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# UMZUMBE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK

## CONSOLIDATED SDF REPORT

FINAL DRAFT REPORT





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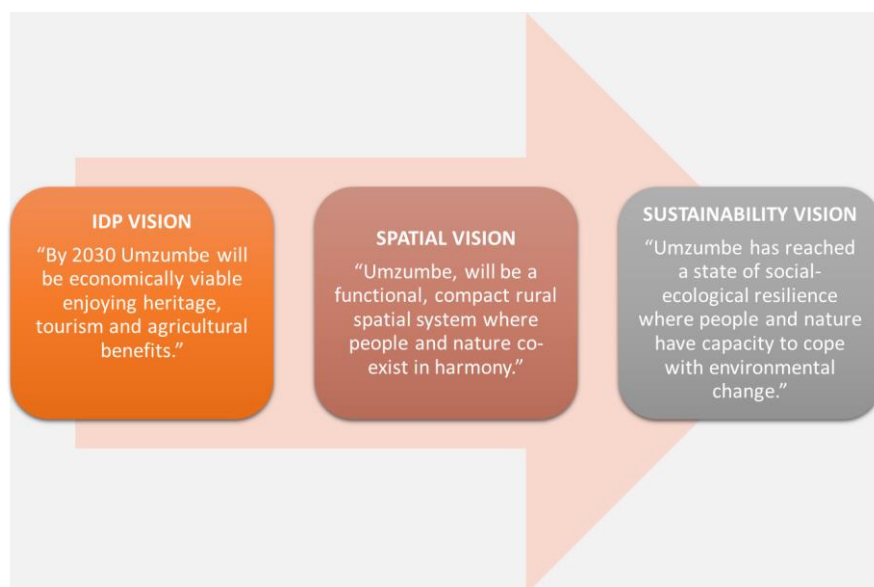
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## Executive Summary

The Umzumbe local municipality (KZN213) Spatial Development Framework (SDF) fulfils the legal requirements set out in the Spatial Planning and Land Use Management Act (Act No. 16 of 2013). The SDF is an integral component of the Integrated Development Plan (IDP), and provides a spatial representation of the IDP within the Umzumbe municipality's area of jurisdiction. It gives spatial effect to the vision, strategies, goals and objectives of the municipality. The vision of the municipality is as illustrated below:



Moreover, it serves as the principal strategic spatial planning instrument, which guides and informs all planning, future development,

land use management, and spatial decision-making within the municipality. It also takes into account the national and provincial spatial planning imperatives, and seeks to contribute to spatial transformation within Umzumbe.

The SDF is a framework, hence it is also aligned with other municipal sector plans and strategies and also national and provincial strategies. It also takes due cognizance of various development principles, particularly those stipulated in the Spatial Planning and Land Use Management Act, No. 16 of 2013. This is part of the municipality's efforts towards ensuring that the desired spatial form and outcomes are achieved in accordance with government's broader development agenda as outlined in various legislative and policy instruments.

The preparation of the SDF embraced a phased and participatory approach, which ensured that key stakeholders are engaged at key stages of the project. Thus, the concept of integrated and coordinated development was espoused.

The Umzumbe SDF provides an analysis of the key status quo elements within the municipality, which are in turn used to highlight the spatial development opportunities, trends and issues. These are subsequently used to formulate appropriate and well-contextualized spatial concepts and strategies for the municipal area.

Umzumbe is a rural municipality, in that some of the dominant forms of land use are expansive agricultural plantations and scattered rural

settlements characterised by unsystematically spread homesteads. The municipality is also devoid of a town, urban area or formal settlement; this further supports the pronouncement of Umzumbe as a rural municipality. The municipality is also endowed with one formally proclaimed protected area and numerous other environmentally sensitive areas, to which well-defined management processes and procedures are applied. The natural environment within the municipality is generally worthy of conservation and of economic value.

Different municipalities are characterized by unique attributes or different influencing factors, which can be seen as competitive advantages. The Umzumbe municipal area has a unique spatial morphology characterized by unique scenery and rivers flanking and traversing the municipality. Such scenery is highly influenced by the rugged terrain, characterised by steep hills, valleys, ridges and canyons on the western and northern portions and also the low-lying areas and smoothly rolling hills on the eastern and southern sections of the municipality.

The municipality has a tourism sector that can thrive through heritage and also the use of natural resources and potential tourism routes which can help stimulate the development of nature-based tourism. Umzumbe also has significant tracts of land reserved for agricultural purposes as per the provisions of the Subdivision of Agricultural Land Act, 70 of 1970, of which some is classified as of good agricultural

potential; accordingly, agriculture forms the base of the municipality's economy.

The municipality is characterized by a fragmented spatial structure that marginalizes the poor from employment and economic opportunities. Poverty is concentrated mainly in the remote rural traditional council areas, which have not benefitted from any formal spatial planning; hence their spatial morphology and settlement pattern reflects the impact of such informally guided inhabiting of these areas. The municipality is also characterized by substandard local road infrastructure in some areas, which can be seen as a limiting factor that limits intra and inter-settlement access. It is within this context and light of the issues alluded to above that the municipality's spatial development framework is formulated.

In addressing the negative spatial implications arising from the prevailing development trends and patterns, the Umzumbe SDF considers the local economy, land use planning, natural resources, transportation and socio-economic issues in an integrated manner. It aims to respond to the aforementioned issues currently prevailing within the municipality by adopting and employing a number of strategies. They are diagrammatised as follows:



These strategies are in consonance with the municipality's vision and ultimately aim to:

- ⇒ facilitate the development of sustainable, integrated and harmonious human settlements, based on a spatial system that encourages development in certain strategic areas and creates an environment conducive to economic development.
- ⇒ facilitate the sustainable development of social and bulk infrastructure and promote the development of rural communities
- ⇒ protect the municipality's natural resources and capitalise on their economic and livelihood value

The Umzumbe SDF requires considerable resources to be effectively implemented. It needs further detailed planning through the formulation of precinct plans, local area plans, land use schemes and

other sector specific guidelines. These, combined with the requisite human and financial resources, ensure that the SDF and its concomitant strategies are taken to the implementation arena effectively. Furthermore, the SDF entails a capital investment framework that captures the implementation of the development vision set by the municipality, through various capital projects. These are mapped accordingly and cross-referenced to show the approximate spatial location of each project.

The SDF aligns with the neighbouring municipalities through continuous development, corridors and hierarchy of development nodes and taking into consideration the spatial attributes of neighbouring municipalities. The SDF also factors in the various boundary re-determination and ward delimitation processes and associated spatial changes, which have directly affected Umzumbe municipality and neighbouring municipalities.

## 1 INTRODUCTION

### 1.1 PURPOSE

This document presents the Consolidated Spatial Development Framework Report (SDF) and is intended to provide planning systems and approaches through which the municipality can achieve its spatial development vision. It is prepared in line with the Spatial Planning and Land Use Management Act, Act 16 of 2013 and the Municipal Systems Act, Act 32 of 2000. It is also substantially in accordance with the Final Guidelines for the Formulation of SDF's developed by the Department of Rural Development and Land Reform.

### 1.2 UMZUMBE LOCAL MUNICIPALITY

Umzumbe Municipality (KZN 213) is one of the four local municipalities within the Ugu District Municipality (refer to Map 1). It runs along the coast for a short strip between Mthwalume and Hibberdene and then spreads out to the inland for approximately 60 km. It covers a vast rural area of some 1221 km<sup>2</sup> with approximately 1% only being semi-urban. The municipality incorporates 18 traditional council areas and comprises of 20 municipal wards (refer to Map 2). Umzumbe is the second largest municipality within the district.

The 2016 Community Survey data indicates that the total population of the Umzumbe Municipality is approximately 151 676 people. There are no established towns within the municipality. A huge service backlog,

high levels of poverty and lack of economic base are some of the key features of the area. The most striking physical feature is the extent of undeveloped natural land, representing almost 60% of the total land area. Agriculture is the mainstay of the economy with the main activities being sugar cane and small-scale farming. The SDF should contribute towards the spatial transformation and development of the municipality as a functional, sustainable and generative administrative and economic region.

The strategic environmental context within which this municipality is located includes the following broad characteristics:

- ⇒ Physical and biological factors have combined to create natural resource diversity. These resources create opportunities for human development and economic growth.
- ⇒ The geographical position of the municipal area creates a climate regime that is highly suitable for human settlements, except for the western section where topography and soil conditions make land usage and habitation difficult. Its location on the eastern seaboard where the warm Mozambique-Agulhas Ocean current interacts with the ocean, the biosphere and the land, creates a summer rainfall region with pleasant sub-tropical coastal conditions.
- ⇒ Great variability in the features that influence the region's climate regularly produces extreme weather events such as frequent

floods. The area is therefore, due to its geography, inherently sensitive to changes in the climate.

⇒ The combination of the socio-economic profile of the area with the geographical and physical factors, as well as the general rate of environmental change, suggests an area where human vulnerability should be the overarching sustainability concern.

TABLE 1: WARDS

| WARD | EXTENT (ha) | PERCENTAGE (%) |
|------|-------------|----------------|
| 1    | 12244.15    | 10.03          |
| 2    | 9764.03     | 8              |
| 3    | 12070.27    | 9.89           |
| 4    | 7309.53     | 5.99           |
| 5    | 6500.98     | 5.32           |
| 6    | 10532.09    | 8.63           |
| 7    | 13824.12    | 11.32          |
| 8    | 2590.59     | 2.12           |
| 9    | 8707.64     | 7.13           |
| 10   | 436.17      | 0.36           |
| 11   | 1642.60     | 1.35           |
| 12   | 12679.66    | 10.38          |
| 13   | 6108.26     | 5              |
| 14   | 4730.00     | 3.87           |
| 15   | 2887.67     | 2.36           |
| 16   | 7491.43     | 6.14           |
| 17   | 371.99      | 0.30           |
| 18   | 828.05      | 0.68           |

|              |                  |            |
|--------------|------------------|------------|
| 19           | 534.48           | 0.44       |
| 20           | 851.60           | 0.70       |
| <b>Total</b> | <b>122094.63</b> | <b>100</b> |

Source: Municipal Demarcations Board (2016)

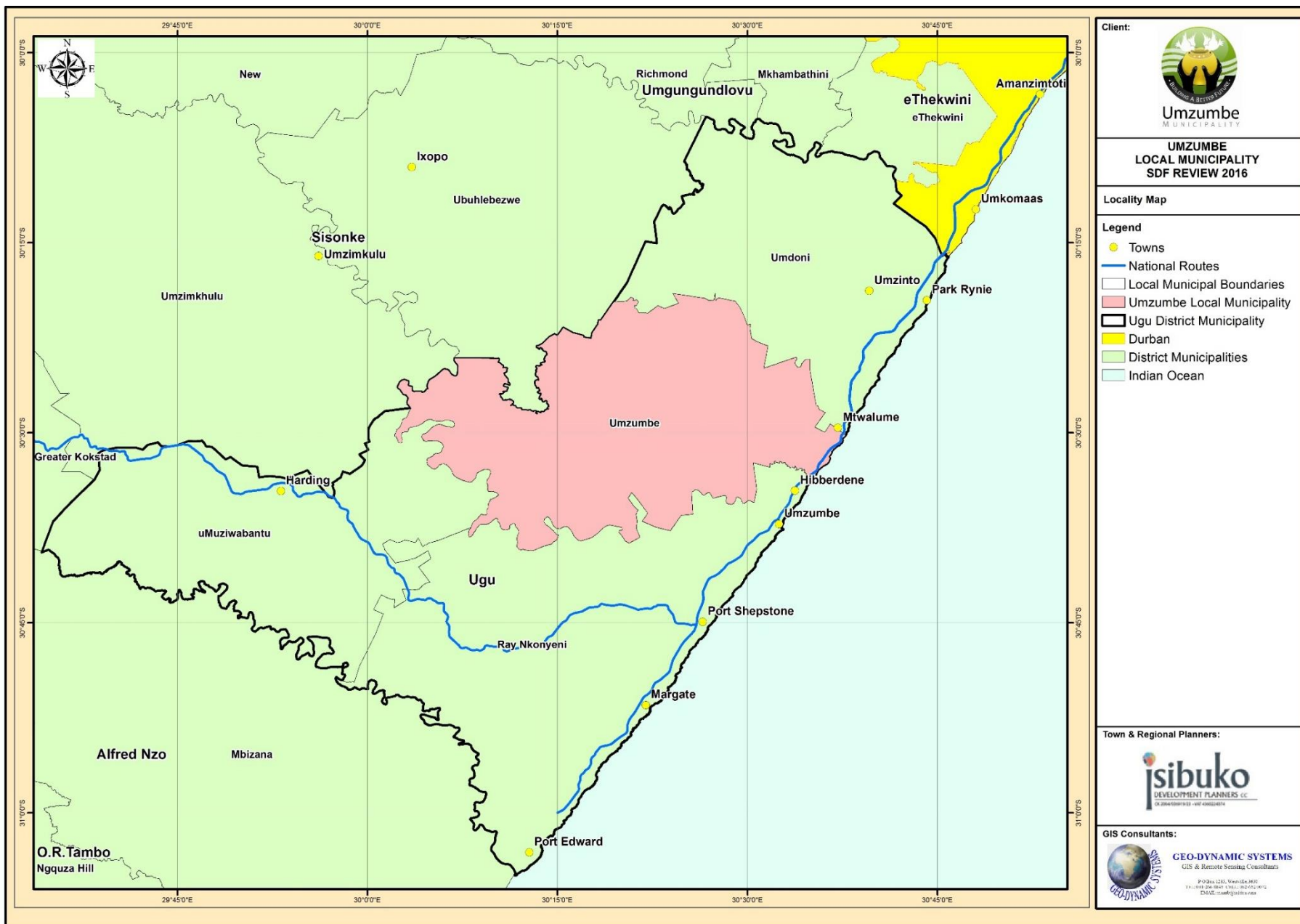
### 1.3 DEFINING THE SPATIAL DEVELOPMENT FRAMEWORK

The Spatial Development Framework (SDF) is a plan that maps the spatial development trajectory of a municipality and guides the spatial location of future developments, towards the achievement of the desired spatial form. It is a process through which a municipality prepares a medium to long-term strategic spatial development plan for its area of jurisdiction. The SDF will serve as the main strategic spatial planning instrument, which guides and informs all planning, land management, development and spatial decision-making in a municipality. It is a component of the Integrated Development Plan (IDP) and aims to create a spatial interpretation of the strategies and projects already contained within the IDP. It should not be seen as a separate planning process, but only aims to assist in the prioritization of resources towards implementing the IDP.

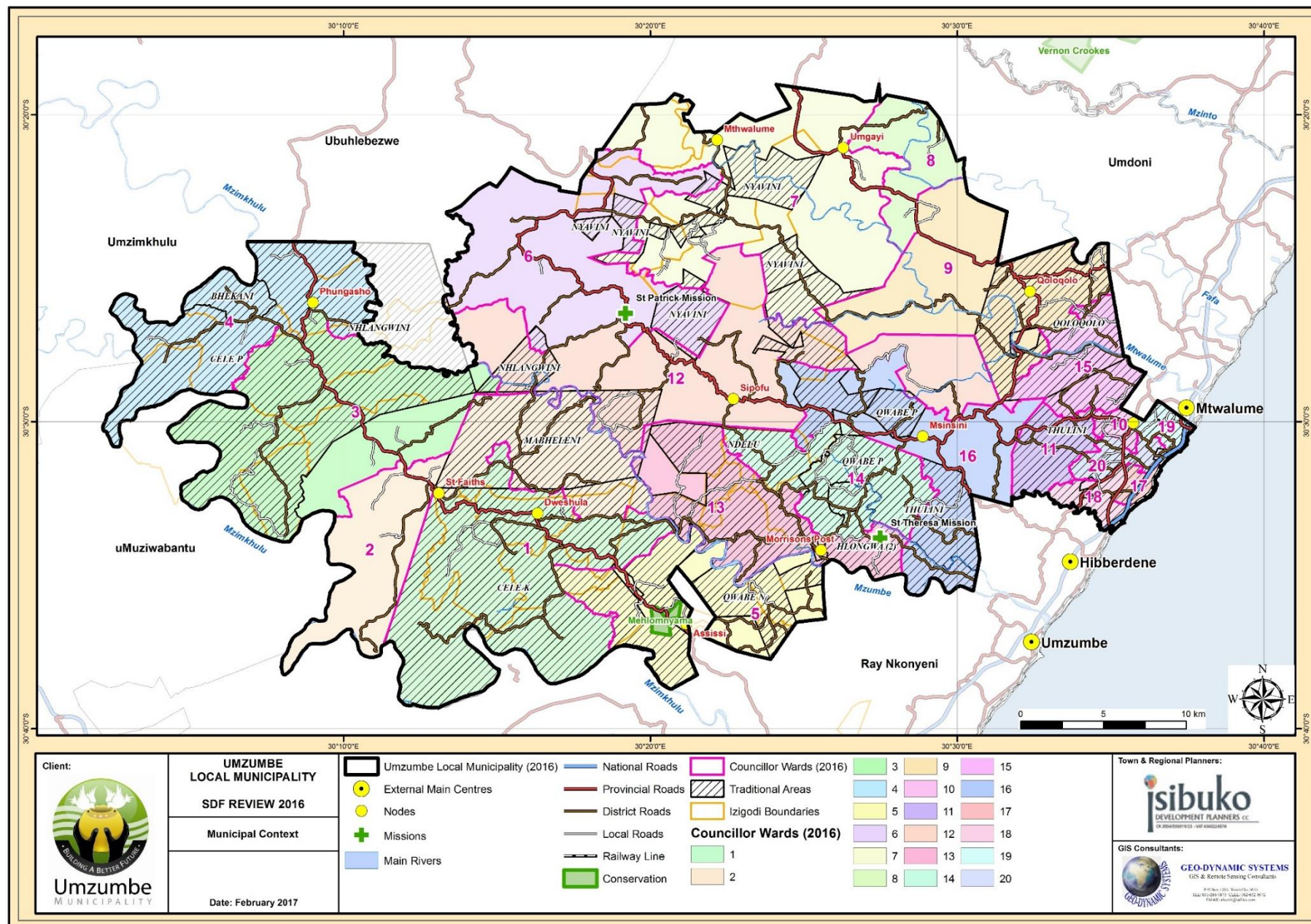
The SDF is also a transformation tool. It guides the form and location of future spatial development in a manner that addresses the imbalances of the past. It is a legislative requirement and this gives it a legal status, but it should resonate with the national and provincial spatial development priorities. It enables the municipality to manage its land resources in a developmental and sustainable manner.



MAP 1: LOCALITY MAP



MAP 2: MUNICIPAL CONTEXT



It provides an analysis of the spatial problems and provides strategies and programs to address the challenges. In summary, the SDF has the following benefits:

- ⇒ It facilitates effective use of scarce land resources
- ⇒ It facilitates decision making with regard to the location of service delivery projects.
- ⇒ It guides public and private sector investment.
- ⇒ It strengthens democracy and spatial transformation.
- ⇒ It promotes intergovernmental coordination on spatial issues.
- ⇒ It provides a framework for the preparation of more detailed and area specific spatial plans and a wall-to-wall Land Use Scheme (LUS)

In short, the SDF defines and facilitates a progressive move towards the attainment of an agreed upon desired spatial structure within the municipality's area of jurisdiction.

#### 1.4 AIMS AND OBJECTIVES

The primary aim of this project is to develop a Spatial Development Framework for Umzumbe Municipality, which will guide the spatial form and location of future spatial development initiatives. Its objectives are as follows:

- ⇒ To give effect to the vision, goals and objectives of the municipal IDP, Provincial Growth and Development Strategy, Provincial

Growth and Development Plan, National Development Plan, Sustainable Development Goals, Municipal Systems Act, Spatial Planning and Land Use Management Act and the associated Umzumbe Spatial Planning and Land Use Management By-laws.

- ⇒ To engage the interested and affected parties in a strategic planning process taking into account their views, concerns and interests.
- ⇒ To promote inter-governmental relations by ensuring that all relevant stakeholders are consulted and participate actively in the planning process.
- ⇒ To provide for the spatial transformation of the municipal area.
- ⇒ To provide for sustainable development in line with the norms and standards for environmental management.
- ⇒ To facilitate the development of an efficient and effective spatial structure.
- ⇒ To provide a framework for the review of the Land Use Scheme.
- ⇒ To develop a framework for public and private sector investment.

In addition, the SDF is required:

- ⇒ To comply with the Umzumbe Municipality Spatial Planning and Land Use Management By-Laws.
- ⇒ To complete the toolbox for effective spatial planning and land use management. This includes the generation of GIS data that would

enable the municipality to promote environmentally sustainable and harmonious development.

should align with all sector plans (service delivery, LED, etc.) and be informed by a rigorous assessment of the state of the environment.

## 1.5 SDF IDP ALIGNMENT

FIGURE 1: MUNICIPAL PLANNING SYSTEMS

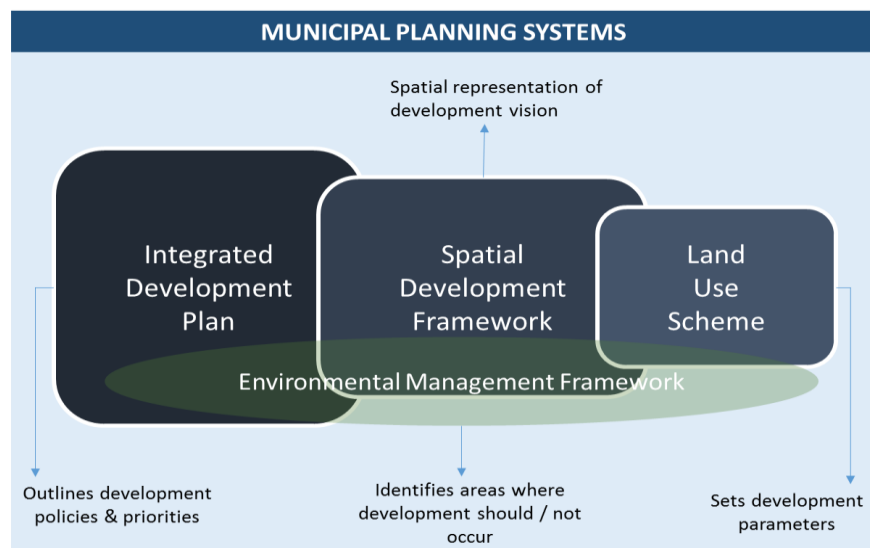


Figure 1 indicates the link between the IDP, SDF, EMF and Land Use Scheme. As such, the IDP outlines the development principles and priorities of the municipality, while the SDF provides the spatial representation of the municipal development vision and the Land Use Scheme sets specific development parameters.

The Environmental Management Framework (EMF) process forms the link between the IDP, SDF and Scheme by providing sustainability and environmental guidelines for spatial development. In addition, the SDF

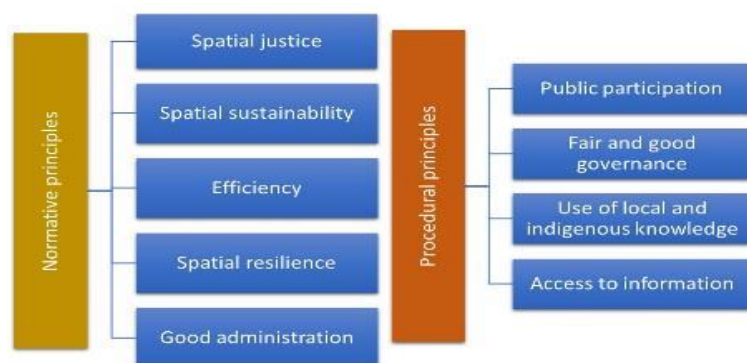


## 2 APPROACH AND METHODOLOGY

### 2.1 GUIDING PRINCIPLES

The preparation of the Umzumbe Municipality Spatial Development Framework (SDF) was underpinned by a number of normative and procedural principles (refer to figure 1), which collectively constitute a single point of reference. These principles present an overarching coherent set of policy guidelines to direct and steer development planning and land use management. This was to allow for outcomes that are consistent with the development objectives as outlined in the Integrated Development Plan (IDP) and with principles advocated by the Spatial Planning and Land Use Management Act, (Act No. 16 of 2013). The principles and norms are to promote normative based spatial planning, land development and land use management.

FIGURE 2: PRINCIPLES



### 2.2 PHASED APPROACH

The project embraced a phased approach in accordance with the terms of reference. The phases were as follows:

FIGURE 3: PHASING



## 2.3 METHODOLOGY

The planning process involved the use of the following methods to collect, generate and analyse data:

- ⇒ Desktop data and literature review.
- ⇒ Stakeholder engagement.
- ⇒ Specialist investigations.
- ⇒ GIS.

It is important to indicate that stakeholder participation in the form of project steering committee meetings, interviews, presentations unfolded throughout the course of the project.

### 2.3.1 DESK-TOP DATA AND LITERATURE REVIEW

The SDF as a component of the IDP needs to be located firmly within the practice of integrated development planning. This includes ensuring alignment with national, provincial and district strategic plans, and using these to inform approaches to local spatial development challenges. The following is an indication of documents / information that was reviewed as part of this process:

- ⇒ Key national policies and programmes of relevance, e.g. National Development Plan, Breaking New Ground, Comprehensive Rural Development Programme, Integrated Urban Development Framework etc.

- ⇒ Relevant legislation such as the Spatial Planning and Land Use Management Act
- ⇒ KZN strategic spatial plans including the Provincial Growth and Development Strategy and the associated spatial strategy.
- ⇒ Existing district level long term strategic plans such as the Ugu District Growth and Development Plan, Ugu District Rural Development Plan and the Water Services Development Plan.
- ⇒ Umzumbe Municipality IDP and the associated sector Plans. The latter includes LED Plan, Housing Sector Plan, Disaster Management Plan, Integrated Waste Management Plan etc.
- ⇒ Spatial plans and data sourced from various sector departments.
- ⇒ Spatial data and mapped information sourced from various sector departments.
- ⇒ Existing local level spatial plans such as the Turton Beach Framework.
- ⇒ Sectoral plans, including the Ugu Biodiversity Sector Plan and the Ugu Environmental Management Framework.
- ⇒ Planning theories and research reports dealing with a range of strategic projects in the area.

### 2.3.2 STAKEHOLDER CONSULTATION

Stakeholders were identified in terms of potential role and contribution towards the achievement of the objectives of the project. Appropriate engagement strategies were adopted to suite the unique requirements of different stakeholders. Fora such as the Integrated Development Plan Representative Forum were used to capitalise on the convergence of a number of stakeholders. These stakeholders include, but not limited to the following:

- ⇒ Umzumbe Municipality officials.
- ⇒ Ugu Municipality officials.
- ⇒ Provincial government officials.
- ⇒ Government owned entities.

Furthermore, Interviews were undertaken with various stakeholders. These were conducted as and when needed and in pursuit of certain sectoral information. The Draft SDF was also advertised and circulated to various stakeholders for comments. The comments received were noted and used to improve the deliverables.

### 2.3.3 USE OF GIS

Geographic Information Systems (GIS) is critical to the development of an effective SDF. The team made use of the GIS to overlay information. GIS was also used to analyse data, discern spatial trends capture data and geo-reference information. Isibuko had access to a recently

developed digital criterion for the development of layers and this tool was used in this regard.

### 2.3.4 USE OF EXISTING INFORMATION

The team made optimal use of the existing information to avoid re-inventing the wheel. A fair amount of existing mapped information was used. Whereas new research was undertaken along the way as and when necessary.

### 3 REGIONAL CONTEXT

#### 3.1 PROVINCIAL CONTEXT

The Provincial Growth and Development Strategy for KwaZulu-Natal (map 3), classifies portions of the Umzumbe area as priority intervention areas (Level 1 and 2), based on variable weighting. These priority intervention areas are identified using spatial variables/ pillars that include Environmental Sensitivity, Economic Potential, Social Need and Urban Accessibility. The categories/level of each variable was weighted and ranked into five similarly described categories to allow for effective overlaying comparisons. This resulted in a map indicating priority intervention areas. In Umzumbe, the identified level 1 and 2 priority intervention areas require urgent short-term concentration and co-ordination of public interventions (PGDS 2016:120).

In addition, the St Faiths area is identified as a quaternary node, as reflected in map 3 (PGDS 2016: 121). These quaternary nodes should provide service to the local economy and community needs. Almost the entire municipal area is classified as an area that requires social investment (shown in brown hatching), while a large portion requires service delivery (yellow). In addition, a large portion is classified as an agricultural investment area (shown in brown), with the coastal area as an economic support area (shown in orange).

An important secondary corridor connects St Faiths to Ixopo in the north and Port Shepstone in the southeast. The coastal area is also

connected to the economic hub of eThekweni on the north, via a primary corridor (N2).

#### 3.2 NATIONAL AND PROVINCIAL ROAD NETWORK

The national and provincial road network provides access and mobility within different areas in the municipality, but also connects Umzumbe to surrounding areas and neighbouring municipalities. The N2 is of particular importance, due to its provincial and regional context. Although it only runs along the Umzumbe coastline, it is an important mobility route and provides access to major economic areas, such as eThekweni to the north and Port Shepstone to the south. Other important provincial roads that provide regional access are the P68, P73 and P254, which provide strong southeast – northwest linkages to Ubuhlebezwe, Umzimkhulu and Ray Nkonyeni (Hibiscus Coast) municipalities. The P68 is of specific importance, as it provides the linkage between Ixopo through Highflats to the coast (Port Shepstone).

#### 3.3 DISTRICT SPATIAL ECONOMY

The Ugu district contributed around 3.6% of the R 328.9 billion-estimated provincial Real GDP (Gross Domestic Product) in 2013. The district's economy is highly concentrated in Ray Nkonyeni Municipality (Hibiscus Coast & Ezinqoleni), which contributed 51.2% of the total Ugu's real GDP. Umzumbe municipality contributed 26.4%, while



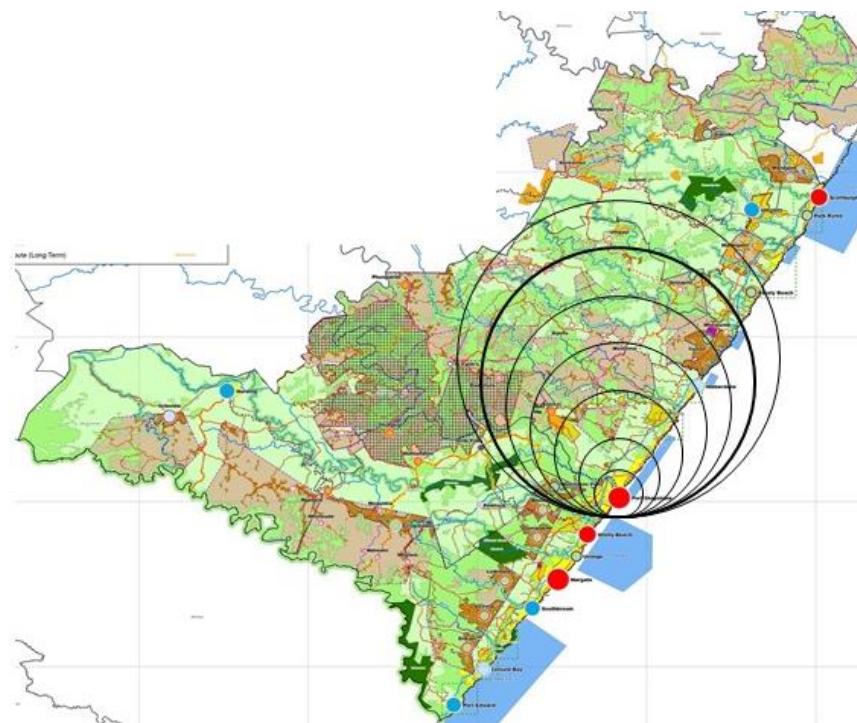
uMuziwabantu was the least contributing municipality at 4.2% in 2013 (Ugu DM Socio-economic profile: 2014).

