Supply Zones
 - Local Municipalities
 - Zululand District Municipality
 - District Municipalities



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Table 43: WASDP Capital Expenditure

Sanitation Implementation Year	Local Municipality	Sanitation		Rudimentary Schemes		Rural Water Service Schemes	
		Cost (Sanitation)	Households Served	Cost (Bulk & Reticulation)	Households Served	Cost (Bulk & Retic)	Households Served
In Progress	aBaqulusi						
	eDumbe (KZ261)	1 393 600	418				
	Nongoma (KZ265)	10 438 600	3 002				
	Ulundi (KZ266)	2 579 500	769				
	UPhongolo (KZ262)	12 971 200	3 875				
2013/14	Abaqulusi (KZ263)	5 862 500	847	35 674 718	1 151	40 140 731	Unknown
	eDumbe (KZ261)			18 836 921	536	26 456 000	Unknown
	Nongoma (KZ265)	24 367 900	3 637	7 452 576	245	147 939 647	Unknown
	Ulundi (KZ266)	22 873 800	3 414	35 479 645	966	40 348 971	Unknown
	UPhongolo (KZ262)	5 862 500	875	7 600 146	173	25 249 647	Unknown
2014/15	Abaqulusi (KZ263)	8 817 200	1 316	19 900 873	643	4 192 650	Unknown
	Nongoma (KZ265)	25 171 900	3 757	1 470 996	30	92 440 257	Unknown
	Ulundi (KZ266)	19 302 700	2 881			19 867 399	Unknown
	UPhongolo (KZ262)	3 296 400	492	19 142 467	571	2 291 296	Unknown
	eDumbe (KZ261)					50 000 000	Unknown
2015/16	Abaqulusi (KZ263)	5 976 400	892	3 417 285	89	43 885 632	Unknown
	eDumbe (KZ261)						
	Nongoma (KZ265)	25 379 600	3 788			94 180 931	Unknown
	Ulundi (KZ266)	13 212 400	1 971	16 228 318	462		
	UPhongolo (KZ262)	4 247 800	634				
2016/17	Abaqulusi (KZ263)	8 609 500	1 289			67 497 607	Unknown
	eDumbe (KZ261)						
	Nongoma (KZ265)	25 339 400	3 782	34 736 466	1 765	139 824 715	Unknown
	Ulundi (KZ266)	194 300	29	23 951 229	755	22 602 601	Unknown
	UPhongolo (KZ262)	5 279 600	796	4 739 876	145	26 291 538	Unknown
2017/18	Abaqulusi (KZ263)	8 535 800	1 276			16 044 765	Unknown
	eDumbe (KZ261)			1 685 043	89		
	Nongoma (KZ265)	8 790 400	1 312	270 419 474	10 039	127 797 300	Unknown
	Ulundi (KZ266)			103 437 276	3 284	18 773 674	Unknown
	UPhongolo (KZ262)	5 889 300	879			6 950 884	Unknown
>2018	AbaQulusi					216 630 517	Unknown
	eDumbe					168 573 081	Unknown
	Nongoma					753 549 704	Unknown
	Ulundi					510 722 866	Unknown
	uPhongolo					100 746 853	Unknown