The district is characterised by a dual space economy, with an urbanised coastal region and an impoverished rural interior. Commercial farmlands (sugarcane) and subsistence agriculture (livestock, dryland cropping and homestead gardening) are characteristics of the interior. The economy of the Ugu District features on tourism and agriculture, and manufacturing. Other key sectors include community services, construction, trade, the informal sector and transport. Tourism is concentrated mainly along some well-established coastal towns, which have become popular tourism destinations (e.g. Port Shepstone, Pennington, Uvongo, Margate and Hibberdene). Retail activity is concentrated in the coastal strip that acts as commercial and service centres for local residents and neighbouring rural communities. However, Port Shepstone is the main commercial centre and Shelley Beach is the fastest growing commercial centre. Manufacturing activity is also concentrated along the coastal strip with some light industrial parks such as Marburg, Park Rynie and Margate. There are also a number of industrial development points in the hinterland, such as Harding and some that are related to the activities of large firms, such as Idwala NPC, Sezela Sugar Mill, Umzimkulu Sugar Mill and the Weza Saw Mill. (Ugu District Growth and Development Strategy: p23)

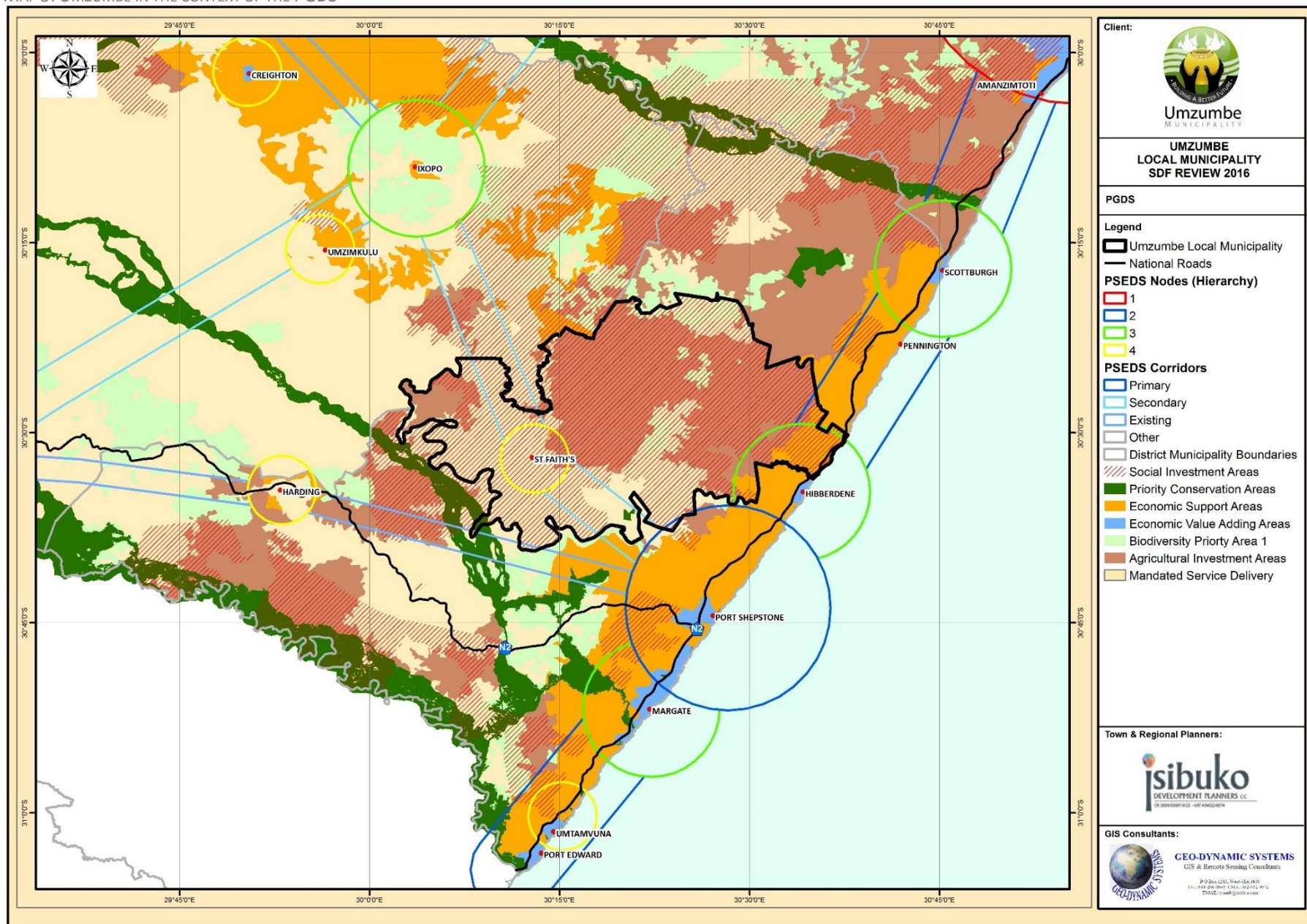
### 3.4 GREATER PORT SHEPSTONE FUNCTIONAL AREA

Port Shepstone is located approximately 20km to the south of Umzumbe, along the coastline. It is the major economic hub in the south coast and serves as the administrative centre for both Ray Nkonyeni Municipality and Ugu district municipality.

FIGURE 4: PORT SHEPTONE FUNCTIONAL AREA



Map 3: UMZUMBE IN THE CONTEXT OF THE PGDS



Port Shepstone is also an area where there is a higher concentration of commercial, industrial and trade related activities and one of the major sources of employment and economic opportunities in the region.

Given the above, Port Shepstone is an important economic catchment area for the population of Umzumbe and as a result, transport routes move people out of the Umzumbe area to Port Shepstone to access these services and facilities. Port Shepstone thus provides Umzumbe with services that are not available in Umzumbe, and plays an important role in the regional economy.

### 3.5 CATCHMENT MANAGEMENT

Umzumbe falls within the Mvoti-Mzimkhulu Water Management Area (WMA 11), one of 19 such areas in South Africa. It is further divided into ten (10) major river-catchments and a number of sub-catchments. By comparison with other WMAs the Mvoti-Mzimkhulu is well endowed with water resources, has generally good water quality and water infrastructure, and potential for economic development. However, a negative water balance has been calculated for the Coastal sub-area within which Umzumbe is located (2000-year baseline) and it is very

likely that the water requirements of the area will exceed availability by 2025<sup>1</sup>.

There are a number of Water Resource Management Strategies in place that are aimed at the protection of water resources, water use, water conservation and demand management. These strategies define the institutions that should be consulted in catchment management, water resource quality and quantity objectives to be achieved, and a range of other aspects of water resources management that must be taken into account in land use development. Local choices for the SDF and the LUS must therefore be influenced by the parameters as set out in these frameworks and the Umzumbe municipality must ensure that there is no infringement on the protection and management of water resources by land use development plans.

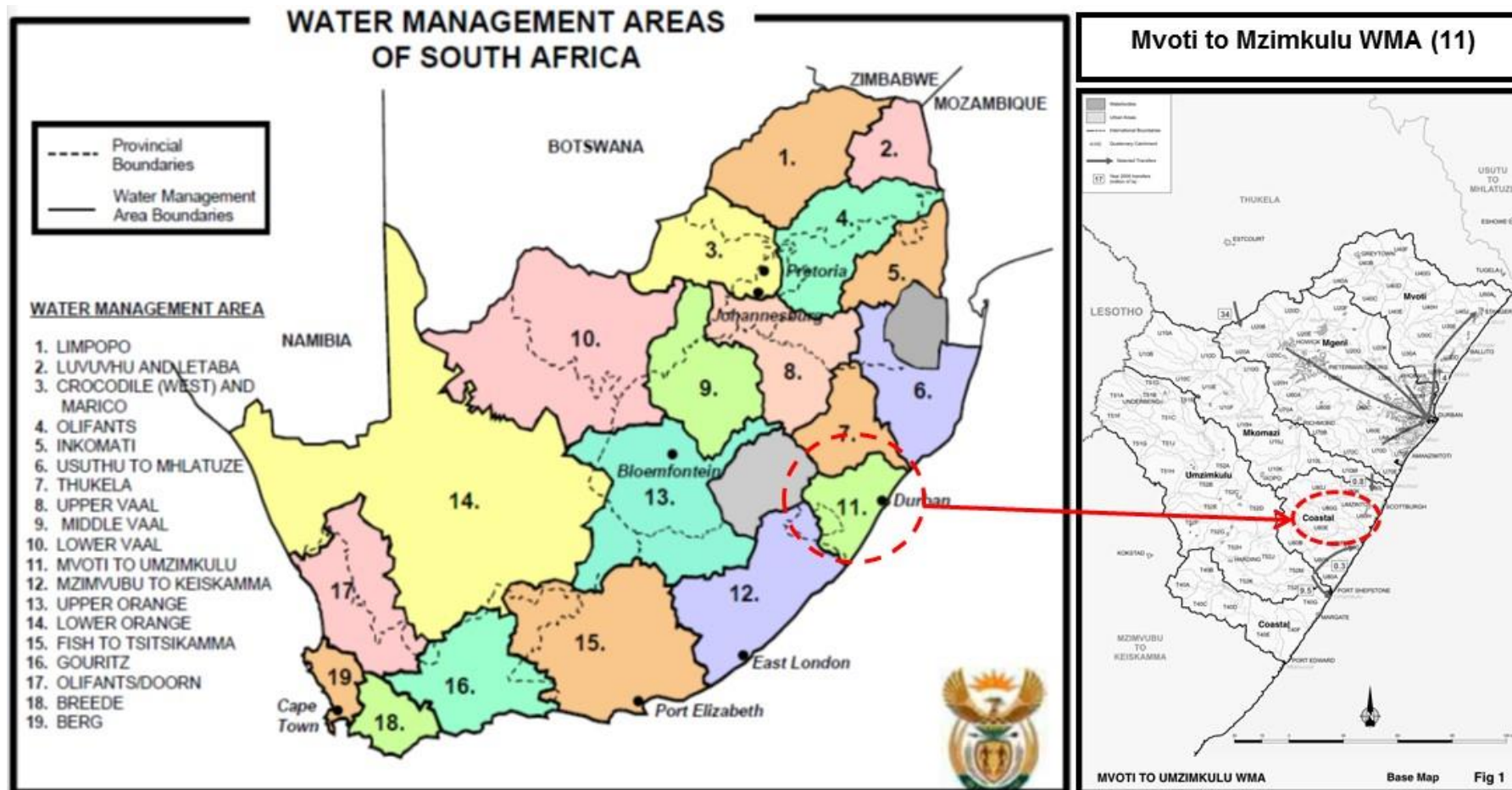
The Catchment Management Agency for the WMA is responsible for developing a Catchment Management Strategy to guide management of water resources at regional and catchment levels and will ensure that catchment strategies and plans are influenced by local thinking. In this regard, it is important to note that Amakhosi/Traditional Leaders are important institutions in integrated water resources management. Their roles are to facilitate integrated water resources activities in their

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<sup>1</sup> DWAF (2004) National Water Resource Strategy



FIGURE 5: WATER MANAGEMENT AREAS



areas of jurisdiction. The National Water Resource Strategy also identifies Traditional structures as conflict resolvers in water resources management.

### 3.6 BIODIVERSITY MANAGEMENT

Umzumbe is located within the Maputaland-Albany-Pondoland-Albany Hotspot<sup>2</sup>, a globally recognised bio-geographic region of significance, which contains unusually high numbers of endemic species, as well as globally unique ecosystem diversity in terrestrial, freshwater and marine systems. At least 70% of the original habitat, which occurred in this hotspot, has already been lost.

Given the above, Umzumbe is an important role-player in global efforts to influence the world's extinction crisis and to ensure the continued functioning of ecological and evolutionary processes that allow biodiversity to persist over time at a global scale. On a national level the significance of the area has been recognised by the listing<sup>3</sup> of threatened ecosystems that occur within Umzumbe.

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<sup>2</sup> Map source: Conservation International ([www.conservation.org](http://www.conservation.org))

<sup>3</sup> National list of ecosystems that are threatened and in need of protection, published in terms of Section 52 of the National Environmental Management: Biodiversity Act, 2004 in December 2011.

The coastal zone is under severe threat of extinction and there are vast inland areas that are vulnerable. Umzumbe also contains terrestrial ecosystems that are endangered, some of which only occur in the Umzumbe area and no-where else.

Municipalities are expected to take the need for protection of these listed ecosystems into account. To assist them in this regard, provincial government has prepared a District-level Biodiversity Sector Plan, which is a Bioregional Plan, aimed at promoting biodiversity compatible development in spatial areas of priority. Listed ecosystems must influence the Umzumbe SDF and it must contain restrictive land-use guidelines to ensure that further loss and degradation of natural habitat in these ecosystems is avoided.

### 3.7 COASTAL MANAGEMENT

The KZN coastal zone is a highly complex environment and extremely vulnerable to change. As a result, integrated coastal and estuarine management has become an important driver for regional sustainability and Umzumbe plays an important role in this regard. Coastal

Management Programmes are important institutional mechanisms to link national and provincial administrative, biodiversity management, and integrated water resource management requirements with the special management needs of the coastal zone and the planning needs of local authorities. They provide the frameworks within which decisions must be made related to activities which impact on the coastal assets and the coastal zone. The Ugu District Municipality has not yet developed a Coastal Management Programme that translates national and provincial coastal management plans into local coastal management objectives.

Of particular importance in the new coastal management regime is the change in municipal planning systems. Whereas the previous land-use planning system of South Africa used to be a land-based system that essentially stopped at the High-Water Mark, it now extends across the land/sea interface. The spatial planning boundaries of coastal municipalities such as Umzumbe must therefore include the coastal zone, which also comprises spatial aspects such as land below the High-Water Mark and coastal waters. This is necessary to facilitate coordination and alignment between national, provincial and local plans.

Existing spatial plans and objectives relating to coastal and estuarine management must be integrated into the Umzumbe SDF where relevant and specific areas within the coastal zone that require special management and strategies must be described.

### 3.8 REGIONAL SPATIAL PLANNING

The Ugu District Municipality is an important role-player in the spatial planning of the district. They have a regional planning role and have a mandate to support local municipalities and undertake a supportive co-ordinating role. Their function in terms of planning is to undertake district-wide planning and development facilitation, which is often referred to as a strategic function. They also have to provide support to, and ensure alignment between, planning processes of local municipalities. In order to facilitate vertical alignment between the District municipality and the Local Municipalities, the Ugu District Development Planning Forum (UDDPF) was established. It provides relevant technical, sector and financial information regarding each municipality and facilitates horizontal alignment with sector departments and public utilities. Alignment of the district IDP with the local municipalities will be undertaken through the UDDPF. The frequent UDDPF meetings will assist the district family to monitor alignment issues constantly.

### 3.9 REGIONAL ENVIRONMENTAL MANAGEMENT

An Environmental Management Framework (EMF) for the Ugu District has been developed. The EMF produces a spatial decision-support tool to help guide environmental decisions in the area. It should be adopted by the MEC for Economic Development, Tourism and Environmental Affairs, after which the information contained in it must be used to

inform local planning and land development and in particular the making of EIA decisions.

### 3.10 BOUNDARY RE-DETERMINATIONS

The Umzumbe local municipality has been affected by the delimitation and redetermination of various ward and municipal boundaries processes, which were undertaken prior to the August 2016 local government elections and came into effect after the elections.

Umzumbe shares municipal boundaries with Ubuhlebezwe, located within Harry Gwala district municipality on its north-western edge. A large portion of ward 4 of Umzumbe Municipality was added to Ubuhlebezwe Municipality as part of the boundary changes alluded to above (refer to Map 4). This portion includes areas that formed part of Nhlanguwini Traditional Council and resulted in Umzumbe losing two voting districts to Ubuhlebezwe Municipality. The SDF will have to take into account the implications of boundary changes, the cross boundary issues and the management issues that surface thereof.

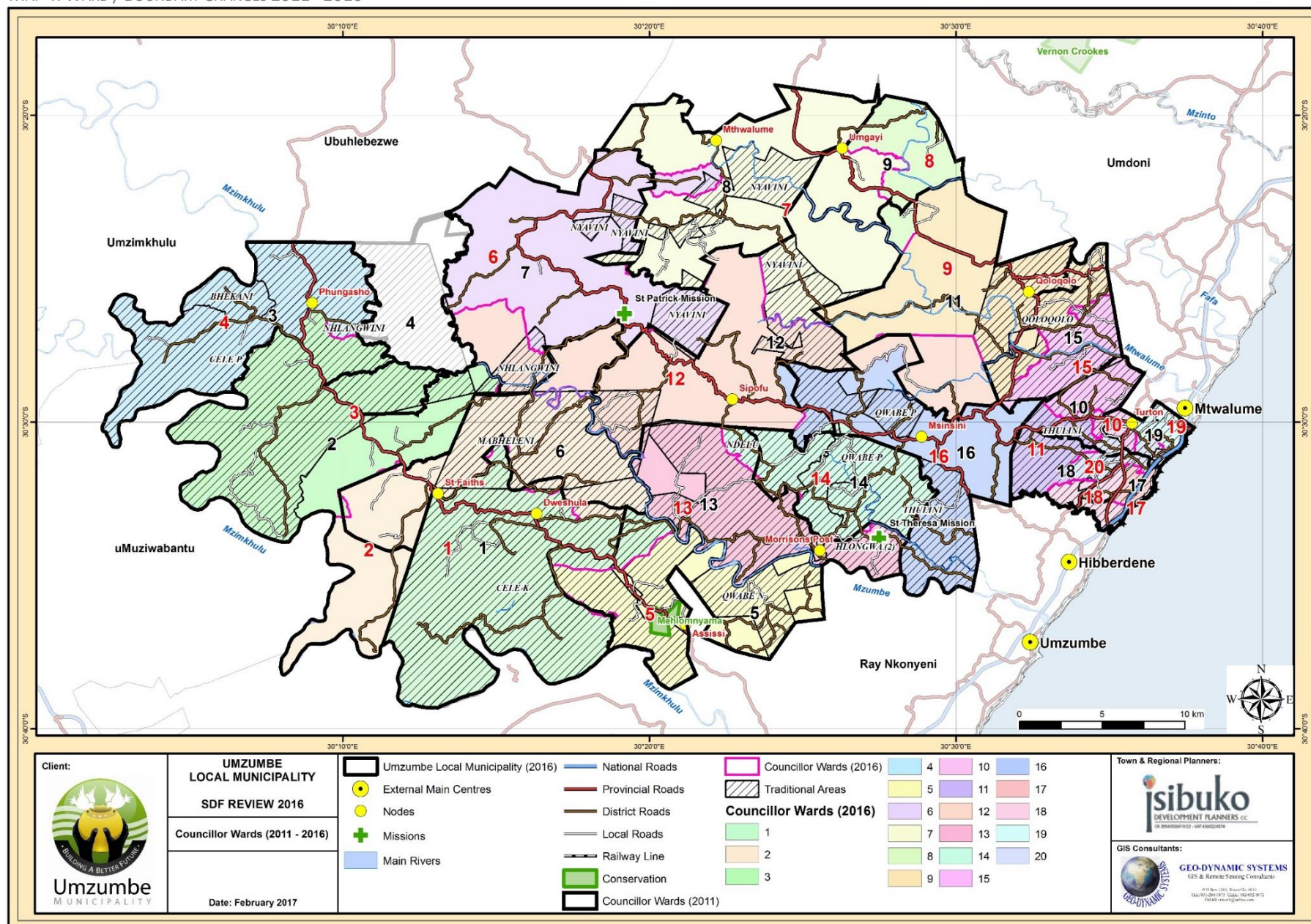
Furthermore, the municipality's wards have also increased in number. The municipality had 19 electoral wards, these increased to 20 after the elections. Noteworthy, wards 18, 10 and 19 were the largest wards in terms of population size. Portions of these wards, along with portions of ward 17, were combined to form ward 20.

Umzumbe is one of the four municipalities situated within the administrative boundaries of Ugu District Municipality. Noteworthy,

the number of municipalities within the district was six prior to the recent local government elections. This has now changed due to the disestablishment of the municipal area of Ezinqoleni Local Municipality, and its inclusion into the municipal area of Hibiscus Coast Local Municipality and also due to the disestablishment of Vulamehlo Municipality and incorporation of its components into Ethekewini Metropolitan Municipality and Umdoni Local Municipality. The former case culminated in a new municipality name viz. Ray Nkonyeni Local Municipality. The above has cross-boundary implications, of which the reviewed Umzumbe SDF will have to consider.



MAP 4: WARD / BOUNDARY CHANGES 2011 - 2016



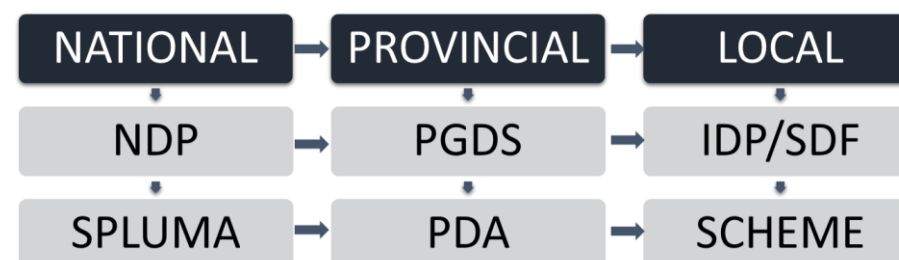


## 4 POLICY CONTEXT

The Umzumbe SDF should be informed by various legislation and spatial planning directives. The internalisation of these directives allows for the translation of the national and provincial spatial development vision to the implementation arena at a local level. It also repositions Umzumbe to contribute towards the attainment of spatial development targets and objectives outlined in these policy directives. The following is a non-exhaustive list of the critical government policy positions that should inform the Umzumbe SDF:

- ⇒ The National Development Plan (NDP)
- ⇒ National Infrastructure Plan (NIP)
- ⇒ Spatial Planning and Land Use Management Act (SPLUMA)
- ⇒ National Environmental Management Act (NEMA)
- ⇒ Comprehensive Rural Development Programme (CRDP)
- ⇒ Breaking New Ground (BNG)
- ⇒ Provincial Growth and Development Strategy (PGDS)
- ⇒ Ugu District Integrated Development Plan
- ⇒ Ugu District Growth and Development Plan
- ⇒ Umzumbe Integrated Development Plan (IDP).
- ⇒ Various Sector Plans and Bylaws

FIGURE 6: GENERIC POLICY / LEGISLATIVE RELATIONSHIP



### 4.1 SPATIAL PLANNING MANDATE

Since the mid-1990s, the notion of spatial planning has become an integral part of the development planning discourse and practice in South Africa. The Constitution (Schedule 4 Part B) bestows this responsibility to local government, particularly local municipalities. Umzumbe gives effect to this mandate through a range of empowering legislation and policies, including, but not limited to the following:

The Municipal Systems Act (MSA), Act No. 32 of 2000 is the principal legislation regulating the content and scope of SDFs, and requires that an SDF should be prepared as a component of the IDP.

National government introduced the Spatial Planning and Land Use Management Act (SPLUMA), Act 16 of 2013 in an attempt to consolidate the spatial planning mandate under a single piece of legislation. SPLUMA is now the overarching spatial planning legislation,

and introduces a uniform spatial planning approach and agenda throughout the country. One of the key innovations of this legislation is the recognition that spatial planning should not only occur at a local level, but at provincial and national levels as well. This will facilitate vertical and horizontal cross-border alignment and land use integration.

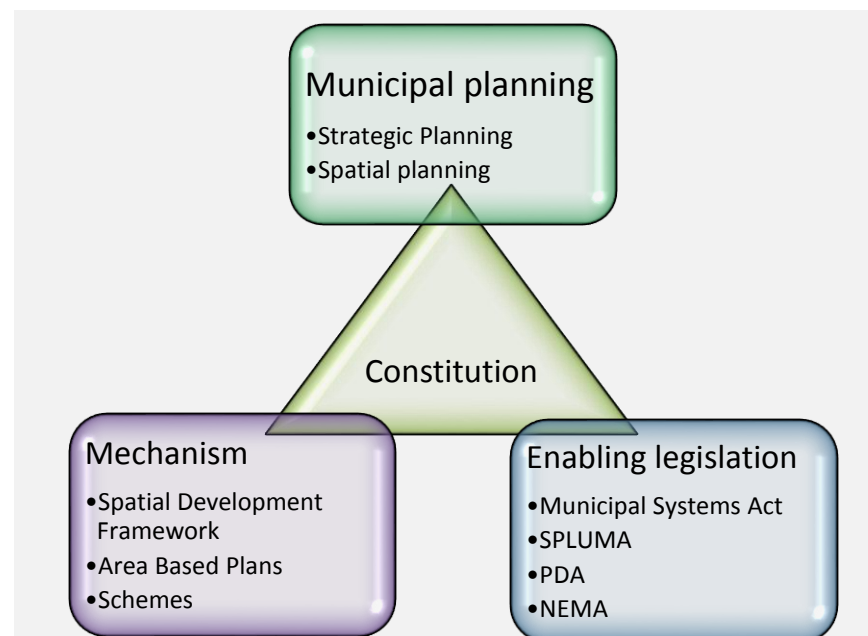
In effect, SPLUMA addresses the following issues:

- ⇒ It provides a uniform and coherent framework for spatial planning and land use management;
- ⇒ It specifies the relationship between the spatial planning and the land use management system;
- ⇒ It provides for the inclusive, developmental, equitable and efficient spatial planning at different spheres of government;
- ⇒ It promotes greater efficiency, consistency and uniformity in the decision-making by authorities responsible for land development decisions;
- ⇒ It addresses the legacy of past spatial planning and regulatory imbalances (SALGA presentation 2014).

The new law supersedes provincially applicable planning laws, such as the Planning and Development Act (PDA). It lays down national policy, norms and standards as well as frameworks on land use, and therefore fall within the ambit of section 146 of the Constitution. At a local level,

it provides a framework for the preparation of area specific SDFs and Land Use Schemes.

FIGURE 7: SPATIAL PLANNING MANDATE



## 4.2 SUSTAINABLE DEVELOPMENT GOALS

South Africa is a member of the United Nations, thus subscribes to the development goals and aspirations of this global organisation. In 2015, countries adopted a set of 17 goals as part of a new sustainable development agenda. Each goal has specific targets by 2030. The achievement of these goals and associated targets requires everyone,

including municipalities, to play their role. A number of goals are of particular pertinence to spatial planning. These include:

- ⇒ Sustainable cities and communities – make cities and human settlements inclusive, safe, resilient and sustainable.
- ⇒ Life on land - protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
- ⇒ Climate action – take urgent action to combat climate change and its associated impacts / natural catastrophes.
- ⇒ Clean water and sanitation - ensure availability and sustainable management of water and sanitation for all.

## 4.3 NATIONAL SPATIAL PLANNING POLICY

### 4.3.1 THE NATIONAL DEVELOPMENT PLAN

The National Development Plan (NDP) introduces the long-term vision for the future development of South Africa. It acknowledges the spatial inefficiencies that characterises existing settlements and commits the national government to developing a national Spatial Framework as a policy framework to address these abnormalities. The NDP requires plans such as the SDF to respond directly to the area specific issues, including the following:

- ⇒ Population movement patterns including migratory patterns between rural and urban areas.
- ⇒ Impact of external factors such as globalisation and climate change on spatial planning and development within Umzumbe.
- ⇒ Public sector investment in economic infrastructure as a means to create a climate conducive to economic growth and development.
- ⇒ Creating opportunities for rural communities to participate actively in the economy. This has serious implications for access to productive assets, particularly high potential agricultural land, skills development, etc.

The Umzumbe Municipality SDF should give effect to the spatial planning principles outlined in the NDP and contribute to an effective implementation of the national spatial development vision. This includes spatial transformation and promoting spatial integration.

### 4.3.2 NATIONAL INFRASTRUCTURE PLAN [NIP]

The National Infrastructure Plan (NIP) is the brainchild of the NDP and seeks to use infrastructure development as a vehicle to transform the country's economic landscape, through the maximization of job creation and improved basic service delivery. Essentially, the NIP calls for increased investments in, inter alia: healthcare and education facilities; housing and electrification; sanitation facilities; road and railway infrastructure; construction of dams and ports. Some of the 18

Strategic Integrated Projects (SIPs) identified in the NIP have implications for Umzumbe Municipality. These include:

- ⇒ SIP 11 is crucial for predominantly rural municipalities and emphasises investment in agricultural and rural infrastructure. This will allow for growth in production and employment from both small-scale farming and rural development.
- ⇒ SIP 18: Water and Sanitation Infrastructure. SIP 18 is a ten-year plan that seeks to address backlogs in water supply and basic sanitation to households. This will help serve social needs through efficient basic service delivery.

#### 4.3.3 SPATIAL PLANNING AND LAND USE MANAGEMENT ACT

The Spatial Planning and Land Use Management Act, (Act No. 16 of 2013) (SPLUMA) is a framework legislation for spatial planning and land use management in South Africa. SPLUMA has a primary focus on the rationalization of the fragmented spatial pattern and land use management still evident in South Africa. It aims to redress the underlying historical spatial injustices and imbalances that remain thereof through the following five development principles:

- ⇒ Spatial Justice: seeks to redress the spatial imbalances of the past through improving access to land and ensuring efficient use of land

- ⇒ Spatial Sustainability: requires the sustainable use and management of natural resource to ensure the protection of prime land and natural resources.
- ⇒ Spatial resilience: Advocates for the formulation of spatial plans and land management policies that will ensure the creation of sustainable human settlements that will be resilient against impacts of natural shocks and economic uncertainty.
- ⇒ Spatial Efficiency: Advocates for the effective use of resources such as land and the optimal use of infrastructure.
- ⇒ Good Governance: Suggests the adoption of an integrated approach in spatial planning and land development.

SPLUMA provides for inclusive, developmental, equitable and efficient spatial planning in all spheres of government, and a framework for monitoring, co-ordination and evaluation of spatial planning initiatives. It prescribes the minimum content of for SDFs. The Umzumbe SDF will have to ensure that aspects prescribed by SPLUMA are given adequate attention, so that the final deliverable is SPLUMA compliant.

#### 4.3.4 NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA)

The National Environmental Management Act, 1998 (Act No.107 of 1998). NEMA provides for co-operative environmental governance by establishing principles for decision-making on matters affecting the environment. It also provides for certain aspects of administration and

environmental management law enforcement undertaken by institutions that can promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of government. The Umzumbe Municipality SDF embraces the NEMA principles and presents a spatial strategy that is environmentally sustainable and creates a balance between development and protection of the natural resources.

#### 4.3.5 COMPREHENSIVE PLAN FOR THE DEVELOPMENT OF SUSTAINABLE HUMAN SETTLEMENTS

The Comprehensive Plan for the Development of Sustainable Human Settlements (August 2004) provides detailed information on the programmes identified by the National Department of Human Settlements. The new “Human Settlements Plan” promotes the achievement of a non-racial, integrated society through the development of sustainable human settlements and quality housing. This program seeks to use housing delivery as a means for the development of sustainable human settlements in support of spatial restructuring. It moves beyond the provision of basic shelter towards achieving the broader vision of integrated, sustainable and economically generative human settlement systems at both local and regional scales. The following are fundamental tenets and underlying principles of this new approach:

⇒ progressive informal settlement eradication;

- ⇒ promoting densification and integration in urban centres;
- ⇒ enhancing spatial planning in both urban and rural contexts;
- ⇒ enhancing the quality and location of new housing projects;
- ⇒ supporting urban renewal programmes; and
- ⇒ developing social and economic infrastructure.

#### 4.3.6 COMPREHENSIVE RURAL DEVELOPMENT PROGRAMME

The Comprehensive Rural Development Programme (CRDP) seeks to create vibrant, equitable and sustainable rural communities through a three-pronged strategy based on:

- ⇒ a coordinated and integrated broad-based agrarian transformation;
- ⇒ strategically increasing rural development through social and economic infrastructure; and
- ⇒ an improved land reform programme.

Umzumbe Municipality is very rural in nature. As such, they embrace the principles and seeks to contribute towards the attainment of the CRDP vision as part of their spatial and development planning program. This includes identification of target areas for rural development, agrarian reform and ensuring developmental outcomes of the land reform programme.

#### 4.3.7 NATIONAL STRATEGY FOR SUSTAINABLE DEVELOPMENT

Government's National Strategy for Sustainable Development and Action Plan (NSSD 1) - which was approved by Cabinet on 23 November 2011 - provides the conceptual framework and the high-level roadmap for strategic sustainable development. Its intention is to provide guidance for long-term planning. It sets out key areas that are in need of attention to ensure that a shift takes place towards a more sustainable development path and identifies the following key elements:

- ⇒ Directing the development path towards sustainability;
- ⇒ Changing behaviour, values and attitudes; and
- ⇒ Restructuring the governance system and building capacity.

The outcome of sustainable development is a state in which interdependent social, economic and ecological systems can be sustained indefinitely.

The vision, principles, strategic priorities and strategic goals of NSSD 1 should inform the development of the SDF, and the municipality should agree to make a contribution to environmental sustainability in its area of jurisdiction. The contribution by the district should include the following:

- ⇒ Developing a better understanding of the meaning of sustainability within the context of the municipality;

- ⇒ Promoting environmental accountability in decision-making; and
- ⇒ Facilitating the identification of development options and alternative proposals, which are more sustainable.

#### 4.3.8 INTEGRATED URBAN DEVELOPEMENT FRAMEWORK

FIGURE 8: IUDF FRAMEWORK / CORE ELEMENTS



SOURCE: INTEGRATED URBAN DEVELOPMENT FRAMEWORK, 2016

The Integrated Urban Development Framework (IUDF) is a response to the various chapters of the National Development Plan, specifically chapter 8, which deals with the transformation of human settlements and South Africa's national space economy. The IUDF aims to guide the development of inclusive, resilient and liveable urban settlements, while directly addressing the unique conditions and challenges facing South Africa's cities and towns. To give effect to this, the following overall strategic goals have been identified:

- ⇒ Spatial integration: To forge new spatial forms in settlement, transport, social and economic areas.



- ⇒ Inclusion and access: To ensure people have access to social and economic services, opportunities and choices.
- ⇒ Growth: To harness urban dynamism for inclusive, sustainable economic growth and development.
- ⇒ Governance: To enhance the capacity of the state and its citizens to work together to achieve spatial and social integration.

The IUDF encompasses 9 policy levers that give effect to the above mentioned strategic goals. These are illustrated by Figure 6 above.

#### 4.4 PROVINCIAL SPATIAL DEVELOPMENT VISION

##### 4.4.1 PROVINCIAL GROWTH AND DEVELOPMENT STRATEGY

The KwaZulu-Natal Province development vision is outlined in the Provincial Growth and Development Strategy (PGDS 2016). The PGDS is a primary strategy for KwaZulu-Natal that drives growth and development in the Province to 2035. It provides the province with a 20 year strategic framework for accelerated and shared economic growth through catalytic and developmental interventions, within a coherent equitable spatial development architecture, putting people first, particularly the poor and vulnerable, and building sustainable communities, livelihoods and living environments (PGDS, 2016).

Concomitant attention is also given to the provision of infrastructure and services, restoring the natural resources, public sector

leadership, delivery and accountability, ensuring that these changes are responded to with resilience, innovation and adaptability.

FIGURE 7: PGDS STRATEGIC FRAMEWORK

| 2016 PGDS STRATEGIC GOALS and OBJECTIVES   |     |  |
|--|-----|--|
| STRATEGIC GOAL                             | No  | STRATEGIC OBJECTIVE 2016   |
| 1<br>INCLUSIVE<br>ECONOMIC GROWTH          | 1.1 | Develop and promote the agricultural potential of KZN  |
|  | 1.2 | Enhance sectoral development through trade investment and business retention   |
|  | 1.3 | Enhance spatial economic development   |
|  | 1.4 | Improve the efficiency, innovation and variety of government-led job creation programmes   |
|  | 1.5 | Promote SMME and entrepreneurial development   |
|  | 1.6 | Enhance the Knowledge Economy  |
| 2<br>HUMAN RESOURCE<br>DEVELOPMENT         | 2.1 | Improve early childhood development, primary and secondary education   |
|  | 2.2 | Support skills development to economic growth  |
|  | 2.3 | Enhance youth and adult skills development and life-long learning  |
| 3<br>HUMAN AND<br>COMMUNITY<br>DEVELOPMENT | 3.1 | Eradicate poverty and improve social welfare services  |
|  | 3.2 | Enhance health of communities and citizens   |
|  | 3.3 | Safeguard and enhance sustainable livelihoods and food security  |
|  | 3.4 | Promote sustainable human settlements  |
|  | 3.5 | Enhance safety and security  |
|  | 3.6 | Advance social cohesion and social capital   |
|  | 3.7 | Promote youth, gender and disability advocacy and the advancement of women   |
| 4<br>INFRASTRUCTURE<br>DEVELOPMENT         | 4.1 | Development of seaports and airports   |
|  | 4.2 | Develop road and rail networks   |
|  | 4.3 | Develop ICT infrastructure   |
|  | 4.4 | Ensure availability and sustainable management of water and sanitation for all   |
|  | 4.5 | Ensure access to affordable, reliable, sustainable and modern energy for all   |
|  | 4.6 | Enhance KZN waste management capacity  |
| 5<br>ENVIRONMENTAL<br>SUSTAINABILITY       | 5.1 | Enhance resilience of ecosystem services   |
|  | 5.2 | Expand the application of green technologies   |
|  | 5.3 | Adapt and respond climate change   |
| 6<br>GOVERNANCE AND<br>POLICY              | 6.1 | Strengthen policy, strategy coordination and IGR   |
|  | 6.2 | Build government capacity  |
|  | 6.3 | Eradicate fraud and corruption   |
|  | 6.4 | Promote participative, facilitative and accountable governance   |
| 7<br>SPATIAL EQUITY                        | 7.1 | Enhance the resilience of new and existing cities, towns and rural nodes, ensuring equitable access to resources, social and economic opportunities    |
|  | 7.2 | Ensure integrated land management use across the Province, ensuring equitable access to goods and services, attracting social and financial investment |

SOURCE: PROVINCIAL GROWTH AND DEVELOPMENT STRATEGY, 2016

The strategic goals and the associated vision and objectives are reflected In Figure 7. Goal 7 deals specifically with spatial issues.

The outcome of this goal is Spatial Equity and Integrated Land Use Management that will guide the allocation and utilisation of human and environmental resources towards sustainable growth and development.

In addition, the outcome will focus on the promotion of spatial concentration, the co-ordination of development interventions, the integration of spatial planning initiatives and effective land use management (PGDS 2016: 104).

#### 4.4.2 PROVINCIAL HUMAN SETTLEMENTS MASTER SPATIAL PLAN

The KZN Provincial Master Spatial Plan aims to translate the Provincial Growth and Development Plan into a detailed implementation plan for assisting with the identification of suitable land for housing delivery in the province. It focuses on strategic goal 3 (human and community development) and strategic objective 3.4 of the PGDP which talks to the promotion of sustainable human settlements. The plan broadly identifies focus areas for investment in human settlements in the province, in alignment with the Provincial Spatial Development Framework. No areas are identified as provincial human settlement investment focus areas within Umzumbe municipality.

#### 4.4.3 KZN PROVINCIAL SPATIAL ECONOMIC DEVELOPMENT STRATEGY

The KZN Provincial Spatial Economic Development Strategy (PSEDS) is a framework for prioritisation of spatial economic development initiatives in the province. It essentially provides an indication of where development should be directed. The 2007 version of the strategy has been reviewed and updated to align with the changing policy environment and with the prevailing trends and patterns. This review has culminated in the identification of new nodes and corridors to prioritise for development. The following is noted from the PSEDS with regards to Umzumbe Municipality:

- ⇒ The identification of the N2 (Scottburgh / Park Rynie – Port Edward) as an economies of scale corridor and a high growth / strategic corridor for beach tourism, agriculture and agro-processing.
- ⇒ The identification of the P68 (Port Shepstone - Highflats) as a poverty intervention corridor.

### 4.5 DISTRICT CONTEXT

#### 4.5.1 UGU DISTRICT SDF

Spatial Planning is a shared function between Umzumbe LM and Ugu District. The latter has developed a SDF as part of their IDP. Ideally, the district SDF should provide a framework for the formulation of local municipality SDFs, deal with cross-boundary issues and spatial



implications of the exclusive powers and functions of the district municipality. As such, any inconsistencies in the spatial planning process between the two entities should be eliminated and a greater coordination should be promoted. Noteworthy, the Ugu SDF is outdated and does not provide adequate guidelines for the formulation of SDFs within the district. The Ugu SDF details the following with regards to Umzumbe Municipality:

- ⇒ The coastal strip of Umzumbe is identified as a dense informal area in need of improvement. In addition, this area is identified as a large convenience node, which requires improvement.
- ⇒ Phungashe and Assissi are identified as future rural service centres, while a number of other smaller nodes are identified as potential future nodes.
- ⇒ The western portion of the municipality is identified as a future nature reserve area, while large areas within the municipality are identified for conservation purposes. This leaves the rest of the municipality as commercial agriculture areas or traditional practice and settlement areas.
- ⇒ The P254, P73 and P68 are identified as the main roads traversing Umzumbe Municipality. Furthermore, the N2 is identified as the main high level limited access mobility road.

#### 4.5.2 UGU DISTRICT GROWTH AND DEVELOPMENT PLAN

The Ugu District Growth and Development Plan is intended to translate the Provincial Growth and Development Strategy into a more localised and implementable plan at a district level. It identifies a number of strategic objectives and then details the strategic programmes and key intervention areas required to ensure the realisation of those objectives. Furthermore, it also maps out a spatial vision for the district and details the various key elements forming part of the spatial vision. These spatial development elements identified at a district level will inform the Umzumbe SDF.

#### 4.5.3 UGU DISTRICT SECTOR PLANS

Ugu district Municipality has developed a number of sector plans to guide the implementation of its development programmes. These include but are not limited to the following:

- ⇒ Environmental Management Framework
- ⇒ Local Economic Development (LED) Plan.
- ⇒ Agricultural Sector Plan.
- ⇒ Water Services Development Plan (WSDP).
- ⇒ Disaster Management Plan.
- ⇒ Integrated Waste Management Plan.
- ⇒ Rural Development Plan

⇒ Biodiversity Sector Plan.

Each of these should be considered and integrated into the Umzumbe SDF.

## 4.6 LOCAL POLICY CONTEXT

### 4.6.1 UMZUMBE MUNICIPALITY SPLUM BYLAWS

The Spatial Planning and Land Use Management Act is a Framework Legislation, thus does not provide details with regards to some procedural issues. Hence, Bylaws have been formulated by the Umzumbe Municipality to facilitate the implementation of SPLUMA. The Umzumbe Municipality Spatial Planning and Land Use Management Bylaws deal with, inter alia:

- ⇒ The establishment of Municipal Planning Approval, Appeal and Enforcement Authorities.
- ⇒ The preparation, adoption and amendment of a Land Use Scheme.
- ⇒ Applications for municipal planning approval
- ⇒ Appeals against decisions
- ⇒ Offences and penalties
- ⇒ Compensation and matters incidental thereto.

The By-Laws have a number of legislative provisions that should be considered in the formulation of the SDF. These include:

- ⇒ “The Municipal Planning Approval Authority may not approve an application for municipal planning approval that is inconsistent with... its Spatial Development Framework, except where site specific circumstances justify a departure from its provisions.”
- ⇒ “The Municipality may declare land as land for the settlement of indigent households in an unstructured manner, if... the Municipality has designated the land in its Spatial Development Framework as land to which shortened land use development procedures apply as contemplated in section 21(I)(ii) of the Spatial Planning and Land Use Management Act.”
- ⇒ An application for municipal planning approval to zone or rezone land by the Municipality to achieve the development goals and objectives of the municipal spatial development framework must be decided by a Municipal Council.

### 4.6.2 UMZUMBE MUNICIPALITY SECTOR PLANS

The IDP articulates the long-term vision and strategic programmes for the municipality. The latter is elucidated in various sector plans that deal with sector specific issues and identify development opportunity and development need areas. These sector plans include the following:

- ⇒ A Local Economic Development Plan, which establishes an economic development agenda and identifies economic development opportunity areas.

- ⇒ Housing Sector Plan, which outlines a housing delivery agenda and a programme for the transformation of the existing settlements into sustainable human settlements.
- ⇒ Local Area Plans / Development Frameworks for different areas, e.g. Turton Beach Development Framework.
- ⇒ Energy Master Plan.
- ⇒ Disaster Management Plan.
- ⇒ Integrated Waste Management Plan.
- ⇒ Infrastructure Master Plan.

The SDF gives effect to the intentions of the IDP and provides a framework for the formulation of area and/or site specific land use controls.

#### 4.7 IMPLICATIONS FOR THE UMZUMBE SDF

National, provincial, district and local spatial planning policies introduce a set of principles that are intended to influence the substantive outcomes of planning decisions. These could relate to spatial development frameworks or decisions on land use change or development applications. The overall aim of these principles is to achieve planning outcomes that:

- ⇒ restructure spatially inefficient settlements;

- ⇒ promote sustainable development and use of natural resources;
- ⇒ channel resources to areas of greatest need and development potential;
- ⇒ redress inequitable historical treatment of marginalized areas;
- ⇒ stimulate economic development opportunities in rural and urban areas;
- ⇒ support an equitable protection of rights to and in land; and

For the desired or ideal spatial and economic system, Umzumbe Local Municipality needs to work in conjunction with the relevant organs of state and civil society, so to achieve efficient spatial planning within its area of jurisdiction. This emphasises the importance of public participation and cooperative governance. To this end, land development should address the local interests. It should generate a wide range of economic development opportunities and provide a choice of living environments along a continuum from conditions of intense public environments to conditions of great privacy. It enables members of the public to conduct their daily activities quickly, easily and cost effectively while also promoting equitable access to opportunities.

## 5 DEMOGRAPHIC CONTEXT

This section presents a report on the current demographic patterns and trends within Umzumbe Local Municipality. It provides background and base information for the spatial strategy including the desired spatial structure and built form. It covers the demographic trends and patterns focusing mainly on population size, growth trends and distribution.

### 5.1 DEMOGRAPHIC PROFILE

#### 5.1.1 POPULATION SIZE AND GROWTH/DECLINE

According to the 2011 census, Umzumbe Local Municipality had a total population of 160 975 people, while it recorded a population of 193 761 people in the 2001 census. Thus, the population decline per annum between 2001 and 2011 is 1.84%. In the recent Community Survey (2016) by Statistics South Africa, Umzumbe Municipality recorded a population of approximately 151 676 people which is a 1.18% decline from the 2011 population.

Table 2: Population Decline

|                           | 2011               | 2016    |
|---------------------------|--------------------|---------|
| <b>Umzumbe Population</b> | 160 975            | 151 676 |
| <b>Population Growth</b>  | (2011-2016) -1.18% |         |

Source: StatsSA Census & 2016 Community Survey

Noteworthy, in August 2016 a large portion of ward 4 of Umzumbe Municipality was added to Ubuhlebezwe Municipality in line with the

Municipal Demarcation Board's boundary and ward demarcation and delimitation processes. The municipality is made up of a very youthful population. The working age group accounts for a significant portion of the municipality's population and thus the decline in population size can be attributed to migration out of the area in search for employment opportunities.

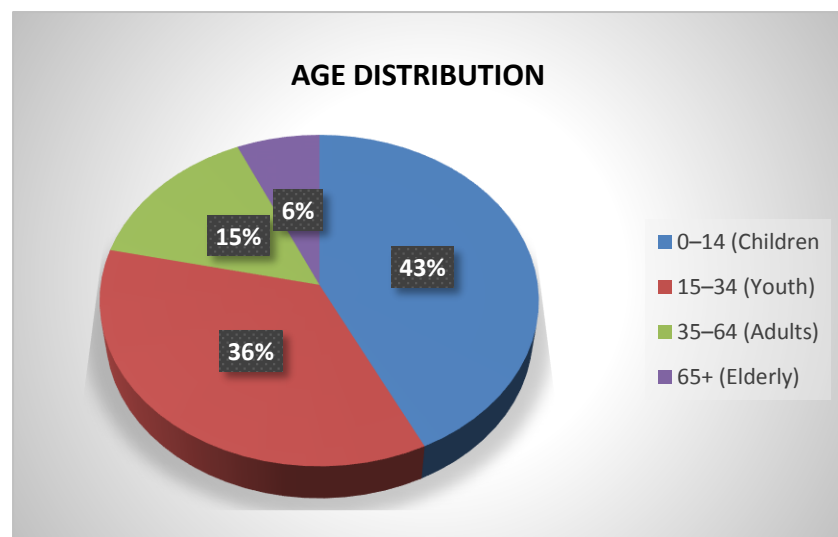
#### 5.1.2 POPULATION DISTRIBUTION

Umzumbe Municipality has 20 electoral wards as of August 2016. The population is spread unevenly among these wards. In 2011, Wards 18, 10 and 19 were the biggest in terms of population size. With the new municipal boundaries, portions of these wards (along with ward 17) have been combined to form ward 20.

#### 5.1.3 AGE DISTRIBUTION

Umzumbe is made up of a largely youthful population, 42,42% of the population comprises of individuals who are less than 15 years old and thus not economically active. Approximately half of the population is within working age, of which a large share includes young people. Against this background, it is clear that efforts to municipal development should also be aimed at investment in education and the creation of employment opportunities.

FIGURE 10: AGE DISTRIBUTION

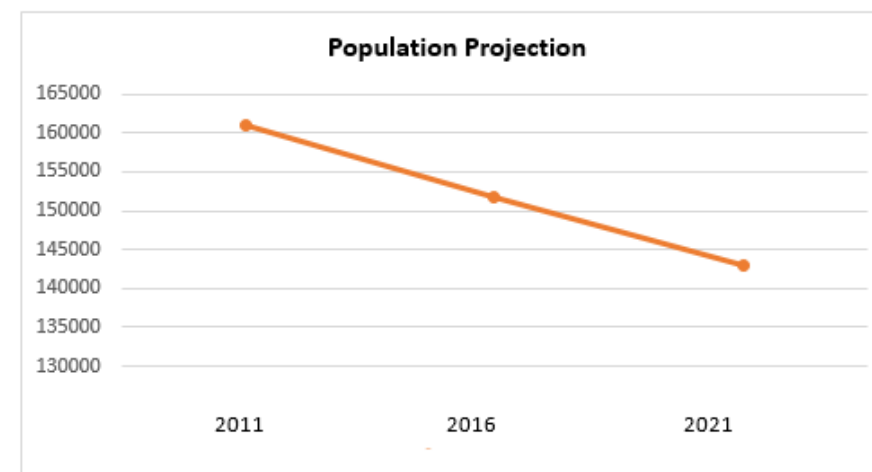


SOURCE: STATS SA COMMUNITY SURVEY 2016

#### 5.1.4 POPULATION PROJECTION

Figure 8 presents population projection based on the growth rate of -1.18% alluded to above. It is assumed that by 2021 the population would have decreased to 142 936. This implies that the population would have decreased by approximately 8740 people within 5 years. This trend should be curbed in order to improve the intensity of development within the municipality. However, this will largely depend on the effectiveness of the initiatives to improve the living conditions and creating economic opportunities that are accessible to the local population. These should be able to curb the population out-migration.

FIGURE 9: POPULATION PROJECTION



#### 5.1.5 MIGRATION PATTERNS

Movement patterns in Umzumbe are primarily of an external nature, to areas outside of the municipal area, and are confirmed by the declining population numbers and a negative population growth rate. This implies that people move to areas of economic opportunity and services outside the municipal area. Secondly, people also move internally within the municipal area. These movements include majority of people moving to be closer to live with a spouse or into a new household, closer to facilities, children changing schools and health reasons. According to the 2016 Stats SA CS, 2.20% of the population of Umzumbe comprised of migrants from other municipal areas and provinces. These migration patterns will influence the direction of growth and development priorities within Umzumbe Municipality.

## 6 SPATIAL ANALYSIS

### 6.1 SETTLEMENT PATTERN

The Umzumbe municipal area exhibits a predominantly rural character. Settlement pattern occurs in the form of expansive rural settlements (inland), with the eastern coastal portion of Umzumbe characterised by denser settlement. A large portion of land forms part of ITB Land and is subject to the policies, systems and procedures of the ITB.

A typical traditional development pattern characterises the municipality with settlements that are scattered in space. Traditional land allocation practices, access routes and a rugged terrain (uneven topography) are some of the main influences on settlement pattern.

#### 6.1.1 PERI-URBAN SETTLEMENT

The municipality has a predominant rural nature with no formal established towns. The Turton area (which is located in Mtwalume), located along the coastal strip, is a concentration of settlements. It presents the largest settlement agglomeration / cluster within the Umzumbe spatial landscape and an opportunity for nodal development and township establishment. This area is located in the eastern border of the municipality, and not centrally located as to provide easy access to surrounding communities. The Umzumbe IDP 2016/17 indicates that the Turton area has been prioritised as one of thirteen towns in the Province that needs to be formalised (Umzumbe IDP 2016/17: 5).

### 6.1.2 TRADITIONAL COUNCIL AREAS

The Umzumbe municipality includes vast tracts of land registered in the name of the Ingonyama Trust and falling under the jurisdiction of Traditional Councils (refer to map 5). The Traditional Councils located within Umzumbe municipality include:

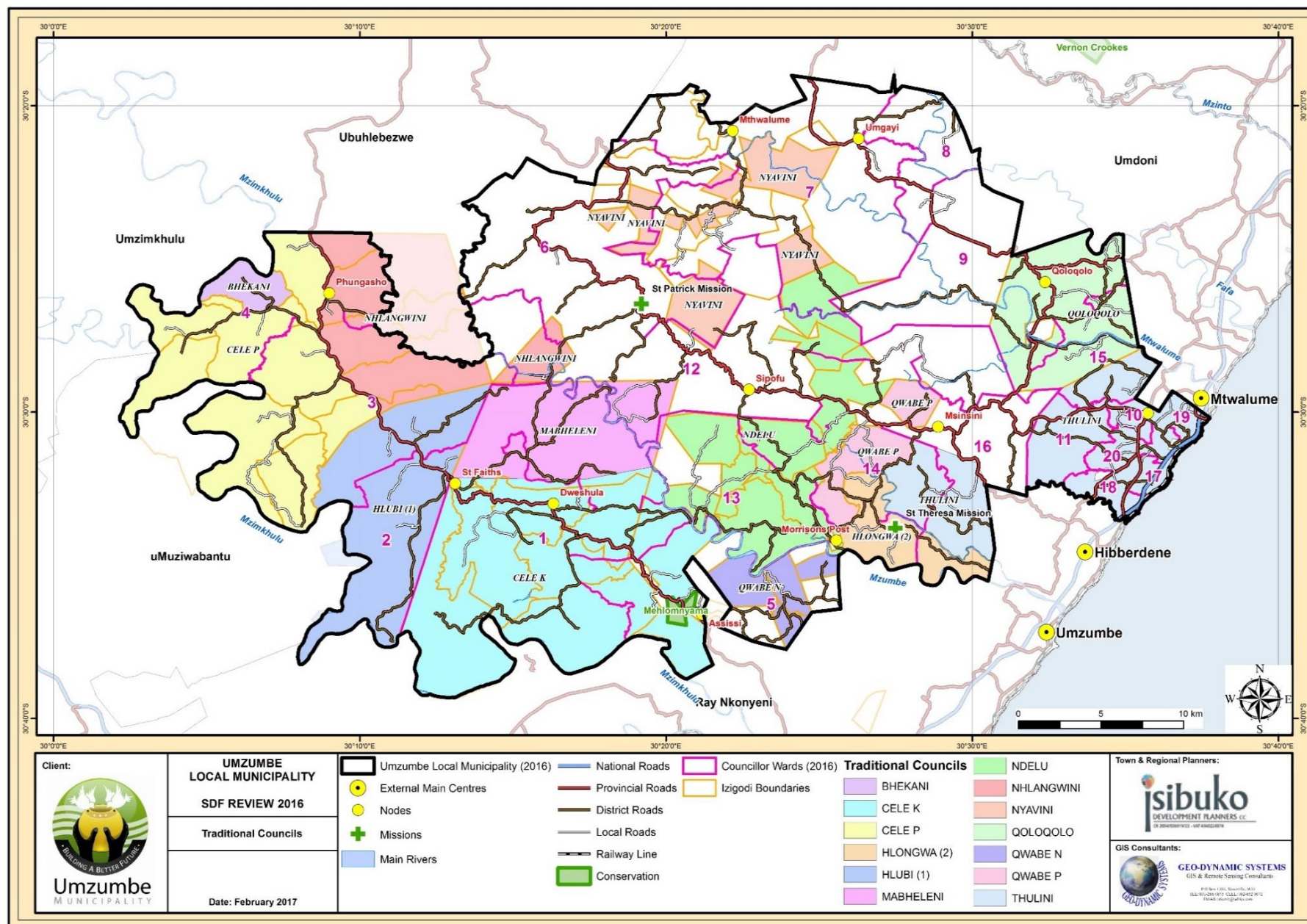
TABLE 3: TRADITIONAL COUNCILS

| TRADITIONAL COUNCILS |                                | TRADITIONAL COUNCILS |                                       |
|----------------------|--------------------------------|----------------------|---------------------------------------|
| <b>1</b>             | Bhekani Traditional Council    | <b>10</b>            | Qoloqolo Traditional Council          |
| <b>2</b>             | Cele P Traditional Council     | <b>11</b>            | Qwabe N Traditional Council           |
| <b>3</b>             | Cele K Traditional Council     | <b>12</b>            | Thulini Traditional Council           |
| <b>4</b>             | Hlongwa Traditional Council    | <b>13</b>            | Qwabe P Traditional Council           |
| <b>5</b>             | Hlubi Traditional Council      | <b>14</b>            | Bombo Traditional Council             |
| <b>6</b>             | Mabheleni Traditional Council  | <b>15</b>            | Dungeni Traditional Council           |
| <b>7</b>             | Ndelu Traditional Council      | <b>16</b>            | Izimpethuzendlovu Traditional Council |
| <b>8</b>             | Nhlangwini Traditional Council | <b>17</b>            | Dunge Traditional Council             |
| <b>9</b>             | Nyavini Traditional Council    | <b>18</b>            | Emandleni Traditional Council         |

SOURCE: COGTA & UMZUMBE MUNICIPALITY



MAP 5: TRADITIONAL COUNCIL AREAS



However, it should be noted that during the process of new demarcations of municipal boundaries, significant portions of the Nhangwini Traditional Council were removed from Umzumbe LM and included into the Ubuhlebezwe LM. The Nhangwini Traditional Council is located along the north-western boundary of the municipal area. The traditional councils are as indicated in Table 3.

### 6.1.3 DISPERSED RURAL SETTLEMENTS

Expansive rural settlement characterises the landscape and settlement pattern in Umzumbe (refer to map 6 & 7). These settlements tend to follow ridgelines and create a complex web. The location of these settlements in space is highly influenced by the livelihood strategies, such as access to arable land, reliable sources of water, grazing land, etc. Factors such as access to public facilities (schools, clinics, etc.), public transport routes and bulk services are fast emerging as critical factors in the growth and expansion of rural settlements. The following are some of the key features of rural settlements in Umzumbe:

- ⇒ Land allocation is undertaken in terms of the traditional land allocation system, which is not based on any specific standards. As a result, site sizes for different land uses vary significantly.
- ⇒ They are scattered in an unsystematic manner.
- ⇒ The settlements have no determining spatial structure and clearly, no formal spatial planning has taken place.

- ⇒ Land use management is based on collective memory where members of the community collectively agree that a piece of land is earmarked for a particular use or belongs to someone.
- ⇒ They differ in size and density depending on location in relation to the above-mentioned factors. Relatively high-density settlements are found in the Thulini area along the coast and within smaller clusters, e.g. the Phungashe area in the north.
- ⇒ The area is characterised by rugged terrain. In these areas, settlements occur along ridgelines forming a continuous line, which breaks where the area becomes very steep.

The spatial structure or lack thereof results in very expensive service delivery costs and poses major challenges to service delivery agents and policy makers. Another major challenge of these settlements is that some of the households and /or public facilities developed on land that is not suitable for development.

This includes steep slopes, unfavourable geotechnical conditions, floodplains and wetlands. These settlements should thus be managed properly in order to direct future growth and expansion in close consultation with traditional councils. In addition, future allocation of land by traditional leaders should be based on informed decisions. This process can be assisted through proper distribution of spatial and technical information at hand and training of leaders on the use and interpretation of this information.



#### 6.1.4 SETTLEMENT DENSITY

Umzumbe municipality is characterised by relatively low-density settlements, typical of a remote rural area. As indicated on the settlement density map (refer to map 6), settlement density tends to be higher along access routes and decrease away from main access routes. Some settlement clusters along these routes exhibit higher densities. Overall, it would seem that the majority of settlement density ranges between 2.1ha to 5ha, which testifies to the low-density nature of the area (Eskom Homestead Data: 2011).