Source: Zululand District Municipality

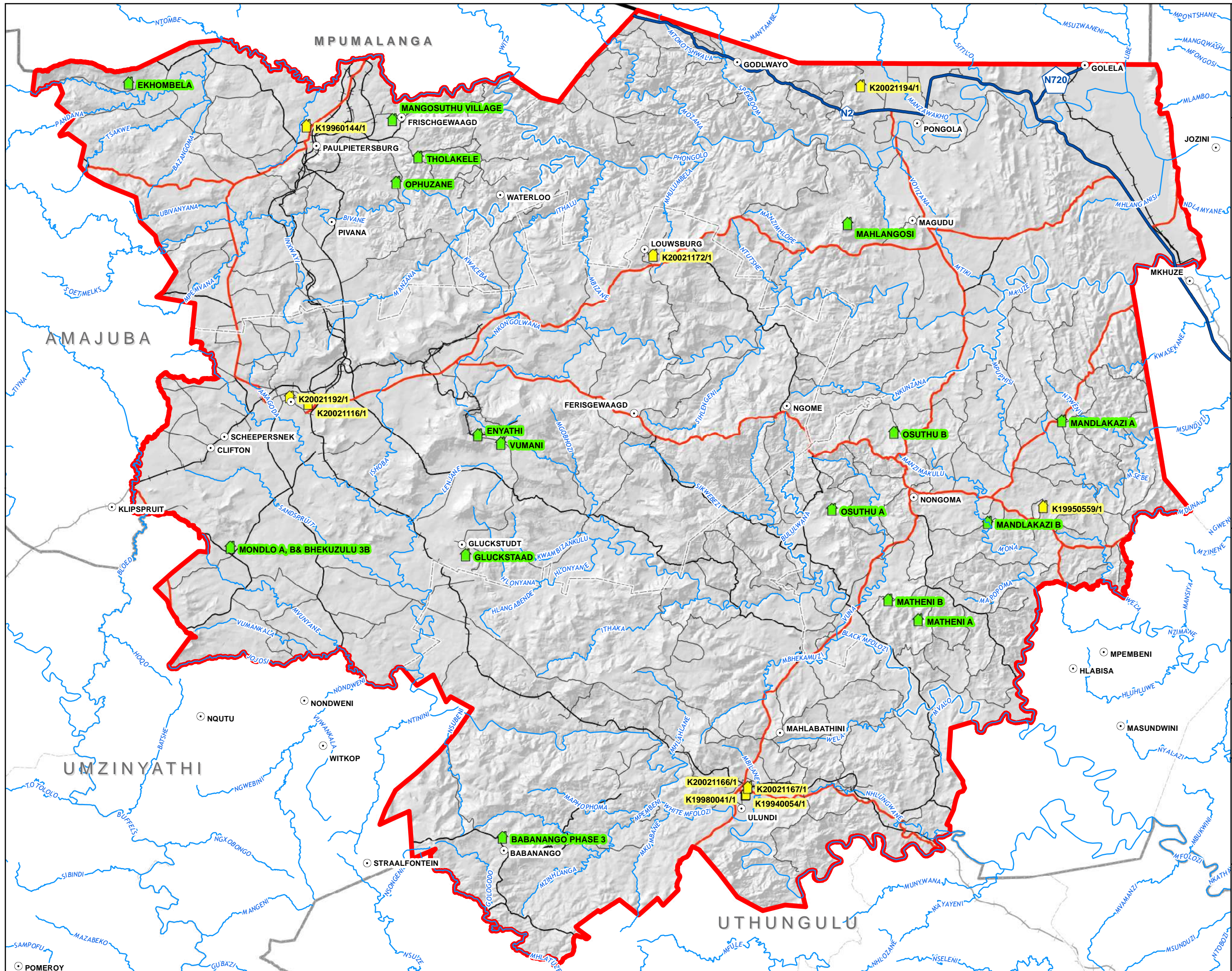
8.3 Housing

The following housing Projects are being planned for implementation within the Zululand District Municipality. All of these projects are still at the planning phase. As the correct amount for housing implementation was not known, an estimated amount of R86,000-00 per unit was utilised for budgeting purposes. These projects were mapped and are depicted on Map 25: Housing Projects Attached Overleaf.

Table 44: Housing Projects

Local Municipality	Project Name	Total Units	Budget (@R86,000-00)	Latitude	Longitude
Abaqulusi KZ263	Mondlo A, B& bhekuzulu 3B	1 000	86 000 000	30.71613	-27.978982
	Enyathi	593	50 998 000	31.05527	-27.824645
	Vumani	1 000	86 000 000	31.08663	-27.83614
	Gluckstaad	1 015	87 290 000	31.03832	-27.989323
eDumbe KZ261	Ekhombela	200	17 200 000	30.57667	-27.342537
	Mangosuthu Village	1 500	129 000 000	30.93820	-27.39260
	Ophuzane	1 000	86 000 000	30.94331	-27.478721
	Tholakele	1 000	86 000 000	30.9732	-27.443985
Nongoma KZ265	Matheni A	2 000	172 000 000	31.65840	-28.07810
	Matheni B	2 000	172 000 000	31.61725	-28.05096
	Mandlakazi A	2 000	172 000 000	31.85507	-27.80552
	Mandlakazi B	2 000	172 000 000	31.75352	-27.9449
	Osuthu A	2 000	172 000 000	31.54027	-27.92694
	Osuthu B	2 000	172 000 000	31.62507	-27.82141
	Babanango Phase 3	200	17 200 000	31.08894	-28.376357
Ulundi KZ266	Zungu	3 500	301 000 000	31.5469	-28.1638
uPongolo	Mahlangosi Housing Project	1 000	86 000 000	31.5616	-27.535
	TOTAL ZULULAND	24 008	2 064 688 000		

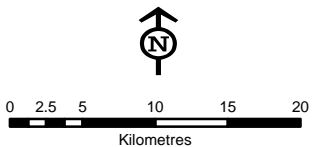
Source: KwaZulu-Natal Department of human Settlement



**ZULULAND
DISTRICT MUNICIPALITY
SPATIAL DEVELOPMENT
FRAMEWORK**

HOUSING PROJECTS

- LEGEND**
- Place Names
 - Housing Projects (PGDS)
 - ZDM Proposed Housing Projects
 - National Roads
 - Regional Distributor
 - District Distributor
 - District Collector
 - Rivers
 - Railway Lines
 - Zululand District Municipality
 - Local Municipalities
 - District Municipalities



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9 Way Forward And Conclusion

This report contains the Draft Spatial Development Framework for the Zululand District Municipality and is the result of a series of spatial analysis and technical interactions with Role-players and the Project Steering Committee. It is intended to serve as discussion document for further role-player input towards the finalisation of the SDF.

The following aspects are still to be included in this Spatial Development framework:

1. Capital Investment Framework
2. Sustainability Assessment
3. Amendments as per Comments

This document is therefore circulated with the intention of obtaining inputs from the various role-players and to include such comments before the final document is submitted to the District municipality for adoption.

Once adopted this SDF will serve as base to inform planning and public investment within the municipality for the period 2012 to 2017 with annual reviews during that period.