The largest settlement cluster and relatively dense area is along the coastline in the Mtwalume area (Turton along R102 leading to the municipal buildings), where average site sizes ranges up to 5000m<sup>2</sup>. Although this is still large sites, compared to an urban context, in the rural context of Umzumbe, this is regarded as high density.

## 6.2 BROAD LAND USE PATTERN

TABLE 4: LAND COVER

| Landcover                        | Area (ha) | Percentage (%) |
|----------------------------------|-----------|----------------|
| Commercial Agriculture           | 6679.9    | 5.47           |
| Dense Bush / Thicket / Shrubland | 58703     | 48.07          |
| Grassland                        | 10953.3   | 8.97           |
| Indigenous Forest                | 2972.1    | 2.43           |
| Mining / Quarrying               | 1.6       | 0.001          |
| No Vegetation                    | 306.4     | 0.25           |
| Plantations / Woodlots           | 5465.0    | 4.48           |
| Settlement                       | 26346.0   | 21.58          |
| Traditional Agriculture          | 10229.4   | 8.38           |

|              |       |      |
|--------------|-------|------|
| Water Bodies | 84.7  | 0.07 |
| Wetlands     | 353.2 | 0.29 |
| Total        |       | 100  |

SOURCE: DEPARTMENT OF ENVIRONMENTAL AFFAIRS

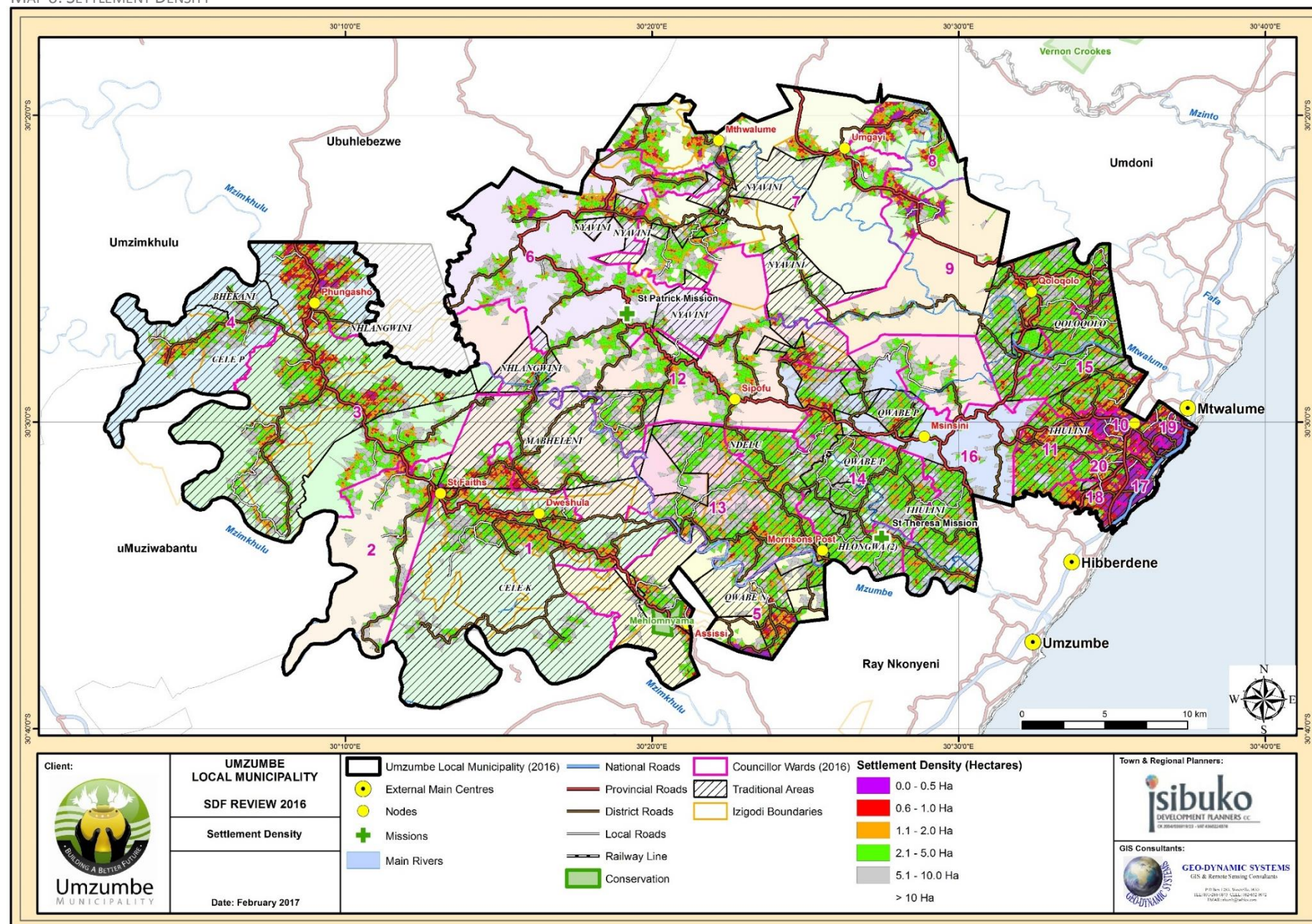
The land use pattern in Umzumbe reflects the rural nature of the area. Land use has developed in response to the settlement pattern and is influenced by the road network and the natural environment. Settlements tend to be more concentrated along roads and within the Turton area (refer to map 6 & 7). Broad land use categories are as follows:

- ⇒ Residential use which occurs in the form of expansive settlements.
- ⇒ Grazing/traditional agriculture land located in between settlements
- ⇒ Commercial agriculture
- ⇒ Environmental areas.

#### 6.2.1 SETTLEMENT / RESIDENTIAL USES

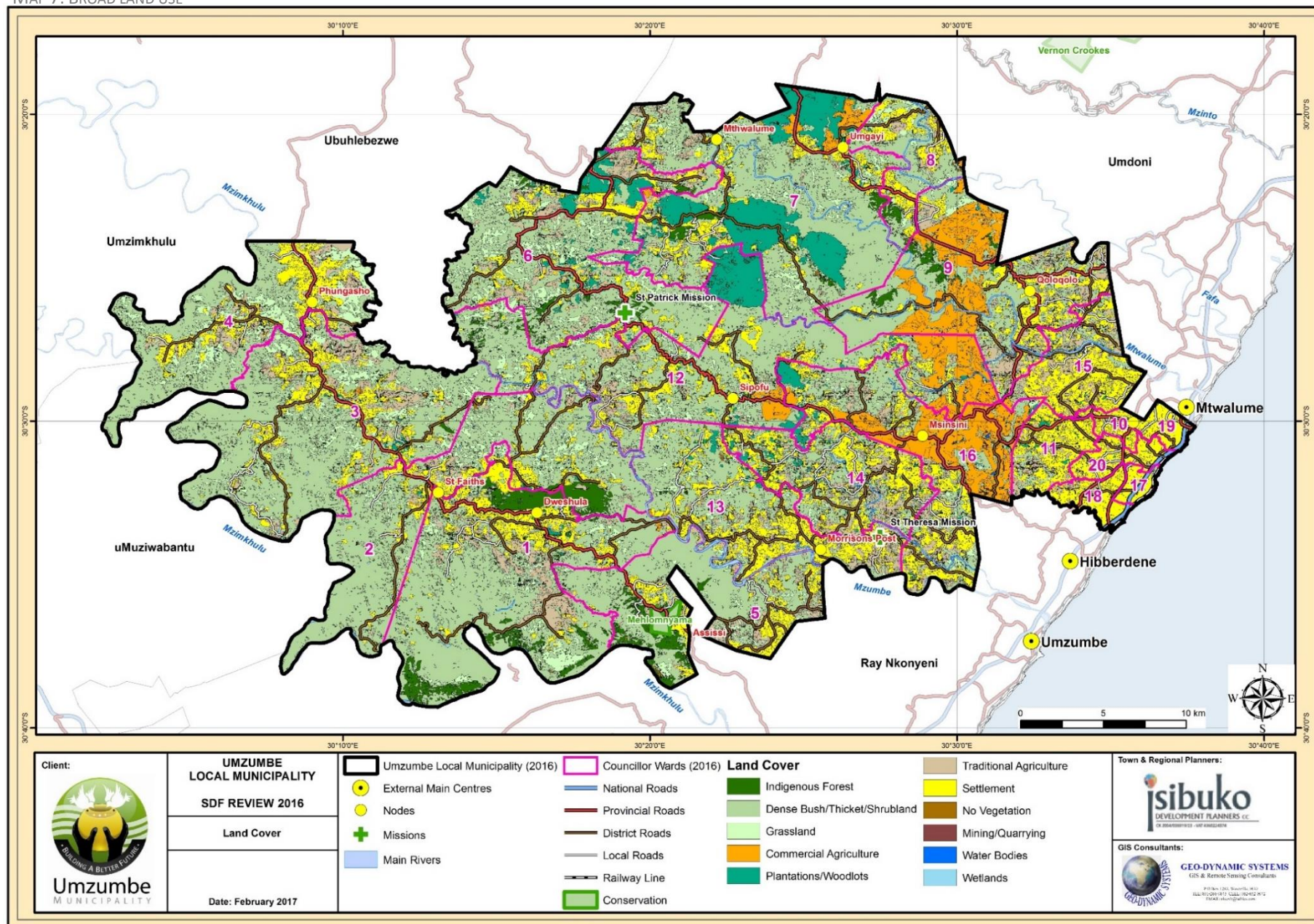
Residential land use represents approximately 21.6% (26 346ha) of land uses in Umzumbe and is scattered unevenly and unsystematically in space. It is more concentrated along main roads and takes on the form of homesteads. The traditional land allocation system is used to allocate homesteads and is undertaken by the local Induna. Land allocations are however, not based on any pre-determined standards, but have to be large enough to accommodate dwelling units, a kraal and some crop production.

MAP 6: SETTLEMENT DENSITY





MAP 7: BROAD LAND USE



### 6.2.2 GRAZING LAND / TRADITIONAL AGRICULTURE

Grassland or grazing land is located in between settlement areas and accounts for 8.3% (10 229ha) of land uses (Department of Agriculture, Forestry and Fisheries). Livestock farming in these rural areas is not managed properly or based on the grazing capacity of the area. Therefore, the amount of cattle per household is not controlled and is undertaken on a subsistence basis. This causes areas to become overgrazed, which leads to soil erosion and degrading of the natural area. The determination of grazing capacity of an area and the effective management of the extent to which land can be grazed is critical.

### 6.2.3 COMMERCIAL AGRICULTURE

Land occupied by existing commercial agricultural practices is limited to certain areas in the eastern part of the municipality, extending in a north-south band. Approximately 10% of land use in Umzumbe is existing commercial agriculture, while potential commercial agriculture represents 19% (Department of Agriculture, Forestry & Fisheries).

Existing commercial agricultural practices in Umzumbe take on the form of timber plantations, cultivated, and irrigated commercial agricultural practices. Timber plantations cover approximately 4.5% (5465ha) of the land in Umzumbe, and is clustered to the northwest of the Umgayi area and to the south of Mthwalume, in the Nyavini Traditional Council area. There are also several small scattered patches of plantations around Sipofu.

Cultivated and irrigated commercial agriculture cover an area of approximately 6680ha and stretches from Qoloqolo in the north to the Msinsini area in the south. This mainly consists of sugar cane cultivation and bananas. Mainly private individuals or private companies own commercial agriculture practices.

### 6.2.4 ENVIRONMENTAL AREAS

The majority of the municipal area is undeveloped /untransformed and consists of grassland, dense bush and indigenous forests. Data from Ezemvelo KZN Wildlife reveals that dense bush represents approximately 48% (58 703ha), while grassland represent almost 14.4% (10 953ha) and indigenous forests 2.4% (2972ha) of land uses. Water Bodies and wetlands account for only 0.36% (438ha) of land uses.

## 6.3 LAND LEGAL

### 6.3.1 BENEFICIAL OCCUPATION RIGHTS

Members of communities that occupy Ingonyama Trust land enjoy beneficial occupation rights protected in terms of the Interim Protection of Informal Land Rights Act, (Act No. 31 of 1996). These include residential, grazing and many other land use rights.

It is probably legally correct to hold that the notion of land ownership was not a rule of the indigenous legal system. Rights to land were never vested in an individual, but rather in a complex web of social groups, such as a family and the residents of an Izigodi, and clear rules existed

to regulate the right of all members of a family, clan or tribe to the land occupied by the tribe.

### 6.3.2 PTO'S, LEASE AGREEMENTS AND SERVITUDES

Ingonyama Trust Land is subject to the policies and legislation that governs all land administered by the Ingonyama Trust Board. The trust holds the land on behalf of the members of communities that occupy and use the land. The powers and functions of the ITB are contained in section 2A (2) of the Ingonyama Trust Act, which provides as follows:

*The Board shall administer the affairs of the Trust and the trust land and without detracting from the generality of the afore-going the Board may decide on and implement any encumbrance, pledge, lease, alienation or other disposal of any trust land, or of any interest or real right in such land.*

Section 2(2) of the Act requires the trust to be administered for the 'benefit, material welfare and social well-being of the members of the tribes and communities' listed in the schedule to the Act – all the tribes and communities residing on Ingonyama Trust land. The trustees are bound to adhere to this provision.

Section 2(5) provides that the trust may not 'encumber, pledge, lease, alienate or otherwise dispose of' any of its land or any real right to such land, without the prior written consent of the traditional or community authority concerned. Thus, the traditional authority (elsewhere called tribal authority) is able to control the use to which their land is put. The effect of this is that, as custodian of the land, the Trust enters into land

use agreements, e.g., leases and the like, but it cannot do so unless and until it has the written consent of the relevant traditional authority. In some cases, the Ingonyama Trust leases the land, or makes it available, under an appropriate agreement to a traditional authority, who, in turn, sub-leases it to a third party (ibid).

The same applies to Permission to Occupy (PTO's). The latter are not surveyed and thus cannot be depicted spatially. It is the intention of Ingonyama Trust to identify all commercial establishments and upgrade them into long term lease agreements. ITB also intends to survey all state uses and enter into lease agreements with the appropriate government institutions. It is understood that the Ingonyama Trust Board will not sell land outright, unless there are overwhelming and compelling reasons to do so. As a rule, it will either authorize the Minister of Land Affairs, or the KwaZulu-Natal Department of Traditional and Local Government Affairs under delegated authority to issue Permissions to Occupy under the KwaZulu Land Affairs Act 11 of 1992, or grant a lease for an initial period of 35 years, renewable for a further period of 35 years. Obviously, in special circumstances, the arrangements can be modified. The Trust can also grant servitudes.

### 6.3.3 LAND OWNERSHIP

The land ownership pattern reflects that the largest proportion of land is within the traditional council areas. Other important landowners are private landowners and state owned land.



Approximately 10% (12 652ha) of land ownership is unknown. A thorough land audit could thus benefit the municipality. Noteworthy, the municipality has already initiated a process to appoint a service provider who will undertake the detailed land audit. This will include, inter alia, undertaking a comprehensive analysis of each property, verifying the ownership and land use of each property and the occupants / users of the property and the rights they have to the land. As per the data from the Department of Rural Development & Land Reform, the main allocation per category of landownership is reflected as follows and is reflected in map 8:

- ⇒ Traditional land: 75.4% (96 295ha), of which 47.5% is owned by the Ingonyama Trust. In traditional areas, the nature and extent of development is regulated by the traditional authorities.
- ⇒ Land owned by the State accounts for 4.2% (5 374ha). Most of the State Land in the municipality is registered with the Department of Land Affairs (now Rural Development and Land Reform) or with government departments, such as the KZN Department of Education. A few portions also belong the Department of Health and the South African National Roads Agency (SANRAL).
- ⇒ Privately owned / freehold land accounts for 7.7% (9 870ha).
- ⇒ Commercial: 2.1% (2 656ha).

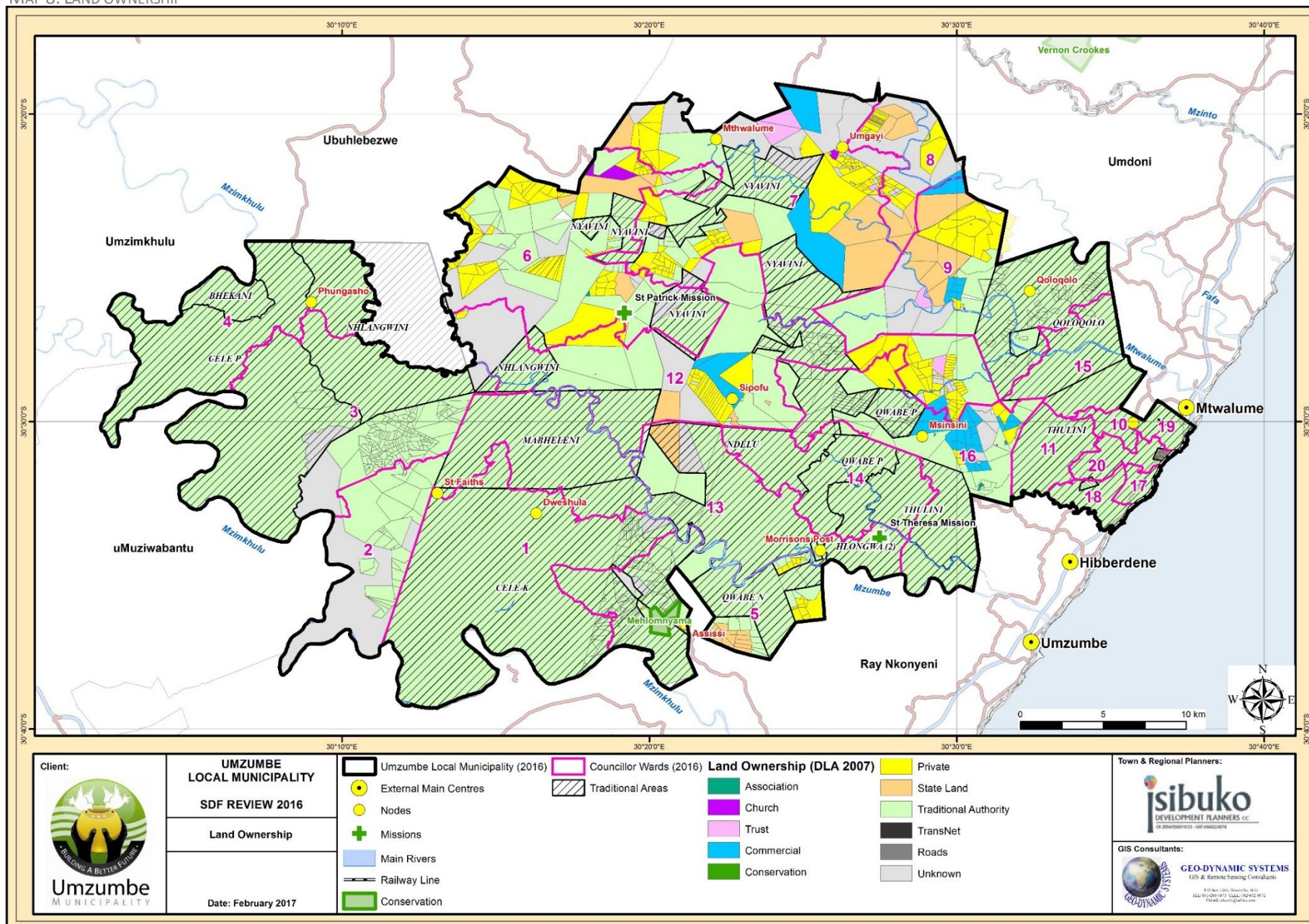
## 6.4 LAND USE MANAGEMENT

Municipal Planning is a function assigned to municipalities in terms of section 156 of the Constitution of the Republic of South Africa read with Part B of Schedule 4 and in terms of which municipalities have both executive authority and a right to administer to the extent set out in Section 155. Umzumbe gives effect to this mandate through a range of empowering legislation and policies. This includes the Spatial Planning and Land Use Management Act (Act No 16 of 2013), which requires all municipalities in the province to develop and introduce wall-to-wall Land Use Schemes throughout their area of jurisdiction. To give effect to the Act, SPLUMA Regulations were promulgated, which provides guidelines to Municipalities in respect of SPLUMA implementation requirements. Part of the implementation requirements includes the preparation of bylaws. As such, all development applications relating to Spatial Planning, Development and Land Use Management must be lodged with the municipality and must comply with the above-mentioned bylaw and other relevant legislation.

### 6.4.1 UMZUMBE MUNICIPALITY LAND USE SCHEME

Umzumbe Municipality adopted a single land use scheme for the entire municipal area, in line with SPLUMA. The scheme applies to the entire area of Umzumbe Municipality and shall at times be read together with the land use scheme provisions, integrated development plan (IDP) and

MAP 8: LAND OWNERSHIP



the Spatial Planning and Land Use Management By-law, which came into operation in February 2016.

The Umzumbe Land Use Scheme identifies suitable zones for the management of land use within the Umzumbe municipal area. It seeks to put forward a land use management system that can be applied throughout the municipal area. Previously, the municipal area of Umzumbe Local Municipality did not have a land use scheme and was subject to two different planning and land use legal frameworks of the former KwaZulu Homeland and former Natal Provincial Administration.

The Land Use Scheme was developed, taking into consideration the rural character and different typologies of a rural area, as well as traditional land use management practices.

## 6.5 LAND REFORM PROGRAMME

### 6.5.1 LAND REDISTRIBUTION

The following information (table 5) provides an overview of the transferred redistribution projects in Umzumbe.

TABLE 5: TRANSFERRED REDISTRIBUTION

| Grant Type             | Legal entity name | Project Name         | Product    | Area (ha) |
|------------------------|-------------------|----------------------|------------|-----------|
| <b>Church land</b>     |                   |                      |            |           |
| <b>Commonage Grant</b> | Ekukhanyeni CPA   | St Josef Church land | Cash Crops | 298.12    |
| <b>Redistribution</b>  |                   |                      |            |           |

|              |                                    |            |                            |         |
|--------------|------------------------------------|------------|----------------------------|---------|
| <b>LRAD</b>  | Siyathemba CPA                     | Msikazi    | Food Safety and Settlement | 1155.84 |
| <b>SLAG</b>  | Masizibambele Community Land Trust | Ridge Farm | Settlement                 | 99.85   |
| <b>TOTAL</b> |                                    |            |                            | 1553.80 |

SOURCE: DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM

- ⇒ There is only one project that falls under the Commonage Grant (St Josef Church land). The commonage product aims to improve people's access to municipal land for agricultural purposes.
- ⇒ The Ridge Farm project falls under the Settlement/Land Acquisition Grant (SLAG). SLAG (later renamed the Settlement/Production Land Acquisition Grant, SPLAG) is a grant to provide for both the settlement and agricultural production land needs of people living and/or working on rural land.
- ⇒ The Msikazi project falls under the Land Distribution for Agricultural Development (LRAD) grant. This programme is a joint venture with the Department of Agriculture, through which qualifying beneficiaries may acquire land for agricultural purposes.

Table 6 indicates the settled claims in Umzumbe. Settled claims are in extent of 1474.63 ha of the municipal area, with the Ndelu Community Trust having the largest settled claim.



TABLE 6: SETTLED CLAIMS

| OWNERNAME                                   | FARMNAME         | Area (Ha) |
|---|------------------|-----------|
| <b>Qoloqolo Community Trust-Trustees</b>    | Lot 60 Umtwalumi | 214.82    |
| <b>Ndelu Community Trust-Trustees</b>       | Clifton Park     | 833.35    |
|   | Sacred Heart     | 229.85    |
|   | Devona           | 94.62     |
| <b>Bhapumile Black Community School</b>     | Poplar Vale      | 86.92     |
| <b>Ekukhanyeni Communal Property Assoc</b>  | Dingle           | 4.80      |
| <b>Mgayi Community Land Trust-Trustees</b>  | Mgai             | 2.71      |
| <b>Maxwell Mnguni Family Trust-Trustees</b> | Lot T4           | 7.57      |
| <b>TOTAL</b>                                |                  | 1474.63   |

SOURCE: DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM

The summary of claims that have been gazetted is indicated in table 7. The extent of these claims is 9011ha and the Mathulini Community has the largest claim.

TABLE 7: SUMMARY OF GAZETTED CLAIMS

| COMMUNITY                          | AREA HA |
|------------------------------------|---------|
| <b>AmaHlongwa Community</b>        | 475.91  |
| <b>Cele Community</b>              | 433.46  |
| <b>KwaMbelu Community</b>          | 89.83   |
| <b>Mathulini Community</b>         | 3453.17 |
| <b>Moyeni Community</b>            | 315.52  |
| <b>Msani Community</b>             | 261.30  |
| <b>Ndelu Traditional Council</b>   | 1512.30 |
| <b>Nyavini Traditional Council</b> | 2469.55 |
| <b>Grand Total</b>                 | 9011.05 |

SOURCE: DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM

Table 7 provides a summary of all land reform in Umzumbe. It is clear that gazetted claims account for the largest percentage of claims in the municipal area (74.85%).

TABLE 8: TOTAL AREA OF UMZUMBE UNDER LAND CLAIMS

| LAND REFORM                       | AREA (HA) | % of LAND REFORM |
|-----------------------------------|-----------|------------------|
| <b>Settled Claims</b>             | 1474.63   | 12.25            |
| <b>Transferred Redistribution</b> | 1553.81   | 12.91            |
| <b>Gazetted claims</b>            | 9011.05   | 74.85            |
| <b>TOTAL</b>                      | 12039.48  |                  |

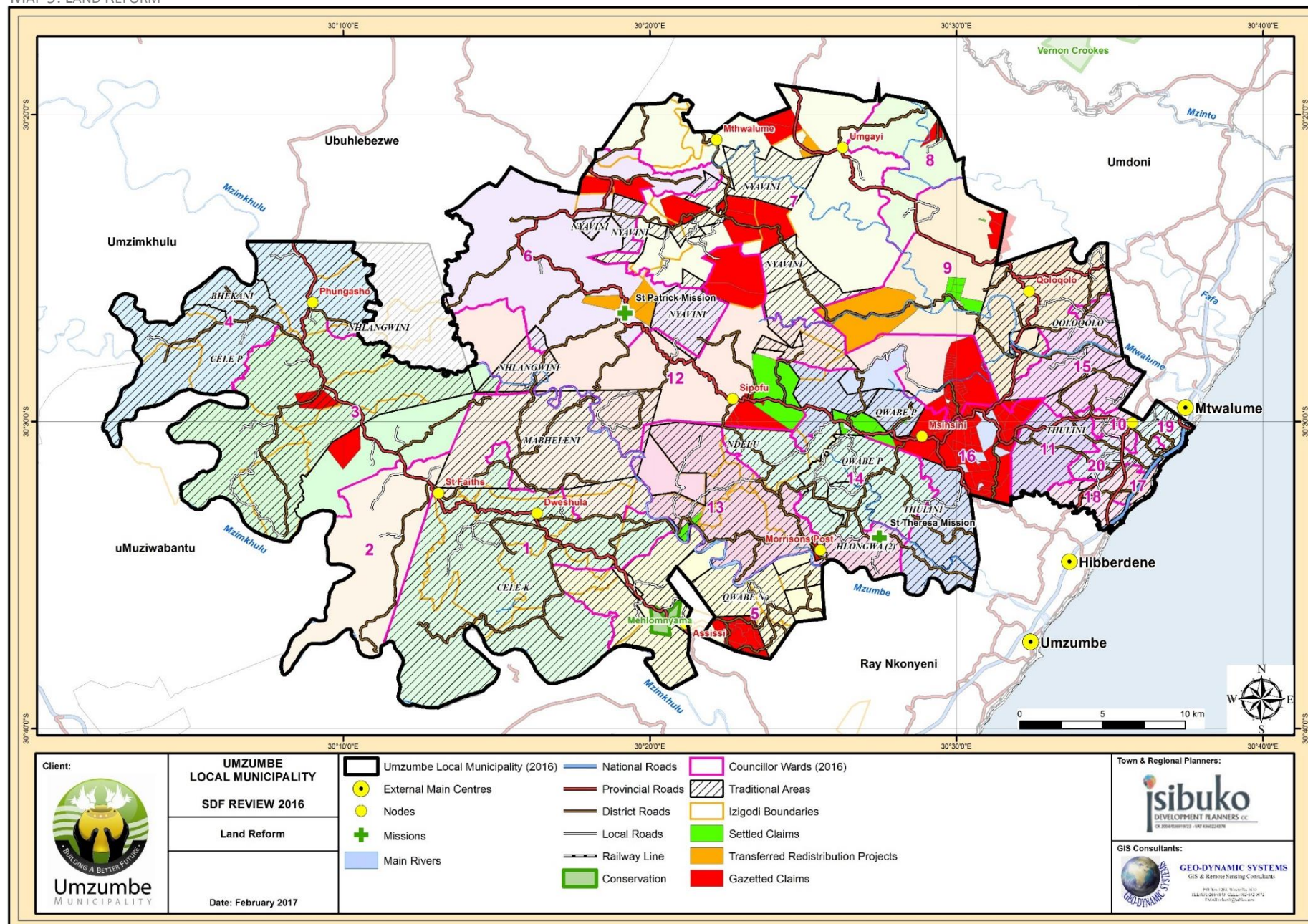
SOURCE: DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM

The total area of the municipality that is under land reform is approximately 12 039.5ha. This accounts for 9.9% of the municipal area.

### 6.5.2 LAND TENURE REFORM

A large number of people occupy privately owned land (with or without the concern of the owners) as if they own the land. As such, they have acquired beneficial occupation rights, which are protected in terms of the Extension of Security of Tenure Act. These land tenure rights should be confirmed as part of a process towards the development of these areas into sustainable human settlements. This practice is common mainly in the areas around Umgayi in Emadungeni Traditional Council area.

MAP 9: LAND REFORM



### 6.5.3 TITLE ADJUSTMENT

The registered owners of some of the privately owned land parcels passed on long time ago and land ownership information has not been updated since. This is stalling development, particularly delivery of housing projects and upgrading of areas. The municipality should engage the DRDLR and request assistance in terms of the Title Adjustment programme to update land ownership data in this regard. This process involves appointment of a Title Adjustment Commissioner and engagement with the family of the registered landowner.

## 6.6 HOUSING DELIVERY

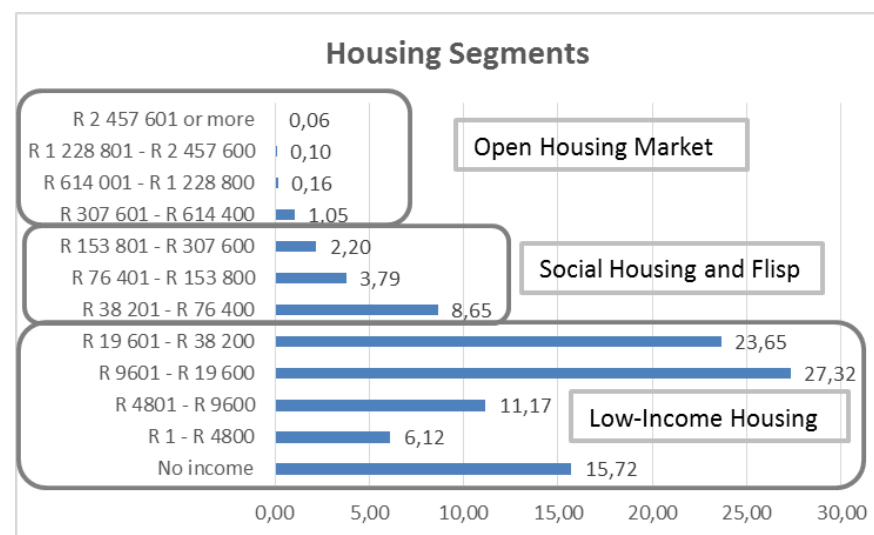
Umzumbe Municipality has developed and adopted a Housing Sector Plan, which outlines housing delivery goals and targets for the municipality and provides an approach to housing delivery and spatial transformation. One of the major challenges in Umzumbe is to transform the vast rural settlements into sustainable human settlements, in line with national housing policy.

Human settlements are the spatial dimension as well as the physical expression of economic and social activity. The creation of sustainable human settlements is inevitably an objective for social development, as it defines and conditions the relationship between where people live, play and work on the one hand, and how this occurs within the confines of the natural environment.

### 6.6.1 HOUSING SEGMENTS AND NEED

The annual household income profile of the population residing within Umzumbe LM provides perspective into the extent of housing demand and need in the municipality within each of the programmes available for delivery. The figure below indicates annual household income groups represented in percentages that can qualify for either the open housing markets, social housing, Finance linked subsidy housing or low cost housing subsidies.

FIGURE 11: HOUSING SEGMENTS & NEED



SOURCE: STATS SA CENSUS 2011

Households eligible for low-income housing are those earning less than R3 500 per month or R42 000 per annum. Approximately 84 % households in Umzumbe Municipality are eligible for low cost housing

subsidies. This includes about 15.7% of households who do not have access to disposable income and are therefore regarded as destitute.

An addition, approximately 15% qualifies for social housing and Finance Linked Individual Subsidy Programme (FLISP). While social housing caters for those in need of rental accommodation. FLISP requires an individual beneficiary to access mortgage bond from a financial institution or pay the balance of the value of the house themselves. It should be noted that this data may not reflect the current housing situation within Umzumbe however it is an estimate.

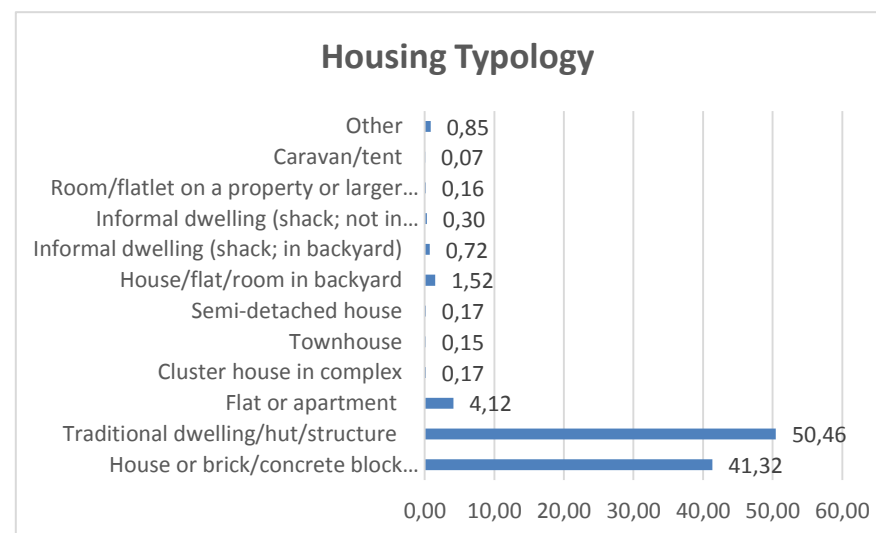
### 6.6.2 HOUSING TYPOLOGY

According to the 2011 census data, there are 35 171 households in Umzumbe and approximately 41.64% of households in the Umzumbe Municipality reside in houses. Traditional/Informal housing units accounts for 51.48% households and households residing in either flats or other forms of housing accounts for approximately for 6.88% (see graph below). The census data does not provide information on the quality of houses. From the statistics, it is evident that a large number of people residing in Umzumbe LM shelter in houses that are substandard.

With a total number of households in the Umzumbe LM being 35 171, it follows that households who are assumed to be in need of housing based on the dwelling type of traditional / informal housing is 18 107 households.

### 6.6.3 RURAL HOUSING PROJECTS

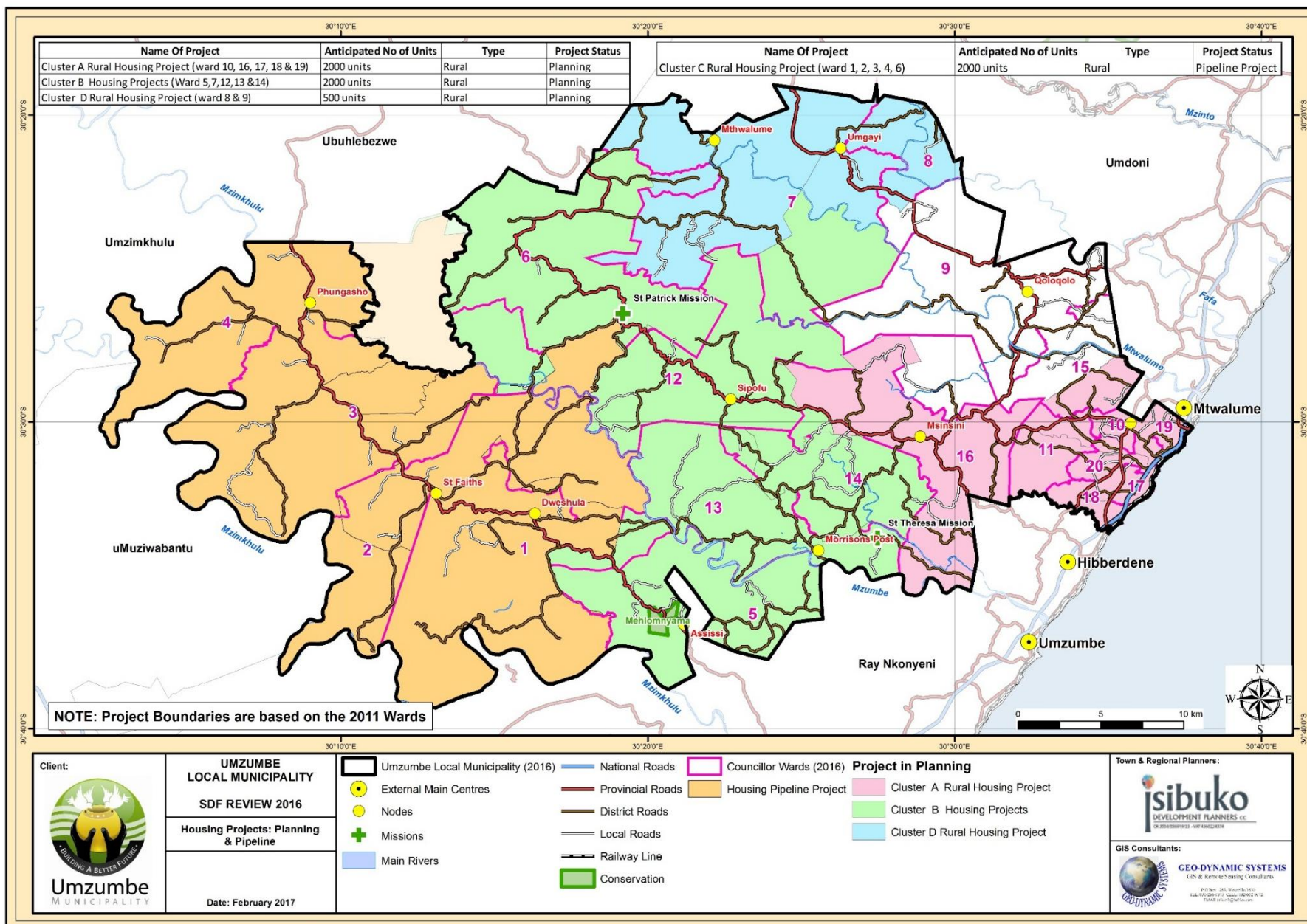
FIGURE 12: HOUSING TYPOLOGY



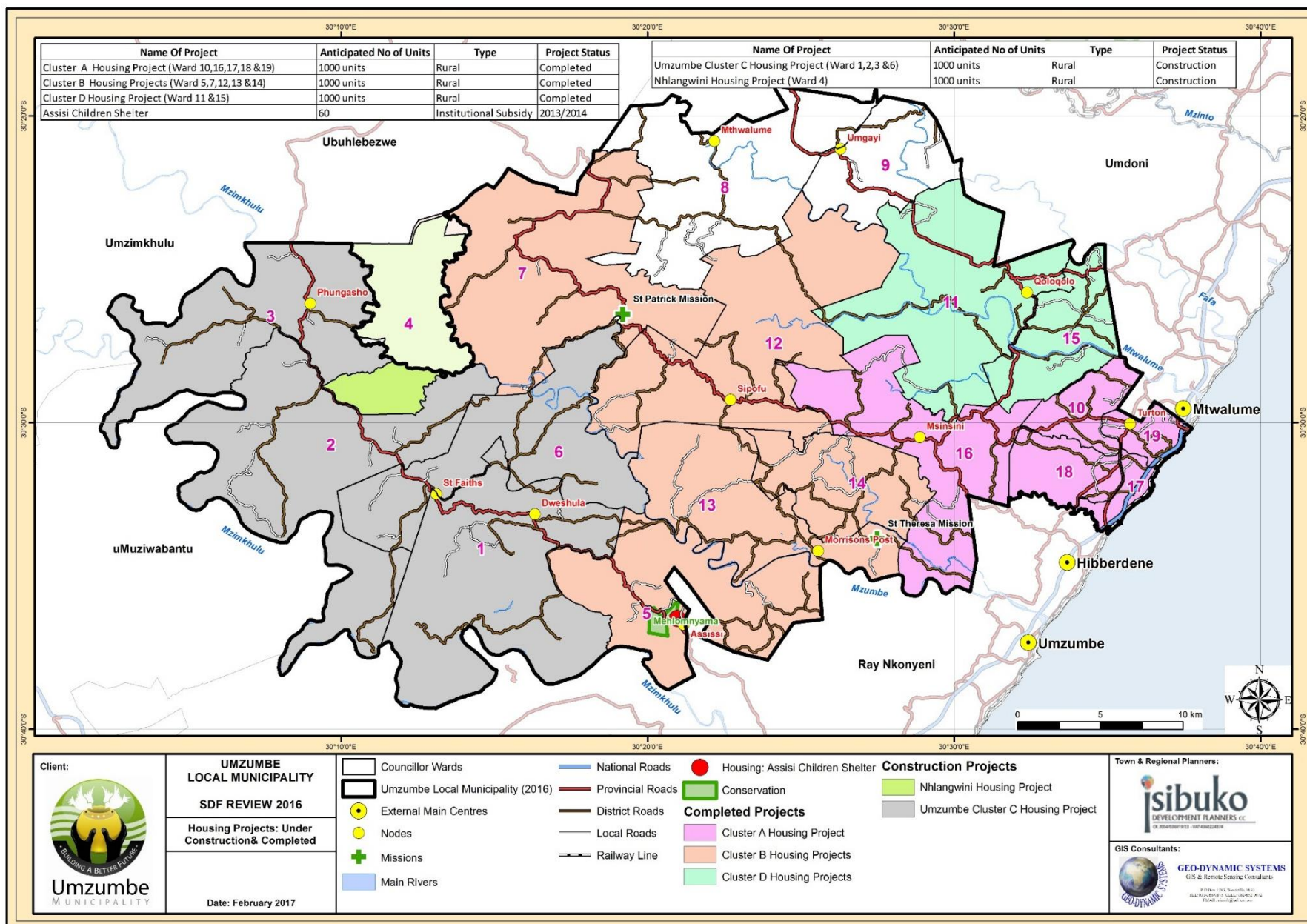
The majority of housing projects in Umzumbe are packaged as rural housing projects, in line with Government's rural housing assistance programme. This programme has been designed to complement the realisation of the objectives of the Integrated and Sustainable Human Settlements. It focuses on areas outside formalised townships where tenure options are not registered in the Deeds Office, but are rather protected in terms of land rights legislation. As opposed to registered individual ownership in formal towns, rural households enjoy protected informal tenure rights and/or rental or permission to occupy.



MAP 10: HOUSING PROJECTS – PIPELINE AND PLANNING



MAP 11: HOUSING PROJECTS - CONSTRUCTION AND COMPLETED





The Umzumbe IDP (2016/17: 87) indicates, “Access to adequate housing is still a challenge to most of the people within the municipality as some of the people qualifying for rural housing reside on private land. At the moment there is no clear plan to provide housing with national housing policy.” The projects within the municipality are at various stages, namely, construction, planning, pipeline and completed. The pipeline projects and projects at planning stages are indicated in Map 10, while the completed projects and the projects that are at construction stage are indicated in Map 11. Table 9 also bears reference in this regard

TABLE 9: HOUSING PROJECTS IN UMZUMBE

| Name Of Project   | Anticipated Number of Units | Type  | Project Status |
|---|-----------------------------|-------|----------------|
| <b>Cluster A Housing Project (Ward 10,16,17,18 &amp;19)</b> | 1000 units                  | Rural | Completed      |
| <b>Cluster B Housing Projects (Ward 5,7,12,13 &amp;14)</b>  | 1000 units                  | Rural | Completed      |
| <b>Cluster D Housing Project (Ward 11 &amp;15)</b>          | 1000 units                  | Rural | Completed      |

|   |            |                       |                  |
|---|------------|-----------------------|------------------|
| <b>Umzumbe Cluster C Housing Project (Ward 1,2,3 &amp;6)</b>          | 1000 units | Rural                 | Construction     |
| <b>Nhlangwini Housing Project (Ward 4)</b>                            | 1000 units | Rural                 | Construction     |
| <b>Cluster A Rural Housing Project (ward 10, 16, 17, 18 &amp; 19)</b> | 2000 units | Rural                 | Planning         |
| <b>Cluster B Housing Projects (Ward 5,7,12,13 &amp;14)</b>            | 2000 units | Rural                 | Planning         |
| <b>Cluster C Rural Housing Project (ward 1, 2, 3, 4, 6)</b>           | 2000 units | Rural                 | Pipeline Project |
| <b>Cluster D Rural Housing Project (ward 8 &amp; 9)</b>               | 500 units  | Rural                 | Planning         |
| <b>Assisi Children Shelter</b>  | 60         | Institutional Subsidy | 2013/2014        |

SOURCE: UMZUMBE MUNICIPALITY & IDP (2016/17: 87)

## 6.7 ECONOMIC ACTIVITY AREAS

### 6.7.1 AGRICULTURE

Approximately 12 144.9ha or 10% of land is utilized for agriculture in Umzumbe LM. Moreover, a large portion of Umzumbe municipality comprises of land that is subject to the provisions of the Sub-division of Agricultural Land Act (Act 70 of 1970), specifically 40784 ha or 33% of



the land within the municipality falls under this act. Notably, much of this land is arable and has good agricultural potential. Accordingly, agriculture is a significant contributor to the economy and a major source of income. According to the IDP (2016: 98), most of the unskilled human capital and both illiterate and semi-illiterate are employed within this sector, with the largest employer being sugarcane farms and Sappi in the forestry industry.

#### 6.7.2 MANUFACTURING

The manufacturing sector is one of the more prominent sectors in the municipality's economy. It is noted in the IDP (2016:101) that the contribution by the manufacturing sector within the municipal economy is increasing steadily. The municipality is seeing more youth entrepreneurial initiatives.

#### 6.7.3 TOURISM

Umzumbe municipality is endowed with tourism resources such as the Mehlomnyama Nature Reserve and rivers which can provide an excellent resource for adventure and sports related tourism. It also has a few kilometres of coastline, which is identified in the IDP as one of the municipality's comparative and competitive advantages. Umzumbe has

a strong sense of history, which the municipality intends to capture with the Ntelezi Msane Heritage Centre.

The municipality is severely limited in terms of accommodation and infrastructure for tourism. In addition, the municipality faces difficult competition from the well-established tourist markets in Ray Nkonyeni municipality where popular resorts and beaches abound. (Umzumbe LED Strategy 2012:35)

#### 6.7.4 MINING

Mining also takes place within Umzumbe, however at a very low scale. It mainly manifests in the form of sand mining, which is undertaken outside the dictates of laws governing such activities. This poses threats to the natural environment.

#### 6.7.5 INFORMAL TRADING

Informal trading acts as a critical survival strategy for the impoverished; this is also the case in Umzumbe municipality. According to the Umzumbe IDP (2016: 99) Informal trade is the backbone of Umzumbe's economy and is mostly situated in the areas that have already been identified as the municipality's economic nodes. The sector is limited by the lack of towns in Umzumbe where intensive formal commercial activities take place and people agglomerate. The lack of formal trading

facilities such as trading stalls also negatively affects the informal sector.

## 6.8 SPATIAL TRENDS AND PATTERNS

### 6.8.1 RURAL SETTLEMENT DYNAMICS

Rural settlements are not all the same and these settlements are dynamic complex spatial systems. As such, the understanding of the factors that shape these settlements is critical in an SDF and the implications for spatial planning must be clearly understood. The Umzumbe SDF thus needs to respond to the rural dynamics of the area, in order to make the SDF a functional and useful spatial planning tool.

Rural settlements have to respond to a range of factors including topographical features, access to natural resources, livelihood strategies, access to basic services and road infrastructure. With the current national government emphasis on rural development and the mandatory introduction of land use schemes in rural areas, it has become imperative to base spatial planning in these areas on informed understanding of spatial dynamics, trends and patterns. Also critical is the relationship between these settlements and other key structuring elements. The rural settlements in Umzumbe neither followed legal prescripts nor has land use pattern evolved in line with the dictates of systems and procedures such as Town Planning Schemes. Instead, they have emerged in the context of land need, forced removals and

livelihood strategies. Today, their growth and spatial development is highly influenced by access to basic services and public facilities.

### 6.8.2 SETTLEMENT GROWTH

The receipt of requests for land by Traditional Councils has implications for spatial planning and management of rural settlements. Proper management of the growth of these settlements becomes important and settlement plans and containing their outward growth becomes important issues to address.

### 6.8.3 SETTLEMENT SPRAWL

Settlements have been grotesquely distorted by the impact of the country's political past, which dictated its urban form. This left us with a legacy of highly fragmented, sprawling and inefficient settlements. This settlement pattern generates enormous movement across vast areas, which is both time consuming and costly thereby entrenching a system of unequal access to economic and social resources.

A review of the structure and form of the municipal area reveals a low-density settlement sprawl that takes on the form of traditional settlements, most of which are located under traditional councils, on Ingonyama Trust land. These extensive areas of settlement have evolved in response to different government policies, local cultural practices and land allocation systems. These spatial footprints presents the municipality with a serious challenge to transform areas from being

rural settlements into a functional, integrated and generative spatial system.

#### 6.8.4 IMPACT OF TRADITIONAL LAND ALLOCATION SYSTEM

A large portion of the population in Umzumbe resides in areas where there is strong influence of traditional leadership and the associated traditional land allocation practices. These systems have been passed on from generation to generation and adapted in response to social changes. They have given rise to settlements that are neither integrated nor sustainable. Homesteads are unsystematically spread in space, which renders infrastructure development inefficient from a cost perspective. Some households have located in areas that are poorly accessible, environmentally sensitive and generally not suitable for settlement purposes. It is expected that the implementation of the recently operationalised scheme in these areas will introduce controls, norms and standards, and facilitate the transformation of rural settlements into sustainable human settlements.

#### 6.8.5 OUTMIGRATION OF YOUNG PEOPLE

The population of the municipality is currently experiencing a decline. This can be associated with, inter alia, the phenomenon of young people leaving the area after matriculating. This is attributed to the lack of job opportunities and tertiary institutions within the municipality. This phenomenon has a number of socio-economic consequences, including the following:

- ⇒ Economy of the municipality: The loss of the economic active portion of the population has certain consequences for the municipality. Economic productivity and the future growth of the area is likely to be affected, since it is unclear if these young people will return to the area, or if they will return to retire on their ancestral land.
- ⇒ Changes in the structure of the population: The majority of young people leaving the area are the economic active section of the population. They leave behind the elderly.
- ⇒ Educational facilities: The decrease in the young population can be attributed to the lack of tertiary educational facilities in the region. There is thus a need to address the lack of tertiary education facilities in closer proximity.

#### 6.8.6 LANDSCAPE AND SETTLEMENT

Landscapes are composed of different elements, including landforms such as valleys, ridges, mountains, plains, vegetation and land-use or activities such as agriculture or settlement. It includes landforms such as valleys, ridges, mountains or plains and vegetation, as well as land-use or activities such as agriculture or settlement. A landscape can thus be described as what the viewer perceives when standing in a particular place and is driven by the character of the landscape. However, different landscapes have different capacities to absorb development. For example, steeper areas (which have unspoilt landscapes) are more

sensitive to development as opposed to flatter areas. This requires the direction of development into areas where it is most appropriate, through the identification of landscapes that are more sensitive to development. Landscape should spatially guide development and should protect the intrinsic character of sensitive and valuable landscapes.

The most sensitive areas to landscape change are the high lying areas. The moderate and low sensitivity areas tend to be located in the lower lying areas further away from the highly visible mountainous areas. Taking these trends into consideration, settlement, agriculture and tourism should be confined to the low-lying flatter areas in order to preserve the character of the landscape. In addition, the intensity of activities that could be sustained in different landscapes, should be defined.

#### 6.8.7 IMPACT OF LAND REFORM

The land reform programme is a Constitutional imperative, and forms one of the cornerstones of the rural development programme of the national government. A significant portion of the Umzumbe municipality is subject to various elements of the land reform programme. While this will transfer productive assets to the rural poor, it may also have an effect of reducing commercial agricultural land, and create isolated settlements.

Land reform also affects agriculture. Land capability of the Umzumbe area is of high value and must be secured. The majority of the municipal area consists of good agricultural potential. It is thus critically important to protect agricultural land and promote its productive use.

## 7 INFRASTRUCTURE ASSESSMENT

The settlement pattern and rural nature of Umzumbe poses a myriad of challenges to service delivery and infrastructure provision, as discussed in the previous section. This section provides an overview of available infrastructure in the municipality, as well as challenges in this regard.

### 7.1 ROAD NETWORK

TABLE 10: ROAD NETWORK

|   | ROADS             | EXTENT (metres)  | PERCENTAGE |
|---|-------------------|------------------|------------|
| 1 | District Roads    | 37300            | 14.37      |
| 2 | Local roads       | 159534           | 6.15       |
| 3 | National Roads    | 16234            | 0.63       |
| 4 | On/Off Ramps      | 2376             | 0.09       |
| 5 | Provincial Roads  | 155607           | 6          |
| 6 | Tracks            | 1888696          | 72.77      |
|   | <b>Total area</b> | <b>122094.63</b> | <b>100</b> |

SOURCE: KZN DEPARTMENT OF TRANSPORT

An extensive road network exists in Umzumbe, providing a large number of households with access to road transport. An analysis of the road infrastructure (Department of Transport) reveals that 67% of households in Umzumbe are within 1km of a national, provincial or district road. In addition, based on road class and location of taxi ranks, 92% of households are within the service delivery standard of roads. The total road network in Umzumbe consists of a total length of

2595km of road. This includes a hierarchy of roads, ranging from a national road to local access road/tracks. The majority of road surface is gravel (85.5%), with only 11.5% of roads having a blacktop surface. The road hierarchy in Umzumbe is discussed below (refer to map 12):

- ⇒ National road – the N2 provides access at a broad provincial and regional scale. While this road is also open to local road users, its primary aim is to connect major national urban centres. In the context of Umzumbe, the N2 runs along the coastline and provides high-speed access to eThekweni and Port Shepstone. The N2 in Umzumbe is 16.2km in length.
- ⇒ Provincial road – Provincial roads accounts for 6% of roads in Umzumbe, a total length of 155.6km. The R102 is one of the most critical provincial roads, running almost parallel, but inland to the N2. Other important provincial roads are as follows:
  - ⇒ P68 between Assissi and Phungashe. Only portions of this road has a blacktop surface.
  - ⇒ P286 links Hibberdene to Msinsini. The portion of this road that is located in Umzumbe has a gravel surface.
  - ⇒ P73 links Msinsini to the north. This provincial road has blacktop surface.

- ⇒ P75 between Msinsini and Qoloqolo, which becomes the P254 to Umgayi in the north. This provincial road has a gravel surface.
- ⇒ District roads – a vast network of district roads provides access to different settlements and public facilities within the municipality. District roads account for 14.37% of roads in Umzumbe, and has a total length of 373km.
- ⇒ Local roads accounts for 6% of roads and has a total length of 159km. These roads provide access to settlements.

Local access roads/tracks provide access within settlements. It accounts for 72.7% of roads, with a total length of 1888.69km. These are clearly some of the most important roads within Umzumbe, which provide intra and inter-settlement access.

The national and provincial roads are in a generally good condition, but the quality of district and local roads are generally poor. This is mainly because these roads are gravel and require regular maintenance and upgrading. During the rainy season, these roads hamper access to settlements. Road upgrades will have to be implemented to improve the road conditions. A rollout programme for the upgrade of the roads should be prepared. Prior to that, a needs analysis will have to be undertaken to identify the need for the upgrade and the nature of the upgrade required, based on the condition and role of the road.

## 7.2 RAIL NETWORK

The only railway line within Umzumbe is along the coastline. This South Coast railway line runs from Port Shepstone to Durban and forms part of the Durban- Kelso- Port Shepstone-Simuma Secondary Main Line. It was intended to develop agriculture in the lower South Coast (sugarcane cultivation). Traffic has however declined dramatically on this line in recent years, as road deliveries have increased.

## 7.3 ELECTRICITY

TABLE 11: ELECTRICITY BACKLOGS

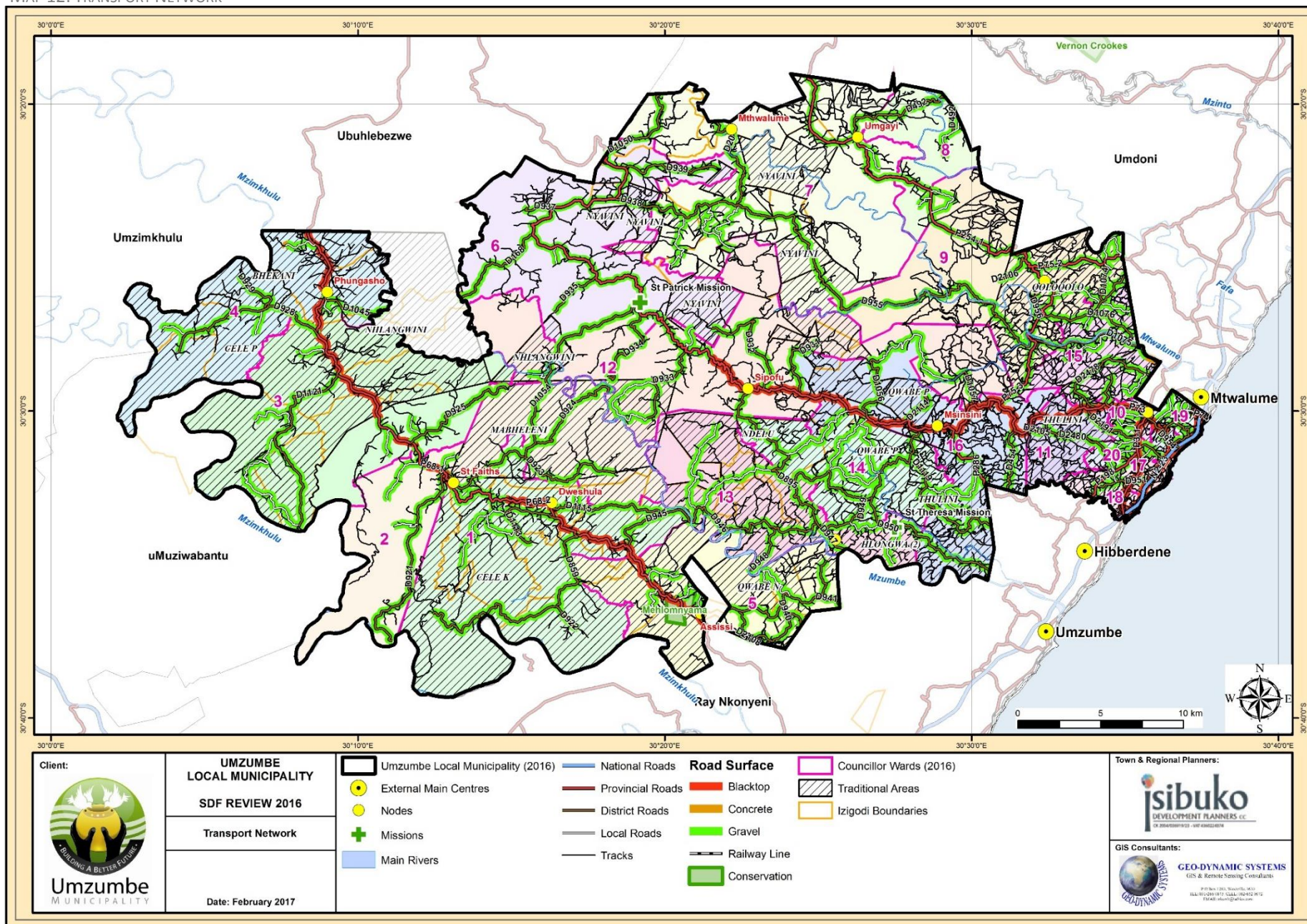
| Year | Total Households | No. of Households electrified | Backlog | % Electrified |
|------|------------------|-------------------------------|---------|---------------|
| 2011 | 35171            | 17241                         | 17930   | 49%           |
| 2016 | 35171            | 23077                         | 12094   | 66%           |

SOURCE: ESKOM, 2017

The main supplier of electricity in Umzumbe is Eskom. It is stated in the IDP (2016/17), that the majority of electricity problems are of a localised nature, since major capacity problems in Ugu have been addressed about ten years ago through the construction of major infrastructure. According to Eskom, the current backlog in terms of access to electricity currently stands at 12094 households. This includes 5480 greenfields and 6614 infills. The former refers to areas where Eskom has not previously installed any Infrastructure, while the latter



MAP 12: TRANSPORT NETWORK



refers to areas where there is existing infrastructure but some of the households are not connected.

This backlog is attributed to capacity problems. According to the IDP (2016/17:69), electrical infrastructure in Umzumbe consists of the following (map 13):

⇒ Two high voltage power lines running in a northeast to south-western direction parallel to the coastline, including high voltage substations along these power lines.

⇒ Medium voltage power lines traversing the municipal area, including several medium voltage substations.

The following tables provide a list of electricity projects within Umzumbe municipality.

TABLE 12: CURRENT ELECTRICITY PROJECTS

| Project Name        | Village      | Ward | Budget | Financial Year |
|---------------------|--------------|------|--------|----------------|
| <b>Mgai kaMoya</b>  | Kwa Mgai     | 9    | 2.0m   | 2015/16        |
| <b>KwaMbiyane</b>   | Mbiyane      | 9    | 5.8m   | 2016/17        |
| <b>Mahlaya</b>      | Mahlaya      | 8    | 2.0m   | 2016/17        |
| <b>Ekubusisweni</b> | Ekubusisweni | 9    | 2.732m | 2015/16        |

SOURCE: UMZUMBE MUNICIPALITY

TABLE 13: ELECTRICITY PROJECTS

| Project Name                                     | Village      | Ward | Budget | Financial Year |
|--|--------------|------|--------|----------------|
| <b>Nkehlamandla Project</b>                      | Nkehlemandla | 16   | 7.5m   | 2012/13        |
| <b>Nkehlamandla Phase 2 Project</b>              | Nkehlamandla | 16   | 5.0m   | 2014/15        |
| <b>Nkehlamandla Phase 3 Project</b>              | Nkehlamandla | 16   | 1.265m | 2015/16        |
| <b>St Nivard Electrification Project Phase1</b>  | St Nivard    | 9    | 5.0m   | 2013/14        |
| <b>St Nivard Electrification Project Phase 2</b> | St Nivard    | 9    | 2.0m   | 2014/15        |
| <b>St Nivard Phase 3 Project</b>                 | St Nivard    | 9    | 7.3m   | 2015/16        |

|  |             |   |     |         |
|--|-------------|---|-----|---------|
| <b>Amen Creche Electrification Project</b> | Amen Creche | 9 | 6.m | 2015/16 |
|--|-------------|---|-----|---------|

SOURCE: UMZUMBE MUNICIPALITY

The municipality further alludes to two future electricity projects that have been identified within the municipality. These include: Magwaza in Ward 9 and Mtwalume in Ward 15.

Eskom has identified extensive areas within Umzumbe for community level planned projects in the Umzumbe Network Masterplan (2013). In addition, regional level infrastructure development planning includes projects that will not only facilitate these community level projects, but also serve to improve the existing network capacity. The spatial position of these regional projects is evident in Umzumbe.

## 7.4 WATER & SANITATION

The Ugu District Municipality is the Water Services Authority and the Water Service Provider for the District. They are responsible for the provision of water and sanitation services within the district.

### 7.4.1 WATER

#### 7.4.1.1 WATER SUPPLY ZONES

Umzumbe falls within the Mtwalume, Ndelu and Mhlabatshane Supply Zone water supply zones. The Ndelu supply zone is supplied by the

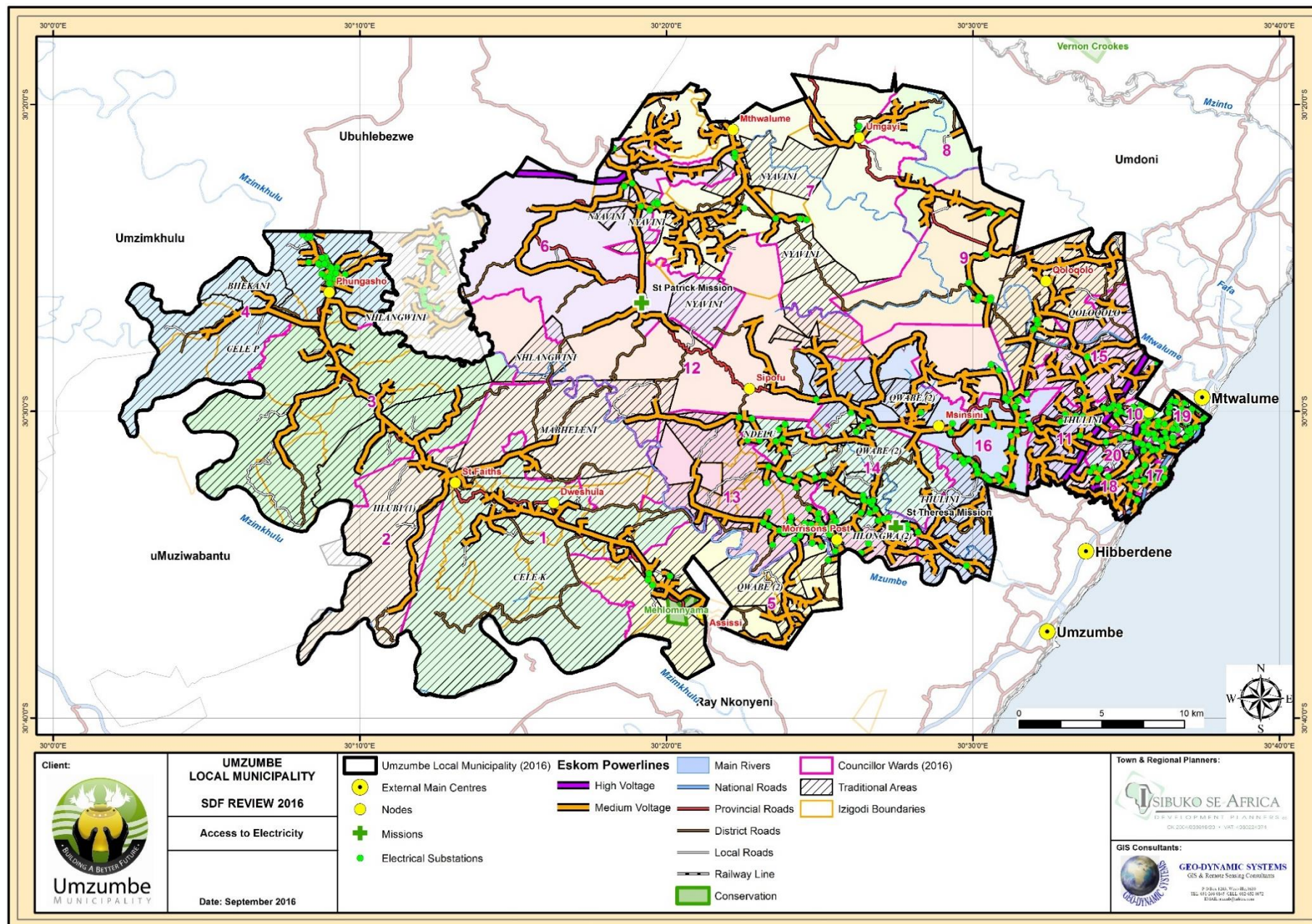
Ndelu waterworks from the Umzumbe River and will also be extended in future to include the areas of Ndelu, Qwabe N, Kwa Hlongwa and parts of Mabheleni and Mathulini. The Mtwalume supply zone is supplied by the Mtwalume waterworks and includes the rural areas of Mathulini and Qolo, as well as the urban coastal areas of Mtwalume, Ifafa Beach and Bazely Beach. The Mhlabatshane supply zone is situated in the Umzumbe Municipality and currently comprises of a number of stand-alone rural schemes (Phungashe, Ndwebu and Assissi schemes), which will in future be incorporated into a single regional water supply scheme. The supply zone covers the area between the Umzimkulu and Mzumbe rivers, from Phungashe in the north-west to Frankland in the south-east (Umzumbe IDP 2016/17:52).

#### 7.4.1.2 WATER RESOURCES

Umzumbe municipality is located in the South Coast catchment, which includes the Mzumbe, Mtwalume and Mpambanyoni Rivers. Currently, this catchment is experiencing a small deficit, mostly during holiday peak season. The provision of off-channel storage can solve this problem. Groundwater is an available, but still undeveloped resource, which can be very valuable to rural communities. However, the sustainable use of this resource is very important and the use thereof should be monitored continuously.

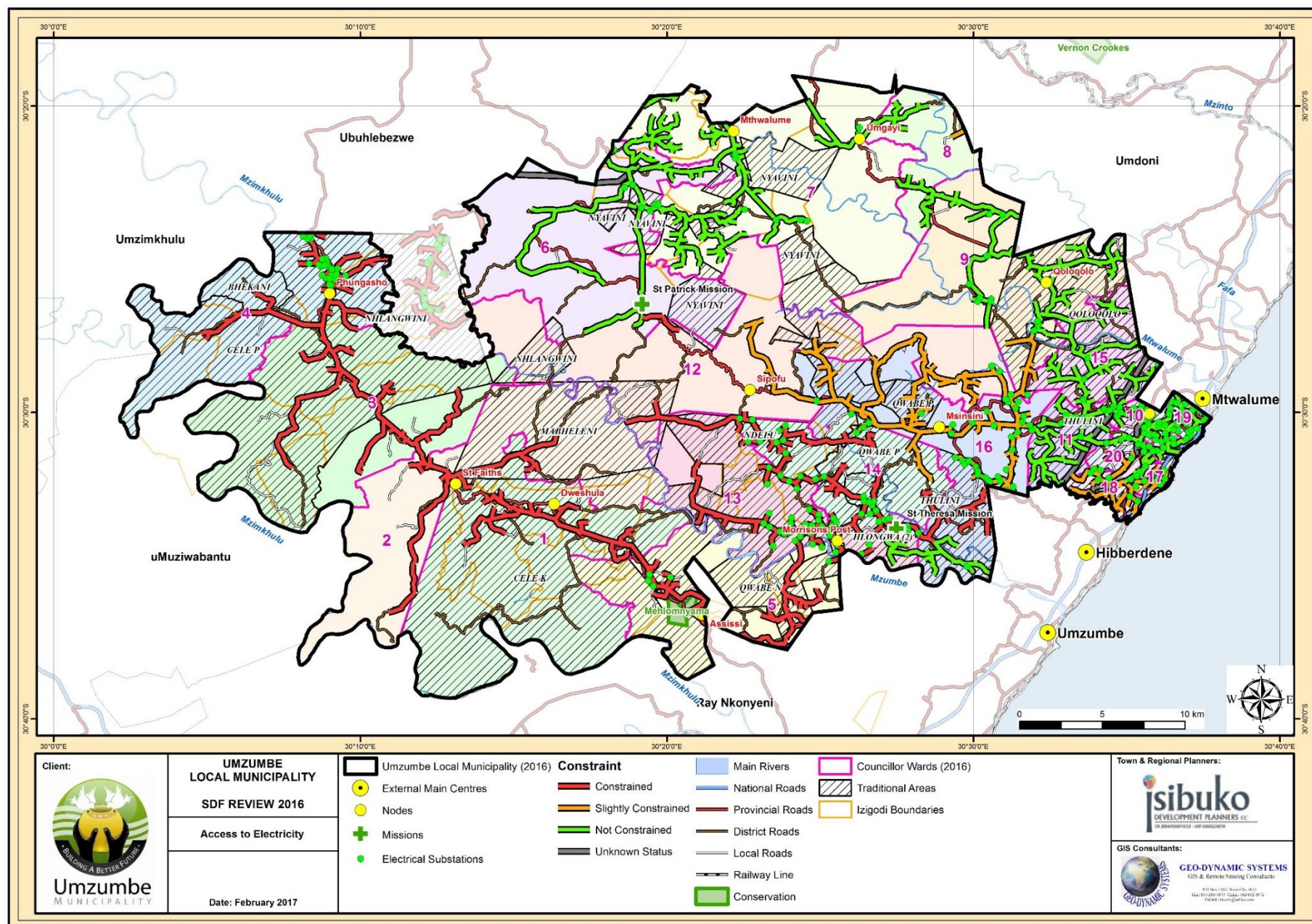


MAP 13: ELECTRICAL NETWORK - VOLTAGES





## MAP 14: ELECTRICAL NETWORK - CONSTRAINTS



### 7.4.1.3 ACCESS TO WATER

The following information extracted from the Statistics South Africa 2016 Community Survey is noted with regards to access to water supply in Umzumbe:

TABLE 14: ACCESS TO WATER

| Access to safe drinking water supply service | No. of people | Percentage (%) |
|--|---------------|----------------|
| Yes  | 99478         | 65.59          |
| No   | 49507         | 32.64          |
| Do not know                                  | 2177          | 1.44           |
| Unspecified                                  | 516           | 0.34           |
| <b>Total</b>                                 | <b>151676</b> | <b>100</b>     |

SOURCE: STATS SA COMMUNITY SURVEY, 2016

The statistic that 32.64% of the population still does not have access to safe drinking water is a clear indication of the prevailing water backlog in Umzumbe.

### 7.4.1.4 SOURCES OF WATER

The following information extracted from the Statistics South Africa 2016 Community Survey is noted with regards to the sources of water.

TABLE 15: SOURCES OF WATER

| Main source of water for drinking           | No. of people | Percentage (%) |
|---|---------------|----------------|
| Piped (tap) water inside the dwelling/house | 1929          | 1,27%          |
| Piped (tap) water inside yard               | 25799         | 17,01%         |

|                                |               |                |
|--------------------------------|---------------|----------------|
| Piped water on community stand | 41589         | 27,42%         |
| Borehole in the yard           | 688           | 0,45%          |
| Rain-water tank in yard        | 3917          | 2,58%          |
| Neighbours tap                 | 895           | 0,59%          |
| Public/communal tap            | 31397         | 20,70%         |
| Water-carrier/tanker           | 6338          | 4,18%          |
| Borehole outside the yard      | 4500          | 2,97%          |
| Flowing water/stream/river     | 33604         | 22,15%         |
| Well                           | 308           | 0,20%          |
| Spring                         | 327           | 0,22%          |
| Other                          | 386           | 0,25%          |
| <b>Total</b>                   | <b>151676</b> | <b>100,00%</b> |

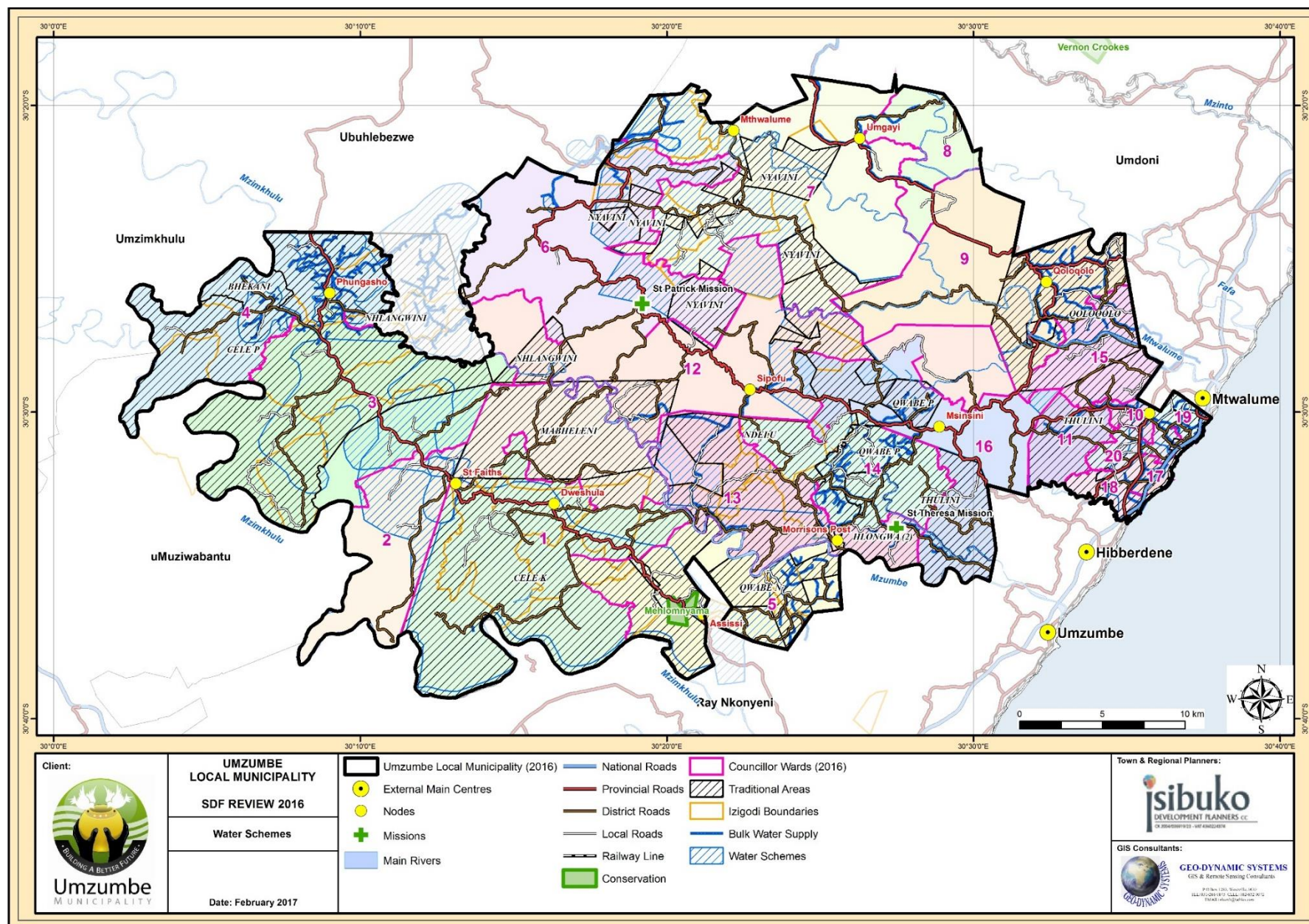
SOURCE: STATS SA COMMUNITY SURVEY, 2016

### 7.4.2 SANITATION

The dominant sewer option in Umzumbe is Ventilated Pit Latrines (VIP). According to Statistics South Africa Community Survey 2016, only 1.11% of the population within Umzumbe Local Municipality have flush toilets connected to sewerage, whereas 2% of households in the municipality had flush toilets connected to sewerage as per the 2011 Census. It remains a challenge to explain this regress however the possibility of deteriorating or aging infrastructure and affordability cannot be ruled out. Highlighted in the municipality's IDP (2016/2017) is the concerning 69% of households that have sanitation which is below RDP standard which should be pit toilet with ventilation.



## MAP 15: WATER SCHEMES



The greatest challenge facing the rural sanitation programme is identified as having to deal with the emptying of full pits in a hygienic and cost effective manner.

## 7.5 SOLID WASTE MANAGEMENT

Solid waste management involves the collection, transportation and safe disposal of refuse from residential areas to landfill. However, solid waste services in Umzumbe are very limited. The municipality has four waste removal sites, with each servicing approximately 360 households. The following is reflected in the Statistics South Africa Community Survey 2016 with regards to refuse collection / disposal in Umzumbe:

TABLE 16: REFUSE REMOVAL

| Refuse removal   | No. of people | Percentage (%) |
|--|---------------|----------------|
| Removed by local authority/private company/community members at least once a week        | 148           | 0,10%          |
| Removed by local authority/private company/community members less often than once a week | 76            | 0,05%          |
| Communal refuse dump   | 5541          | 3,65%          |
| Communal container/central collection point  | 0             | 0,00%          |
| Own refuse dump  | 133570        | 88,06%         |
| Dump or leave rubbish anywhere (no rubbish disposal)                                     | 12194         | 8,04%          |
| Other  | 149           | 0,10%          |

|              |        |         |
|--------------|--------|---------|
| <b>Total</b> | 151676 | 100,00% |
|--------------|--------|---------|

SOURCE: STATS SA COMMUNITY SURVEY, 2016

The majority of the population buries or burns their waste in their own backyard. This has environmental, health and safety implications for of the community of Umzumbe. In addition, there is no official landfill site in the municipal area and Ugu District only has three landfills. These are the Oatlands, Humberdale and Harding landfill sites. Factors that affect waste collection services are highlighted in the IDP (2016/17:60) as follows:

- ⇒ Distance: If the distance between the point of generation of waste and the disposal site is more than 30 km, transportation of waste becomes more difficult for municipal mobile compactors or non-compaction 3-ton trucks.
- ⇒ Accessibility: The accessibility of settlements via the existing road network must also be considered.

The rural nature of settlements, topography and road infrastructure in Umzumbe is a case in point, which complicates waste collection and services. As such, a formal municipal refuse removal service to every single household in Umzumbe may not be practical. Alternative waste management practices that could be implemented in Umzumbe include the distribution of skips at strategic points in communities, community contractors collecting waste door to door and transporting it directly to

a landfill, or on-site supervised disposal by a waste management officer from the municipality. Noteworthy, the municipality has already made significant strides in implementing the former.

## 7.6 COMMUNICATION

Adequate provision of telecommunication infrastructure in Umzumbe remains a challenge. Major cell phone companies provide coverage to the rural areas of Umzumbe, but internet access is not available in the majority of the municipality. The following data regarding internet access was extracted from the Statistics South Africa Community Survey 2016:

- ⇒ About 36.30% of the population can access the internet from any place with their cell phones.
- ⇒ 93.69% of the population do not have internet services
- ⇒ 4.41% have an internet connection in the dwelling

Areas experiencing some problems with access to cellular services are the lower lying areas. Television as well as national, regional and local radio broadcasts is accessible in Umzumbe.

## 8 PUBLIC FACILITIES

### 8.1 EDUCATION

There are 150 schools within Umzumbe Local Municipality (KZN DoE Schools Data: 2016). These include 2 combined schools, 101 primary schools, 43 secondary schools and 2 independent schools.

TABLE 17: SCHOOLS

| Circuit      | Combined | Junior Primary | Primary   | Senior Primary | Junior Secondary | Secondary | Senior Secondary | Independent | Total      |
|--------------|----------|----------------|-----------|----------------|------------------|-----------|------------------|-------------|------------|
| Dweshula     | -        | 1              | 13        | -              | -                | 4         | 3                | -           | 21         |
| Highflats    | -        | 2              | 13        | -              | -                | 6         | 1                | -           | 22         |
| St. Faiths   | 1        | -              | 16        | 1              | 3                | 5         | -                | 1           | 27         |
| Turton       | -        | 2              | 13        | 4              | -                | 5         | -                | 1           | 25         |
| Umzumbe      | -        | 3              | 10        | 2              | -                | 4         | -                | -           | 19         |
| Braemar      | -        | -              | 5         | -              | -                | 2         | -                | -           | 7          |
| Umdoni       | -        | -              | 1         | 1              | -                | -         | 1                | -           | 3          |
| Mthwalume    | 1        | 3              | 11        | -              | 5                | 4         | -                | 2           | 26         |
| <b>Total</b> | <b>2</b> | <b>11</b>      | <b>82</b> | <b>8</b>       | <b>8</b>         | <b>30</b> | <b>5</b>         | <b>4</b>    | <b>150</b> |

SOURCE: KZN DoE (2016)

Challenges facing these schools are capacity, dilapidated infrastructure and the quality of education. A new school viz. Malusi Secondary School is to be developed in the KwaQwabe area. Various other schools are being repaired and upgraded.

TABLE 18: SCHOOLS PLANNING NORMS AND STANDARDS

| Socio-economic category of residential area | Average Household Size | No. of households per primary school | No. of households per secondary school |
|---|------------------------|--------------------------------------|--|
| High  | 4                      | 1000                                 | 1500                                   |

|               |   |     |      |
|---------------|---|-----|------|
| <b>Middle</b> | 6 | 750 | 1500 |
| <b>Low</b>    | 8 | 500 | 1500 |

SOURCE: KZN DOE NORMS AND STANDARDS (2014)

The application of planning standards for educational facilities reveals that 2 primary schools and 1 secondary school is required in Umzumbe. This backlog exists in Cluster A. It thus appears that the backlog in terms of basic educational facilities is minor and can be addressed. However, there are no higher educational facilities in Umzumbe, hence residents make use of extra-municipal tertiary education facilities. The KwaZulu

Natal Department of Education Space Planning Norms and Standards for the development of schools are as follows:

Noteworthy, these are mainly applicable in the establishment of new residential areas. For existing settlements, other issues such as distances to existing schools, accessibility etc. According to the KZN Department of Education, a number of schools within have low enrolment rates due to the limited number of households they service.

## 8.2 HEALTH

According to the Department of Health and Umzumbe Local Municipality's IDP 2016/2017, Umzumbe Local Municipality has 1 Community Health Centre (Turton), the Dunstan Farrell TB Hospital, 13 Clinics and 3 Mobile Stopping Points. There is also a Health Post in Sheepwalk which currently functions as mobile point and Phila Mntwana site.

The IDP (2016/17) highlights the following challenges as faced by the department:

- ⇒ Children under 5 years have low rate of clinic usage which is 3.9% against the target of 5%.
- ⇒ An ever increasing number of clients on ARTs which increased from 10430 to 10766 in a quarter.
- ⇒ Below target condom distribution rate at 36.3% instead of 42%.

⇒ Lower immunisation coverage of children below 1 year which is currently at 68.4% instead of the 90% target.

⇒ PMTCT; 0.5% of babies tested HIV positive at 6 weeks, however this said to be very less than expected rate of 1.7%.

⇒ Capital infrastructure projects were put on hold due to lack of funds.

The buildings and infrastructure of the Dunstan Farrell Hospital are however in a state of disrepair and requires urgent attention.

The planning standards for the provision of health facilities are as follows:

- ⇒ Clinic: 7000 – 30 000 people
- ⇒ Community Health Centre: 30 000 – 160 000 people
- ⇒ Hospital: 100 000 - 500 000 people
- ⇒ Regional Hospital: 1.2 million people
- ⇒ Mobile clinics: based on access to clinics or lack thereof

The application of these norms and standards depends on location e.g. low density rural settlements are normally serviced using the 7000 people threshold. Their application within Umzumbe suggests that Umzumbe requires an additional 8 clinics. This backlog would however have to be analysed in more detail with focus on other localised context specific issues such as patient behaviour.



### 8.3 POLICE STATIONS

There are three police stations in Umzumbe with a ratio of 1:1 063, as per Umzumbe IDP 2016/17. The police stations are located at Msinsini, KwaDweshula and St Faiths. Community policing forums have been set up throughout the municipal area.

In addition, there is a main office of the Magistrate's Court and nine tribal courts. Tribal courts generally deal with civil cases. They are situated in the KwaCele, Bhekani, Nhlanguwini, Qwabe, Ndelu, KwaHlongwa and Nyavini traditional council areas.

According to planning standards, which requires one police station per 50 000 people, Umzumbe requires 3.5 police station and are within an acceptable range (Umzumbe IDP 2016/17:79).

Noteworthy, a new police station is proposed in the Ndelu area. This is part of a countrywide program initiated by the South African Police Service (SAPS) to establish police stations in various rural areas and also their strategic vision, which is to create a safe and secure environment for all the people in South Africa. The project is intended to improve access to police services, promote rural development and address an increasing crime problem in the area.

### 8.4 SPORTS FACILITIES

As per Umzumbe LM IDP 2016/2017, Sports facilities in Umzumbe include school fields, sports fields and sport complexes, scattered

throughout the area. There are 37 sports fields within Umzumbe municipality.

The municipality administers the majority of the sport complexes, with the exception of one privately owned sport complex in Cibini community settlement near Phungashe. Recreational facilities form an important aspect within a community. It provides a place for physical activity, as well as a space for social functions where people can gather and interact.

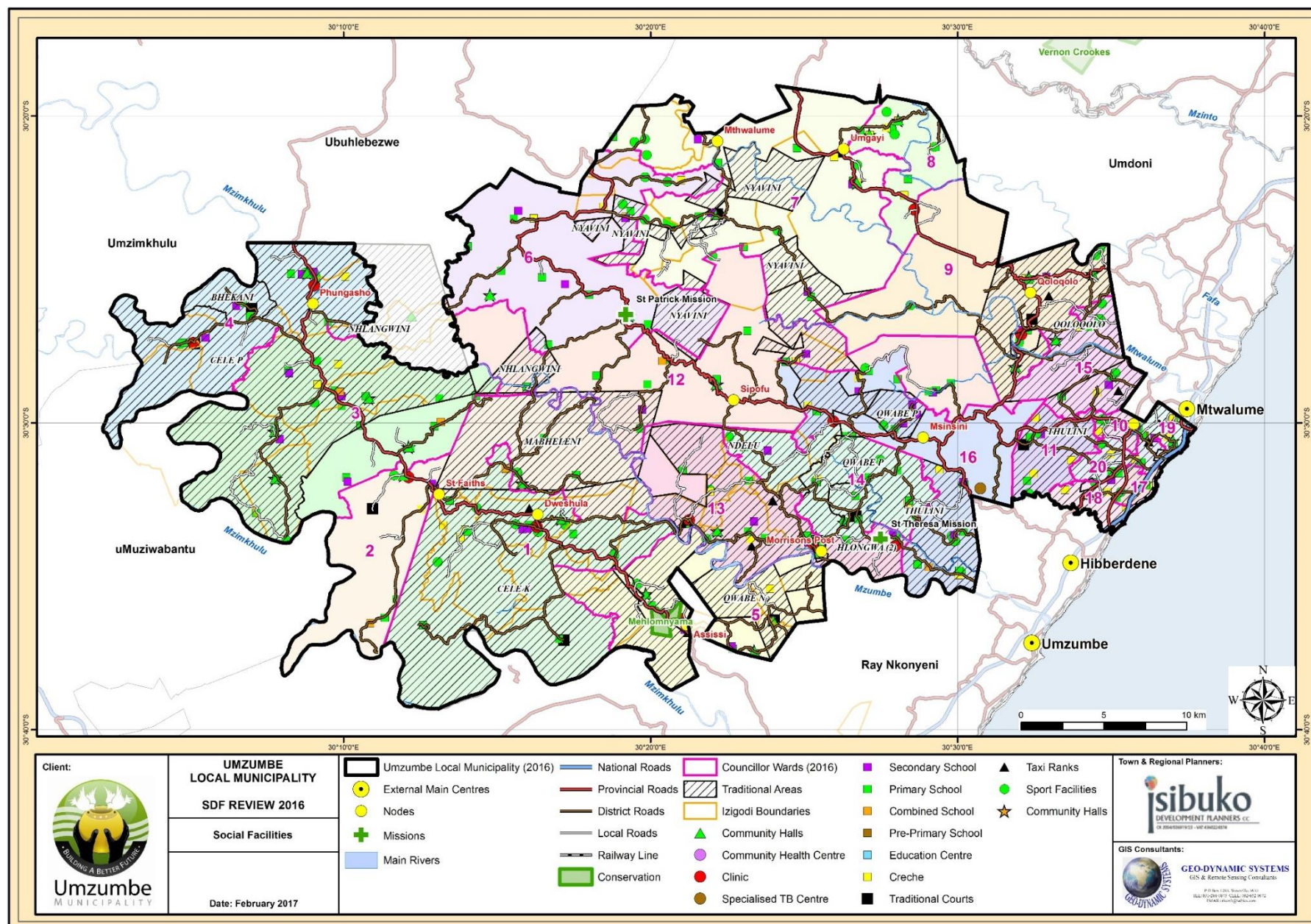
According to the municipality's IDP (2016/17:81), during the 2014/2015 financial year Umzumbe commenced with the construction of the Indoor Sport Centre in ward 18. Within the same financial year, the upgrading of the Sbanini Sports ground in ward 10 and Mnamfu Sports ground in ward 19 have also formed part of the municipality's response to need for healthy living and social cohesion. In the current financial year (2015/2016), the municipality is proceeding with the Indoor Sports Centre project as well as the upgrading of the KwaMagwaza Sports Field in ward 15.

The application of planning standards indicates that at least one sports field is required per 7700-12000 people. This reveals that Umzumbe is adequately supplied with sports fields.

### 8.5 LIBRARY

There is currently one library within Umzumbe. This has serious implications for students and general literacy within Umzumbe, since

MAP 16: SOCIAL FACILITIES



people have to travel to surrounding areas to access this facility. In terms of planning standards, at least one library should be provided for every 5000-50 000 people. As such, at least three (3) libraries are required in Umzumbe.

## 8.6 COMMUNITY HALLS / CENTRES

The IDP (2016/17) states that there are 29 community halls within Umzumbe, of which eight (8) are administered by the district, 18 by the municipality and 3 by traditional councils. The local community mainly uses these halls, with only a few being used by government departments. The provision of services such as access to water, electricity and sanitation are limited to just a few of these halls. In addition, it is stated that some the halls are in a bad state of disrepair.

An application of planning standards to community halls, which requires one hall for 10 000 people, reveals that Umzumbe is adequately supplied with community halls.

As per the Umzumbe LM IDP 2016/2017, the Social and Community Services Department is responsible for the maintenance and upgrading of community halls. During the 2014/15 financial year the department installed burglar guards on 10 community halls and procured chairs and tables for 5 community halls. The department planned to secure 9 community halls with burglar guards and procure chairs and tables for 5 community halls. The community halls / centres in Umzumbe are as indicated in the table below.

TABLE 19: COMMUNITY HALLS / CENTRES

| Ward | Name of Facility             | Location     |
|------|------------------------------|--------------|
| 1.   | Khanyile Hall                | Ntimbankulu  |
| 2.   | St Faiths Community Hall     | St Faiths    |
| 3.   | Johnsdale Community Hall     | Maria Tross  |
|      | KwaNguza Community Hall      | KwaNguza     |
|      | Wozani Community Hall        | KwaDunuse    |
| 4.   | Mpumzuza Community Hall      |              |
| 5.   | Mehlomnyama Community Hall   | Mehlomnyama  |
|      | KwaQwabe Community Hall      | KwaQwabe     |
|      | Frankland Community Hall     | Lokishini    |
|      | MPCC                         | KwaQwabe     |
| 6.   | Bhanoyi Community Hall       | Bhanoyi      |
| 7.   | MPCC Nyavini                 | Nyavini      |
|      | kwaNongwinya Hall / Creche   |              |
| 8.   | Nogoduka Community Hall      | KwaNogoduka  |
|      | Sheep Walk                   | Sheep Walk   |
| 9.   | MPCC ward 9                  | KwaBhavu     |
|      | KwaQoloqolo Training Centre  |              |
|      | Genyaneni                    | Wilder       |
| 10.  | Isibanini Community Hall     | Isibanini    |
| 12.  | Nqolobane Community Hall     | Nqolobane    |
|      | Mfifitha MPCC                | Mfifitha     |
| 13.  | Ndumakude Community Facility | KwaHlongwa   |
|      | Mswilili Community Hall      | Mswilili     |
| 14.  | Mabuthela Community Facility | Mabuthela    |
|      | Old Municipal Building       | KwaHlongwa   |
| 15.  | Nomakhanzana Community Hall  | Nomakhanzana |
|      | Othandweni Skills Centre     | KwaQoloqolo  |
| 16.  | MPCC Ward 16                 | Cabhane      |

|     |                                    |               |
|-----|------------------------------------|---------------|
| 17. | MPCC Ward 17                       | Ziyabenya     |
| 18. | Esihlonyaneni Community Hall       | Esihlonyaneni |
|     | KwaFica Community Hall             | KwaFica       |
| 19. | Mnafu Community Hall (was torched) | Mnafu         |

SOURCE: UMZUMBE MUNICIPALITY, 2017

## 8.7 CEMETERIES

The majority of the rural population in Umzumbe use traditional burial practices. Deceased family members are buried on-site. There are no formal cemeteries in Umzumbe and in some instances, there has been resistance to the development of cemeteries due to the sensitive nature and cultural implications of burial practices.

## 8.8 TRANSPORTATION

### 8.8.1 RAIL TRANSPORT

The south coast railway line is electrified and in use by Spoornet as far as Port Shepstone. However, no commuter services are offered south of the three stations that form part of the metropolitan rail system serving the Ethekewini area. These stations include Kelso, Park Rynie and Scottburgh, all of which are located to the north of Umzumbe (Umzumbe IDP 2016/17:68).

### 8.8.2 PUBLIC TRANSPORT ROUTES

Public transport operations in Umzumbe are geared to move people out of the area to places of work or shopping. This can be ascribed to the

rural nature of Umzumbe, combined with the settlement pattern and the lack of a hub or major town. The result of the settlement pattern is that people have to travel long distances to access certain services, causing underutilised operator vehicles on most routes. Public transport routes vary according to the taxi rank, and include the following routes:

TABLE 20: TRANSPORT ROUTES

|                              | Destination    | Km  | Trips | Util % | Registered Vehicles |
|------------------------------|----------------|-----|-------|--------|---------------------|
| <b>Mthwalume taxi rank</b>   | Port Shepstone | 27  | 40    | 72     | <b>32</b>           |
|                              | Scottburgh     | 27  | 2     | 100    | <b>2</b>            |
|                              | Umzinto        | 21  | 24    | 105    | <b>22</b>           |
|                              | Hibberdene     | 7   | 29    | 39     | <b>19</b>           |
|                              | Quabe          | 13  | 3     | 93     | <b>2</b>            |
| <b>Morrison Taxi rank</b>    | Kwaltlongwa    | 4   | 10    | 47     | <b>6</b>            |
|                              | Magoge         | 9   | 35    | 65     | <b>27</b>           |
|                              | Port Shepstone | 17  | 9     | 118    | <b>8</b>            |
| <b>St Faiths Taxi rank</b>   | Durban         | 106 | 4     | 77     | <b>4</b>            |
|                              | Highflats      | 27  | 63    | 43     | <b>39</b>           |
|                              | Ixopo          | 41  | 1     | 11     | <b>1</b>            |
|                              | Port Edward    | 53  | 15    | 75     | <b>13</b>           |
|                              | Port Shepstone | 32  | 28    | 61     | <b>26</b>           |
| <b>Dweshala Taxi rank</b>    | Dweshala       | -   | 4     | 50     | <b>2</b>            |
| <b>Kwanogoduka Taxi rank</b> | Durban         | 77  | 3     | 80     | <b>3</b>            |
|                              | Umzinto        | 25  | 9     | 82     | <b>9</b>            |
| <b>Mswilili Taxi rank</b>    | Durban         | 96  | 2     | 51     | <b>2</b>            |
|                              | Port Shepstone | 19  | 5     | 90     | <b>5</b>            |
| <b>Nhlanhleni Taxi rank</b>  | Durban         | 75  | 1     | 100    | <b>1</b>            |



|  |         |    |    |     |    |
|--|---------|----|----|-----|----|
|  | Umzinto | 18 | 15 | 100 | 12 |
|--|---------|----|----|-----|----|

SOURCE: UGU PUBLIC TRANSPORT PLAN, 2007

Evident from the above table, is that one of the main routes originating from almost all of the taxi ranks, are the route to Port Shepstone. This confirms the tendency that transport routes move people out of the area to larger urban centres where a variety of services are on offer.

### 8.8.3 TAXI RANKS

The Ugu Public Transport Plan identifies seven taxi ranks serving the population of Umzumbe. The majority of these taxi ranks are of an informal nature and have no amenities (Umzumbe IDP 2016/17). The location of these ranks is along main routes, providing a central pick-up or drop-off point to communities. However, this requires commuters to have to walk to and from the taxi ranks.

The following associations are primarily based at the following ranks:

⇒ Bekezela Taxi Owners Association at St Faiths taxi rank.

⇒ Umzumbe Taxi Owners Association at the Morrison Taxi rank.

### 8.8.4 BUS TRANSPORT

There is only one subsidised bus operator in the Ugu district, namely KZT. One of KZT's three contracts, service the Nhlalwane, Assissi Mission and the surrounding areas to Port Shepstone. The only unsubsidised bus service in Umzumbe operates from the Odeke Bus Rank. This informal bus rank is located in the Umzumbe area along the

Kwahlongwe route. It is an informal ranking area with no amenities. Bus routes originating from this rank go to Durban and Port Shepstone (Umzumbe IDP 2016/17:68).



## 9 STATE OF THE ENVIRONMENT

### 9.1 THE BIOSPHYSICAL CONTEXT

The Umzumbe landscape is a dynamic feature that constantly changes over space and time. It is the result of a host of processes that operate at or near the earth's surface. These processes create specific features and patterns that are arranged in various systems such as climatic, geological, geomorphic, and drainage systems, as well as ecosystems and land use systems. This is the foundation for sustainable development planning. The purpose of this section is:

- ⇒ To create the environmental context for the project;
- ⇒ To describe the key features in the biophysical environment and how they interact; and
- ⇒ To broadly define the parameters for sustainable development.

#### 9.1.1 CLIMATE

Umzumbe experiences a warm sub-tropical climate. It is predominantly a summer rainfall area, with the typical rainfall season being during the spring and summer months (October to March). The highest rainfall months are generally December and January.

Climatic conditions vary between coastal and inland environments, with conditions ranging from more extreme inland temperatures to the milder temperatures and higher rainfall of the coastal areas, moderated

by the effects of the warm Indian Ocean. High rainfall areas create potential for agricultural development.

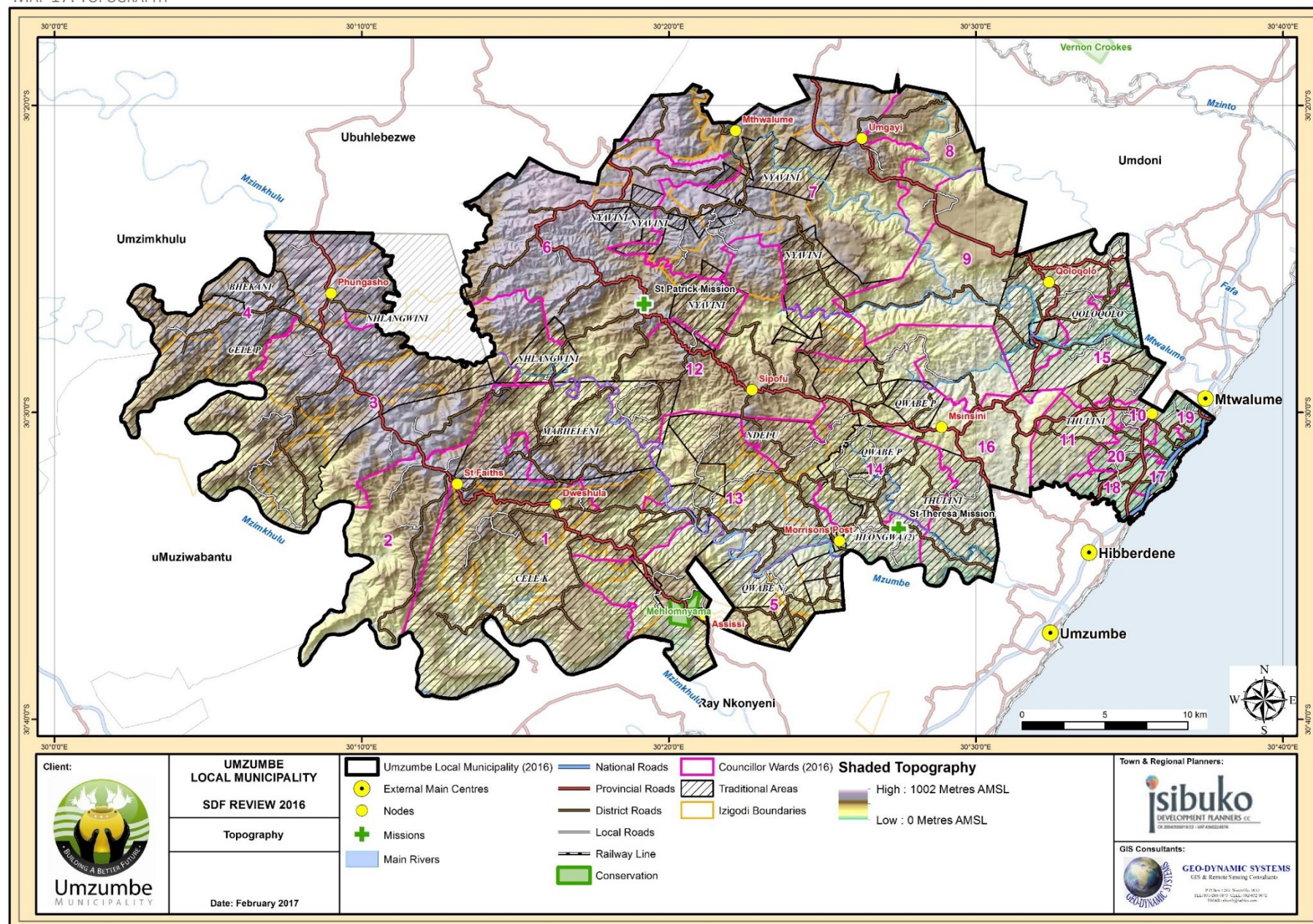
Great variability in the features that influence the region's climate frequently produce extreme weather conditions. Historical records show that regular and extreme flood events have occurred at regular intervals for the last century throughout the region. In fact, the highest number of floods recorded in South Africa between 1800 and 1995 occurred in the Mvoti to Umzimkulu Water Management Area (Caelum, 2008). Umzumbe falls within this area.

#### 9.1.2 GEOLOGY AND TOPOGRAPHY

The majority of the municipality is covered by the Gneiss form of solid geology. At a lesser extent, arenite, tillite and shale geological forms are also found. Most parts of the municipality have soil depths of between 450mm and 750mm, while some soil parts have depths of less than 450mm.

The underlying geology influences the drainage trends and patterns in the landscape. It is these patterns that shape the character of the landscape (Map 17).

- ⇒ A variation in topography can be seen in the elevations that range from 0m at sea level to 1002m above sea level.



- ⇒ The western northern portions of the municipality have rugged terrain, characterised by steep hills, valleys, ridges and canyons.
- ⇒ The eastern and southern sections of the municipality are predominantly flat, low-lying areas.
- ⇒ The topography influences habitat structures, including settlement patterns.

These features are constantly changing due to geomorphological processes (erosion and sedimentation), which make the landscape a dynamic entity.

### 9.1.3 DRAINAGE AND SURFACE WATER FEATURES

The Umzumbe Municipal Area falls within the Mvoti to Mzimkulu Water Management Area (WMA 11), one of 19 such areas in the country.

The drainage patterns in the study area follow the topography. The area comprises two primary water catchments (Map 20). The south-western parts of the area are drained by the Mzimkhulu River and its tributaries. The eastern portion is drained by a network of primary rivers and their tributaries, including the Mhlabatshane River, the KwaMalukaka-Mzumbe River, the Mzimayi/Mfazazana River, and the Qula-Mtwalume-uMgeni Rivers, which drains excess water towards the coast.

Runoff fed directly or indirectly by precipitation continuously carves and forms the features in the landscape. It creates different moisture

environments, which in turn give rise to different plant habitats. These formative processes and their effects on the landscape must be taken into account in spatial planning.

Surface water features include estuaries of which there are four that depend directly on the primary drainage systems. Land use activities in the catchments influence the functioning of these features. Wetlands are associated with low-lying and higher rainfall areas.

### 9.1.4 LAND COVER

Umzumbe covers approximately 1,221km<sup>2</sup> of land (KZN DEDTEA). It is predominantly a rural area with settlements patterns that are widely distributed in the landscape where most people make a subsistence living.

The predominant land cover categories are dense bush / thicket / shrubland, settlement, grassland, traditional agriculture, commercial agriculture and plantations in that order. Settlements cover quite a significant share of the municipal area. This stems from the substantial population within the municipality and can be attributed to the sprawling and expansive nature of settlements within the municipality. The spatial distribution of land cover categories is shown on Map 7. From the map and associated table, it is clear that most of the surface cover of the land remains in a natural state.

### 9.1.5 VEGETATION

The high rainfall in the area and the diversity in landscape features have created different moisture environments, which in turn gave rise to different plant habitats.

The most common veld types in Umzumbe falls within the Grassland Biome, which is represented in this area by Moist Coast Hinterland Grassland (21), KwaZulu-Natal Coastal Belt Grassland (29) and Dry Coast Hinterland Grassland (6)(Department of Agriculture Forestry & Fisheries).

The KwaZulu-Natal Highland Thornveld (37) is unique to the Umzumbe area. Almost half of the Eastern Scarp Forests: Southern Coastal Scarp Forests (60.4) occurring in KwaZulu-Natal can be found in Umzumbe. The Pondoland Scarp Forests (61) only occur in the Ugu district and 20% of these can be found in Umzumbe (Department of Agriculture Forestry & Fisheries).

The diversity in ecosystems supports an equal diversity in species of plants, mammals, avifauna, amphibians, reptiles, and invertebrates.

### 9.1.6 AGRICULTURE

Umzumbe municipality exhibits clear agricultural attributes, with expansive commercial crop production / sugar cane fields covering a considerable amount of the land. Furthermore, subsistence farming is practiced to a great degree in the traditional council areas. Much of the land is arable and has good agricultural potential. High potential

undeveloped agricultural land is a scarce resource that must be protected.

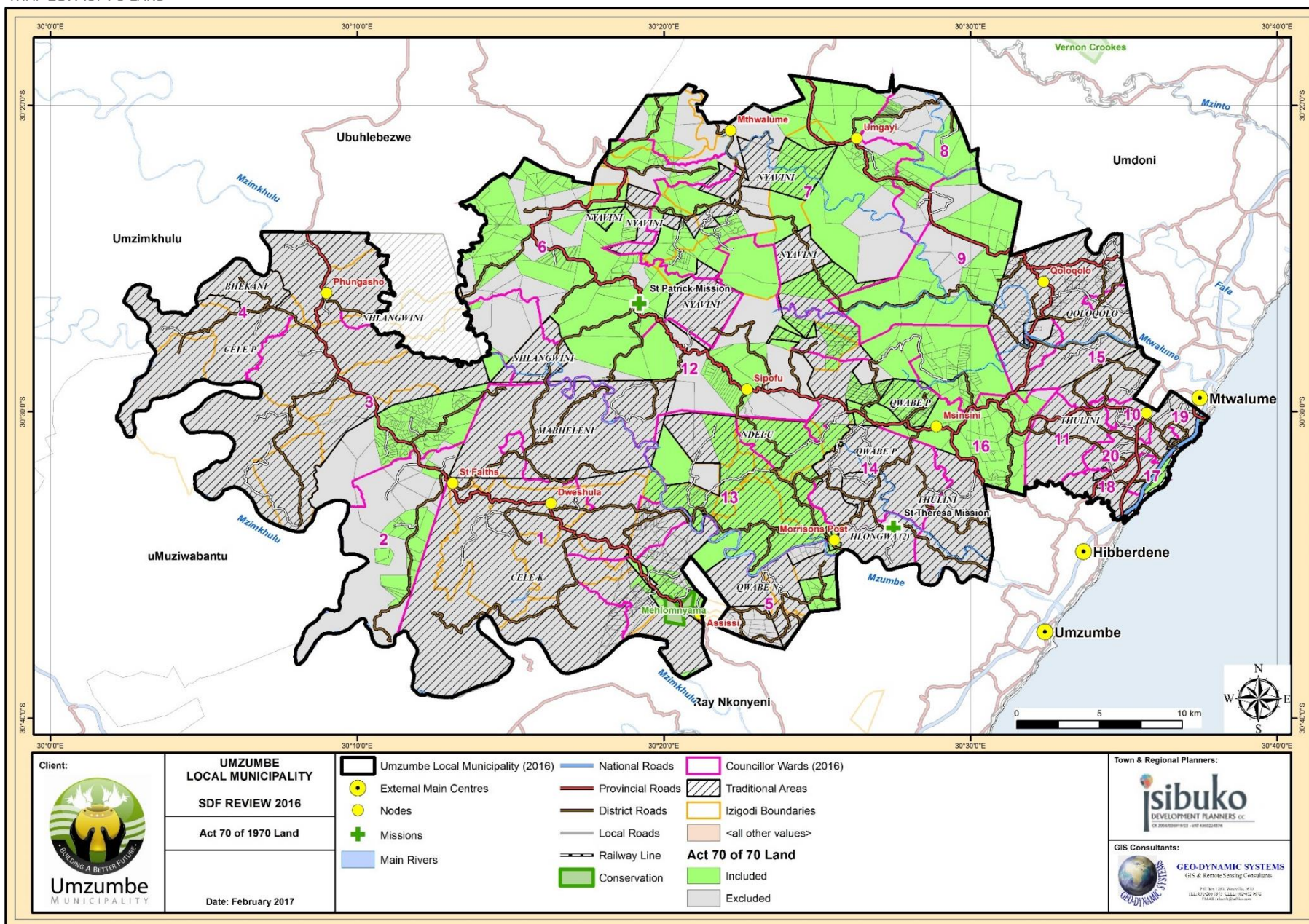
Furthermore, a large portion of Umzumbe municipality comprises of agricultural land and is subject to the provisions of the Sub-division of Agricultural Land Act (map 17), specifically 40784.86 hectares or 33.42% of the land within the municipality falls under this act (Department of Rural Development and land Affairs).

The rate at which high value agricultural land is being lost is of great concern. Studies have indicated that there has been a decline in the area of high potential land under agricultural cultivation. This is mainly due to changes in land use and an increase in productive land that has been transformed permanently.

DAFF AND DAEA embarked on an initiative to develop an Agricultural Land Zoning System for KZN (DAFF & DAEA, 2012). This initiative was undertaken to combine available data to classify a region into Agricultural Land Categories, which indicate the ability of an area to produce food under recommended management practices on a sustainable basis. Land with a high agricultural potential is regarded as a scarce non-renewable resource and the relevant authorities are very cautious and sometimes opposed to development of such land for purposes other than agricultural production. As such, land with high potential for agriculture is deemed irreplaceable and must thus be legally protected (DAFF & DAEA, 2012). Map 18 translates the spatial

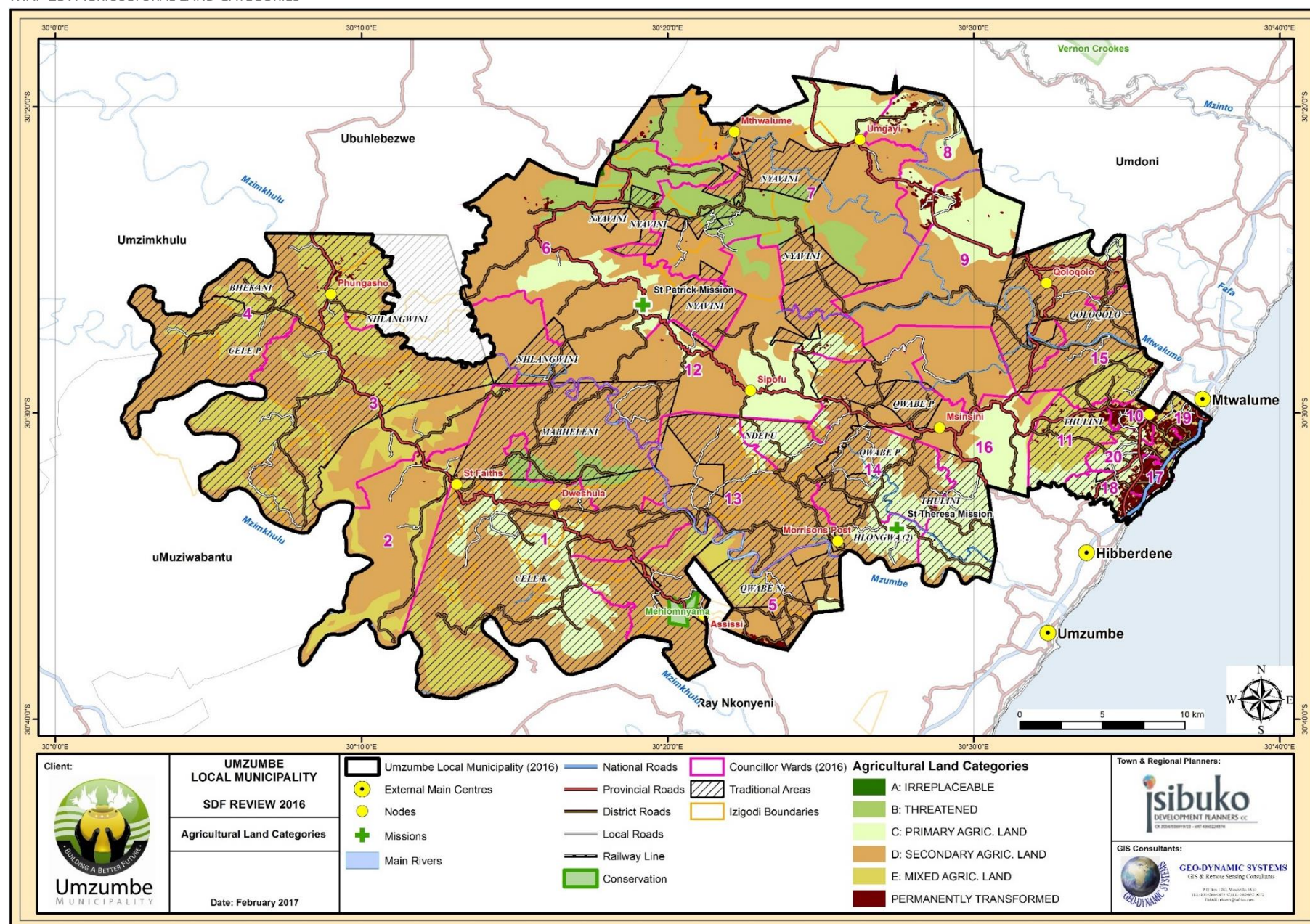


## MAP 18: ACT 70 LAND





MAP 19: AGRICULTURAL LAND CATEGORIES



implications of the new policy direction and identifies categories A and B as prohibited (limited use) and Category C is discretionary.

It is noted that the Department of Agriculture, Forestry and Fisheries has introduced the Draft Preservation and Development of Agricultural Land Framework Bill. This bill provides for agricultural regulation pertaining to subdivision and rezoning applications on high potential cropping land and on medium potential agricultural land. It presents an opportunity to repeal the Subdivision of Agricultural Land Act, Act 70 of 1970 and define new measures in the regulation of land that falls under Act 70 of 1970. Developments with regards to this bill and its possible enactment as an Act should be monitored as it may have implications for the land use regulation on land that falls under the Subdivision of Agricultural Land Act, Act 70 of 1970 and the preservation of agricultural land in general.

## 9.2 ENVIRONMENTAL CHANGE, IMPACTS AND PRIORITIES

Natural and human induced factors influence the biophysical environment and drives environmental change. These changes place pressures on the environment and create outcomes, which are not always desirable. This is why environmental pressures must be maintained within their limits to avoid sudden ecological change that can drastically reduce the flow of ecosystem services, and, thereby increase pressures on the social and economic systems. This is the basis of sustainability.

The purpose of this section is, is as follows:

- ⇒ To identify natural and human induced factors that may drive change in Umzumbe;
- ⇒ To identify likely impacts of change; and
- ⇒ To start defining criteria for desired levels of environmental quality or limits of change.

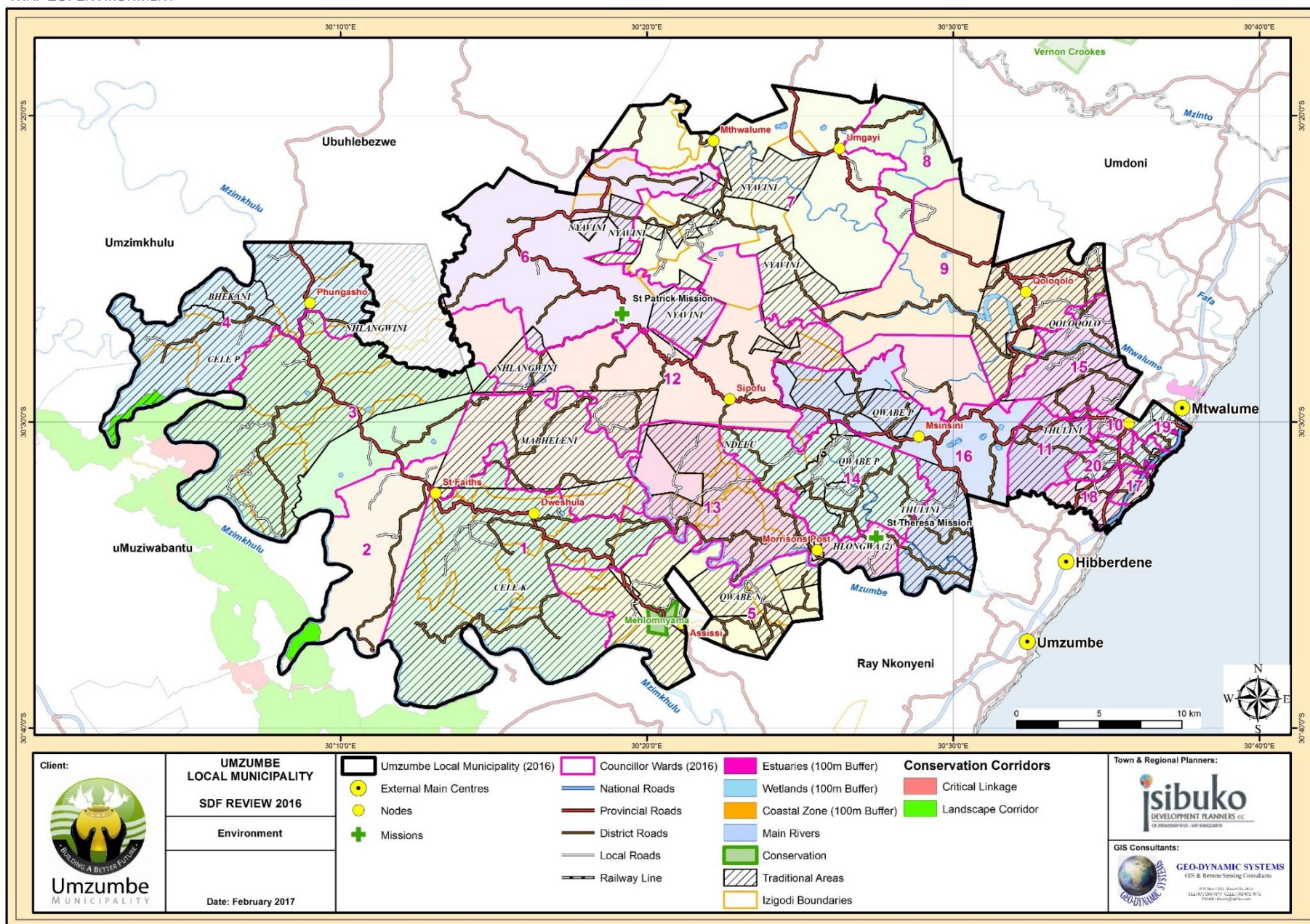
### 9.2.1 TERRESTRIAL ENVIRONMENT: LAND USE PATTERNS

Different land uses affect the condition of the land and the functioning of associated ecosystems. Map 7 illustrates the spatial distribution of the various land cover classes (Ezemvelo KZN Wildlife). There is a distinct pattern of land use activities generally concentrated in specific areas:

- ⇒ Built up dense settlement primarily occurs on the coastal strip;
- ⇒ Low density settlement is scattered across the landscape while the majority of the population congregates towards the coast;
- ⇒ Commercial sugarcane and emerging farmers prevail in the east;
- ⇒ Plantation in the north-east; and
- ⇒ Natural open space dispersed in between the above land uses.
- ⇒ Changes in land use transform and degrade natural systems and impact directly on biodiversity through habitat loss. Associated



MAP 20: ENVIRONMENT



- ⇒ human activities generate other pressures that should be maintained within limits, for example:
- ⇒ Most settlements are associated with low-lying areas, which are also high rainfall areas. It exposes them to flood risks;
- ⇒ The dense settlements on the coastal strip (Turton area) falls within the “KZN High Water Yield Zone”, placing pressures on downstream freshwater ecosystems (estuaries);
- ⇒ Livestock and grazing practices degrades vegetation, accelerate soil erosion, influence sediment yields in the catchment and affect water quality;
- ⇒ Subsistence lifestyles on marginal land place fragile ecosystems under pressure, and increase runoff due to vegetation clearing and soil compaction; and
- ⇒ Inadequate access to sanitation infrastructure affects water quality

### 9.2.2 LAND DEGRADATION

Land degradation in Umzumbe is directly related to settlement patterns (Map 21) (Ezemvelo KZN Wildlife). Factors contributing to this include:

- ⇒ Stock numbers and trampling patterns of domestic livestock;
- ⇒ Limitation of drinking points and the concentration of animals around water provision points such as springs;

- ⇒ Removal of plants for traditional medicines, domestic energy or construction purposes;
- ⇒ Incorrect veld burning techniques;
- ⇒ The spread of alien plants; and
- ⇒ The lack of institutional control.

The state of degradation in Umzumbe undermines the productivity of land and is therefore not sustainable over the long-term. Degradation affects ecosystem processes and place pressures on the livelihoods of people. Over the long-term, veld degradation may cause a decline in the nutrient status of the soils, a decline in carrying capacity, reduced areas available for crop production and grazing and inevitably less economic returns.

### 9.2.3 GEOMORPHOLOGICAL FACTORS (EROSION)

The landscape is a dynamic entity that is constantly changing due to geomorphological processes (erosion and sedimentation). The forms and features that are observed in the landscape are only “fingerprints” of formative processes. A closer look at the area shows a variety of stream valleys, channels and other smaller features that serve as indicators of specific events or processes that take place in the landscape.

As such, it is acknowledged that hydrologic processes play a very important part in shaping the landscape, and high-magnitude events







such as very intense thunderstorms or a flood-flow have the potential to alter the character of the area's terrain. If these processes are combined with the physical changes that land uses through human activity are introducing into the area the result may be undesirable over the long-term.

A characteristic of most South African soils is that they are extremely vulnerable to various forms of degradation and have low resilience (recovery potential). The soils in Umzumbe are no exception. A number of natural factors determine soil erodibility in this area, including slope, soil texture, soil structure, terrain, the presence of organic material in the soil, and vegetation cover.

Map 22 illustrates the areas in Umzumbe that are susceptible to water erosion. It is based on slope gradient and a soil erodibility index (KZN Department of Agriculture, Forestry & Fisheries).

The susceptible areas adjacent to the Mzimkhulu River (indicated as Erosion susceptibility class 7) are characterised by very steep slopes, causing severe erosion hazard or past erosion. Soils in this area may have low to very high erodibility.

The large inland area (indicated as Erosion susceptibility class 6) are also characterised by steep slopes and is therefore susceptible to water erosion. Settlements are generally not associated with very steep slopes (slope gradient 20-40%) but do prevail in areas with moderately to strongly sloping land. It induces risks of land damage from erosion.

Map 23 illustrates the areas in Umzumbe that are susceptible to wind erosion (KZN Department of Agriculture, Forestry and Fisheries). The main factors determining susceptibility to wind erosion are particle size distribution of the topsoil, wind speed, topography, soil cover, soil water content and aggregation of soil particles. Susceptibility in this dataset is primarily based on particle size distribution of the topsoil. In essence the higher the sand fractions, the more susceptible the soil is to wind erosion.

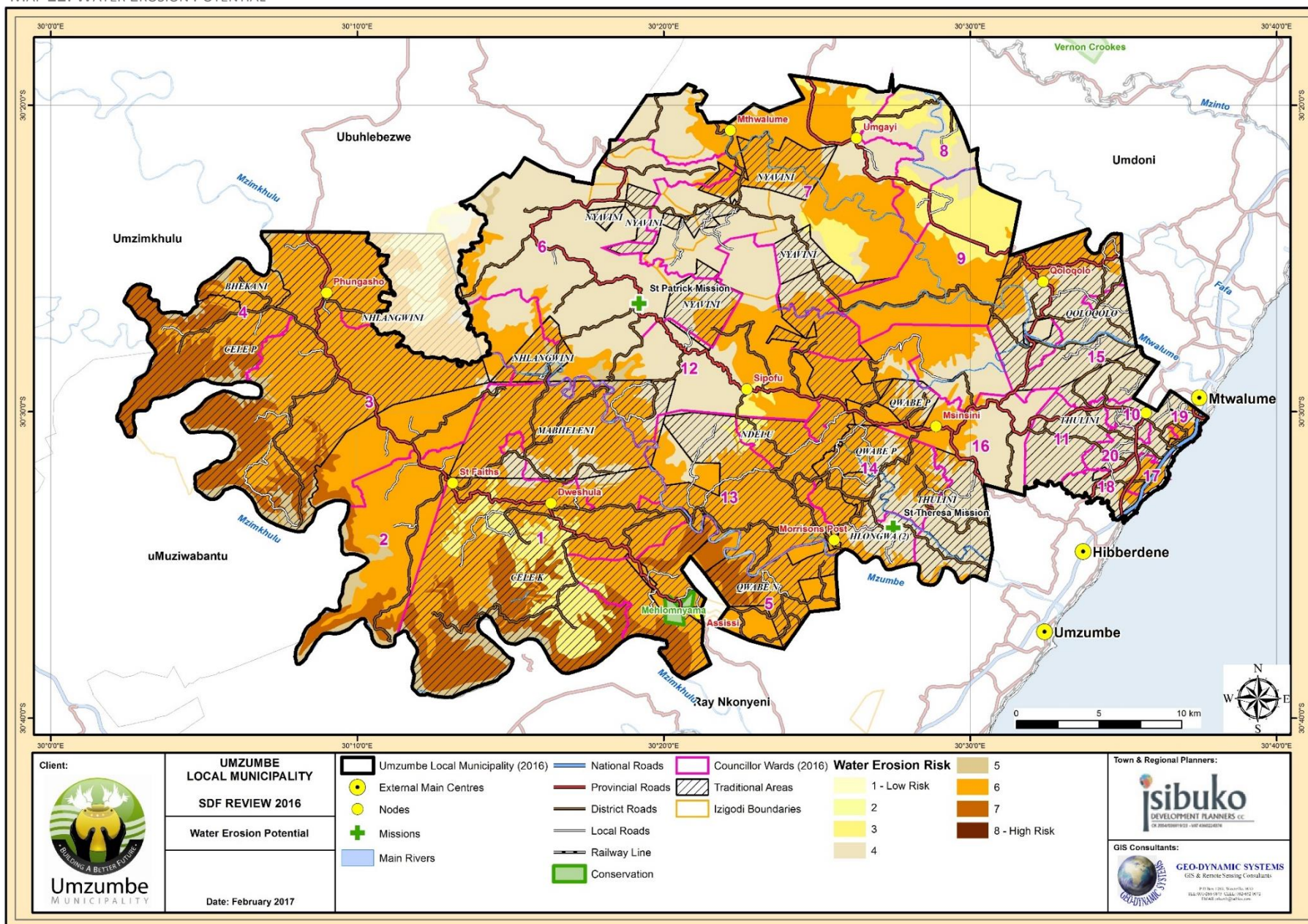
The coastal strip of Umzumbe is highly susceptible to wind erosion. Adjacent to the coastal strip, more towards the inland area, which is associated with dense settlements, the area is moderately susceptible to wind erosion.

Most areas in the interior of the municipality fall under the rubric of somewhat susceptible.

#### 9.2.4 TRANSFORMATION OF ECOSYSTEMS

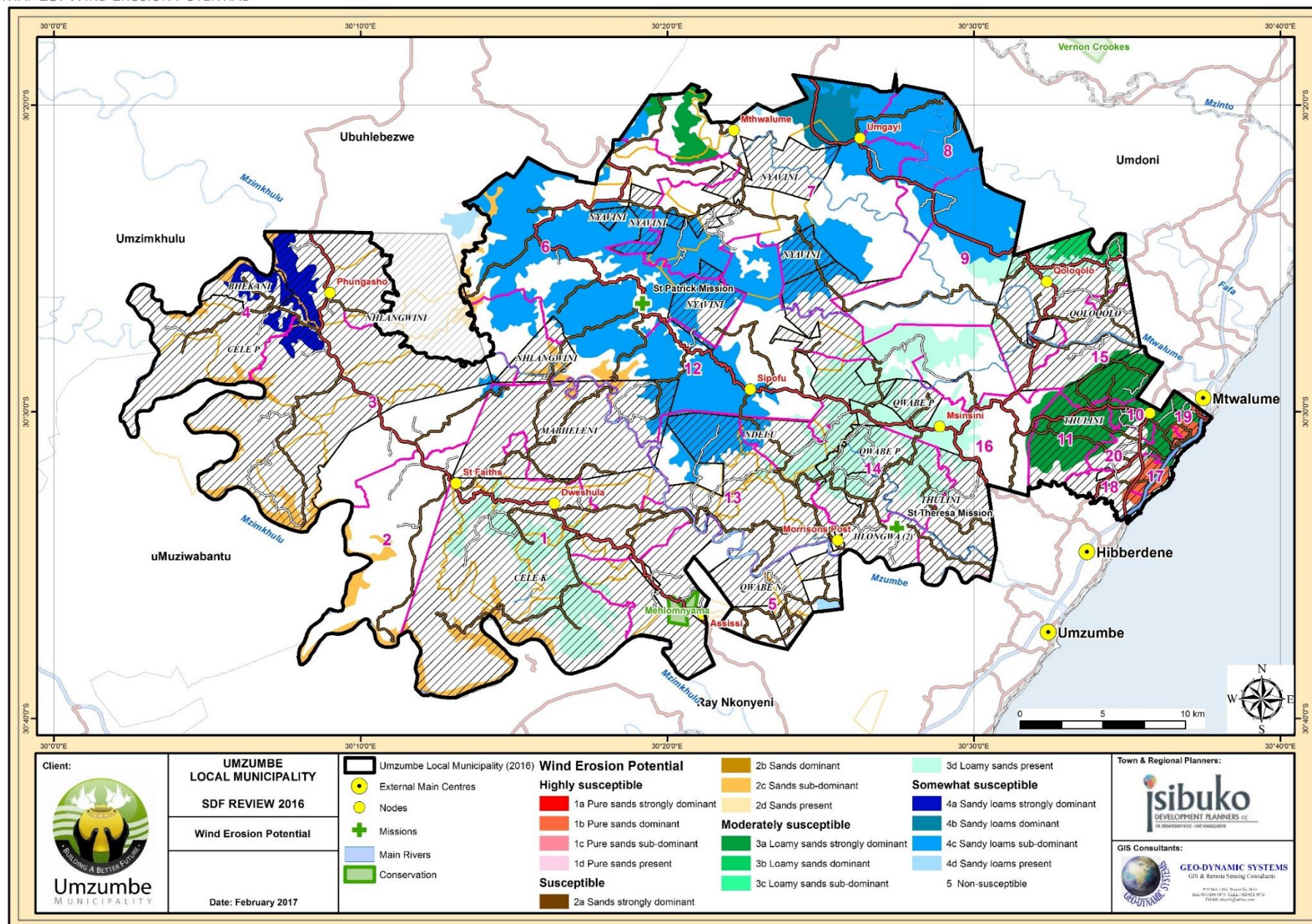
The degree to which the landscape has been transformed influences the health and status of ecosystems. The manner in which this transformation is distributed is important. Map 22 and 23 provide an indication that transformation and degradation are directly related to human settlement patterns, in that, the areas mapped as degraded and transformed are areas where settlements or higher density settlements exist. It is only areas of high altitude, which are not suitable for settlements, which remain intact.

MAP 22: WATER EROSION POTENTIAL





MAP 23: WIND EROSION POTENTIAL



Transformation reflects the impacts on biodiversity at the ecosystem level. The destruction and clearing of areas of indigenous vegetation result in habitat loss. This influences natural ecological processes and leads to species loss. The pressures from human activities influence the continuous supply of ecosystem goods and services and should be maintained within limits to avoid outcomes that may affect the livelihoods of people.

#### 9.2.5 CONSERVATION AND CRITICAL BIODIVERSITY AREAS

The municipality has one formally proclaimed protected area viz. Mehlomnyama Nature Reserve. This area is protected in terms of governing legislation, including the KwaZulu-Natal Nature Conservation Management Act (No.9 of 1997) or the National Environmental Management: Protected Areas Act (Act No. 57 of 2003).

Further to the protected areas, the municipality does have other areas that need to be conserved. These include areas defined by Ezemvelo KZN Wildlife as part of the biodiversity network identification process. This is to ensure that terrestrial biodiversity resources remain available to the local inhabitants and future generations. According to the data from Ezemvelo KZN Wildlife, Umzumbe is covered by Critical Biodiversity Areas (CBAs) which are classified as either CBA Irreplaceable or CBA Optimal. Map 24 indicates that the former is mostly found on the south-eastern parts of the municipality while patches of the latter are found throughout the municipality. The

guidelines for these areas are provided in the Ugu Biodiversity Sector Plan and are meant to inform land use planning, decision making and development authorizations.

#### 9.2.6 INLAND AQUATIC ECOSYSTEMS

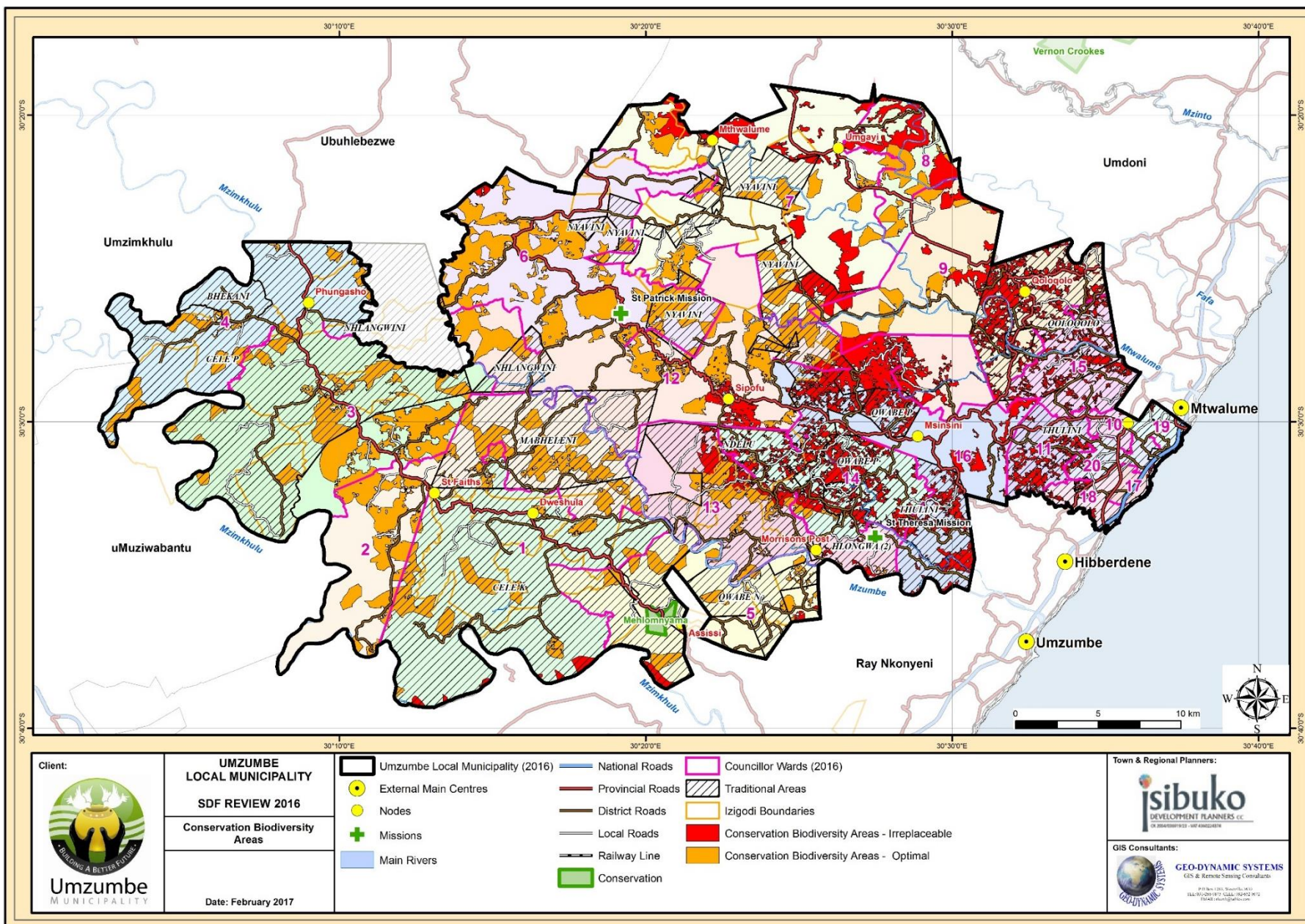
Freshwater ecosystems refer to all inland water bodies whether fresh or saline, including rivers, lakes, wetlands, sub-surface waters and estuaries. Inland waters are a resource under threat in South Africa.

All the rivers have been identified as national priorities for conserving South Africa's freshwater ecosystems and supporting sustainable use of water resources. These priorities are known as Freshwater Ecosystem Priority Areas or FEPAs and they were identified for each Water Management Area in the country based on a range of criteria dealing with the maintenance of key ecological processes and the conservation of ecosystem types and species associated with rivers, wetlands and estuaries.

The Mzimkhulu River is classified as a "free-flowing flagship river" which means it flows undisturbed from its source to the confluence with a larger river or to the sea. It is identified as one of the 19 national flagship rivers and should receive top priority for retaining their free-flowing character. The shading of the sub-quaternary catchment indicates that the surrounding land and smaller stream network need to be managed in a way that maintains the good condition of the river reach.



MAP 24: CRITICAL BIODIVERSITY AREAS



The Mhlabatshane River is classified as a “free-flowing river” – a river without dams and which flows undisturbed from its source to the confluence with a larger river or to the sea. The shading of the sub-quaternary catchment denoting “upstream management area” indicates that human activities need to be managed to prevent degradation of downstream river FEPAs and Fish Support Areas.

The other rivers in the area are “non-free flowing rivers”. Although natural water flow has been influenced in these rivers, the darker green shading of the sub-quaternary catchment indicates that the surrounding land need to be managed to avoid further disruption of ecological functioning which may have serious knock-on effects for the downstream river reaches and users.

There are four estuaries that depend directly on the primary drainage systems, and which have been identified as priority estuaries in KZN (National Department of Environmental Affairs and Tourism). These estuaries are:

- ⇒ Mnamfu;
- ⇒ KwaMakosi;
- ⇒ Mfazazana; and
- ⇒ Mhlungwa.

Land use activities in the catchments must therefore be carefully managed to maintain the water requirements of these downstream ecosystems.

There are 169 wetlands in Umzumbe municipality, covering 681.8 hectares (National Freshwater Ecosystems Priority Areas). Wetlands are associated with low-lying and higher rainfall areas. These same areas are generally preferred for development. However, wetlands and their ecological linkages must be protected from adverse impacts and a “no-net loss policy” applies in KwaZulu-Natal. In other words, all wetlands must be protected from development to safeguard the functions they provide in terms of water supply, water quality and biodiversity habitat.

#### 9.2.7 AIR

The quality of the air in Umzumbe is good. This can be ascribed to the rural nature of the area, with low densities of motor vehicles and no heavy industries that can contribute to a marked decrease in air quality. Air pollution is most likely to be associated with the burning of sugar cane, fuel wood and fugitive dust emissions generated from unpaved roads.

#### 9.2.8 GOVERNANCE

The prevailing environmental governance system in Umzumbe also has potential to drive change and create undesirable outcomes for people and the environment.

Environmental governance is defined as “the exercising of authority over the use and management of natural resources, and the environment. It is essentially about making decisions and about who makes decisions. It includes rules, processes and behaviours that affect the manner in which decisions are made. These decisions ultimately determine whether the environment is harmed or improved” (DAERD, 2010).

The following governance issues were identified as key drivers of change in Umzumbe:

- ⇒ Poverty levels: Poor people have few choices. They tend to be more reliant on natural resources to meet their livelihood needs. The livelihood decisions they make may cause environmental degradation, which, over the longer term, may increase their vulnerability.
- ⇒ Property rights and tenure: The land tenure system in this area (Ingonyama Trust Land) presents challenges in respect of land development decisions. If the respective authority lacks the ability to enforce good environmental decisions, it may exacerbate land degradation and a general decline in environmental quality.
- ⇒ Environmental accountability in the Umzumbe municipality: The extent to which the environment is considered in local planning and day-to-day decision-making is influenced by the presence of an environmental officer in the staff complement. Umzumbe does not

have an adequately skilled environmental person; the District Municipality has taken responsibility for environmental management issues in Umzumbe. A commitment to environmental management is evident in the IDP, which addresses environmental issues but implementation is weak.

- ⇒ Cooperative environmental government: The sensitivity of the area in respect of biodiversity priorities, require decisions about potential trade-offs that may have adverse effects on the environment. Collaboration and collective decisions are also needed to address environmental challenges in the area.

#### 9.2.9 FUTURE SCENARIOS: RISK AND CHANGE

Sustainable development challenges are changing because risks are increasing in social, economic and environmental systems. Whether perceived or real, the notion that risks to development are increasing requires specific policy responses.

#### 9.2.10 EXTREME WEATHER RISKS

Great variability in the features that influences the region’s climate frequently produces extreme weather conditions in Umzumbe. Extreme weather conditions such as heavy storms cause coastal erosion and associated property and infrastructure damage on the region’s coastline. Furthermore, they cause damage traditional housing, leave people homeless, create health concerns and require emergency assistance. They also also impact negatively on biodiversity. Some of the

prioritised weather related risks, as identified in the municipality's Disaster Management Plan, are as follows:

- ⇒ Drought (water shortage/pollution)
- ⇒ Thunderstorm and Lightning (all wards)
- ⇒ Strong winds and Dust (all wards)
- ⇒ Floods (mainly in cluster A and B)
- ⇒ Soil Erosion (mainly in cluster A, wards 15, 17, 18, 19)

#### 9.2.11 CLIMATE CHANGE PROJECTIONS

Changes in the variability or the average state of the atmosphere over time are generally accepted as part of the natural cycle of climate change, but there is a large portion of the scientific community who believe that global climate variability has accelerated beyond natural cycles due to human activities. Climate change in this context refers to changes in the modern climate, including the rise in average temperatures known as global warming.

Climate change projections indicate that extreme weather events such as floods and droughts are likely to become more frequent and intense, and that poor and marginalised groups will be most vulnerable to the risks presented by change. The high degree of natural variability in climate, and regular climate extreme events are already affecting the inhabitants of Umzumbe negatively. This makes the area highly sensitive and vulnerable to climate change.

The high levels and densities of poverty in Umzumbe in combination with the existing levels of degradation and the flood hazard record constitute a high level of sensitivity and vulnerability for the resource-poor people in the area.

#### 9.2.12 PROVINCIAL SCENARIOS

In order to demonstrate the potential vulnerability of a future Umzumbe, we can draw on work undertaken by the Natural Resources Section of the KwaZulu-Natal Department of Agriculture, Environmental Affairs and Rural Development (DAEARD) in 2009. They investigated the potential implications of a warmer province in the future and used plausible incremental scenarios, which are very useful in determining the sensitivity of bio-climatic zones. Although there are limitations to these scenarios, it demonstrates that, under warming conditions, a shift in the bio-climatic zones in the province will occur. It will have marked implications for future agricultural production and food security. The DAERD also modelled basic “food security crops” that are currently being planted in the rural areas for subsistence farming. The results show that, with an increase of 1°C in temperature, a general decrease in the average yield of crops such as cabbage and dryland maize may be experienced by communities on the south coast. Communities in Umzumbe will be highly vulnerable if such changes do take place.



## 10 SWOT ANALYSIS

TABLE 21: SWOT ANALYSIS

| STRENGTHS  | WEAKNESSES  |
|--|---|
| <b>Spatial</b> <ul style="list-style-type: none"> <li>Coastal location</li> <li>Majority of the settlements are clustered along the main roads</li> <li>Relatively well-established regional road network / good access to transport infrastructure</li> <li>Existence of Turton and other small service centres</li> <li>Existence of land use scheme</li> </ul><br><b>Economy</b> <ul style="list-style-type: none"> <li>Existence of coastline</li> </ul><br><b>Environment</b> <ul style="list-style-type: none"> <li>Rich and valuable biodiversity.</li> <li>Availability of agricultural land.</li> <li>Availability of water resources in the landscape</li> <li>Visually attractive landscape</li> <li>Rich heritage</li> </ul> | <b>Spatial</b> <ul style="list-style-type: none"> <li>Unavailability of a town / urban centre within the municipality</li> <li>Poor quality of access roads.</li> <li>Scattered settlement pattern.</li> <li>Poor north-south linkages in the inland part of Umzumbe.</li> <li>Lack of spatial structure with no central point that serves as a centre for the whole area.</li> </ul><br><b>Economy</b> <ul style="list-style-type: none"> <li>Lack of employment opportunities.</li> <li>Infrastructure backlogs – water, sanitation, electricity, roads</li> </ul><br><b>Environment</b> <ul style="list-style-type: none"> <li>Lack of natural resource management programs</li> <li>Rugged terrain / topography</li> <li>Soil erosion and environmental degradation.</li> <li>Susceptibility to water and wind erosion</li> <li>High degradation levels/productivity decline</li> </ul> |
| OPPORTUNITIES  | THREATS   |
| <b>Spatial</b> <ul style="list-style-type: none"> <li>Provincial development corridors traverse Umzumbe.</li> <li>Formalisation / township establishment in Turton</li> <li>Turton Beach development</li> </ul>  | <b>Spatial</b> <ul style="list-style-type: none"> <li>Poor regional integration into the regional road network.</li> <li>Municipal boundaries and structure.</li> <li>Unresolved land restitution claims</li> </ul>   |

- Development of commercial activities

#### **Economy**

- South coast tourism region and the significance of coastal tourism in the province and the district.
- Cultural, heritage and nature-based tourism
- Wildlife and adventure tourism
- Land reform – development of agriculture

#### **Environment**

- Optimal use of natural resources.
- Coastal management programme.
- Catchment management programme.
- National and provincial rural development programs.
- High rainfall areas to support agricultural development

- Settlement sprawl / lack of spatial structure
- Illegal development / development on unsuitable land
- Unknown land ownership

#### **Economy**

- Declining population / population out-migration
- Global economic climate

#### **Environment**

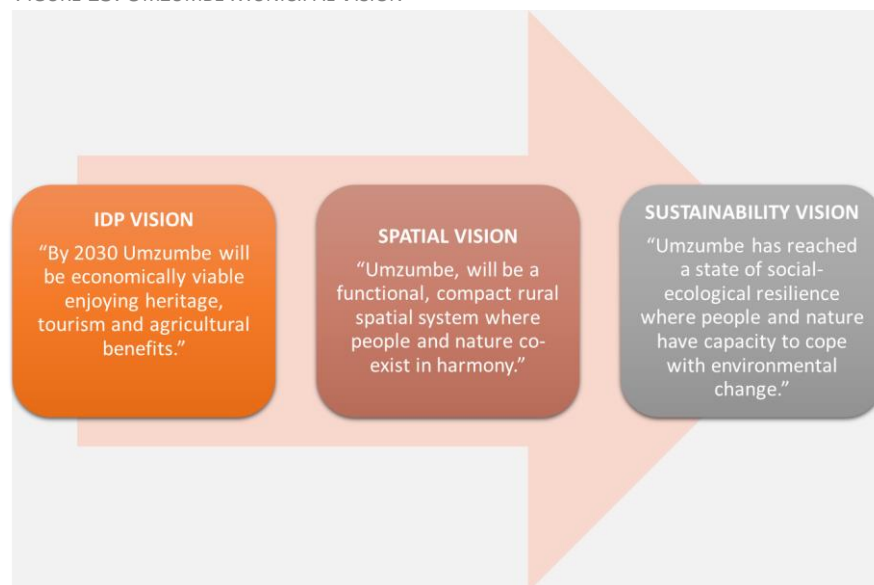
- Climate change and associated natural catastrophes
- Lack of catchment management programs.
- Erosion and sedimentation risks

## 11 SPATIAL DEVELOPMENT CONCEPT AND STRATEGY

The Umzumbe Municipality SDF gives effect to the long-term strategic intent and short to medium development program as outlined in the IDP. It presents the desired future spatial situation and outlined strategic interventions for its attainment.

### 11.1 MUNICIPAL SPATIAL DEVELOPMENT VISION

FIGURE 13: UMZUMBE MUNICIPAL VISION



The Umzumbe LM development vision was developed as part of the Integrated Development Planning process, in line with the requirements of the Municipal Systems Act. The vision commits the municipality to champion economic development within the key

sectors that characterise the Umzumbe municipal area. It also entrusts the municipality with the responsibility of delivering basic affordable services and the protection of the natural environment. The attainment of this vision requires the municipality to facilitate the development of a spatial system that:

- ⇒ Is sustainable from a social, economic, financial, physical and institutional perspective;
- ⇒ Provides for an efficient movement system and embraces frugality in the use of scarce resources;
- ⇒ Promotes integrated development; and
- ⇒ Promotes equitable access to development opportunities.

Such a spatial system will create an environment conducive to economic development and growth. It will promote and contribute to the achievement of the development objectives as outlined in the IDP.

The desired spatial form is in effect, linked to the municipality's vision and needs to consider various land uses within different nodes, as well as the impact of land uses on natural features and environmental services of the municipality.

The departure point for Umzumbe's spatial vision is sustainability - a situation where the people, economy and environment of Umzumbe thrive. *Sustainability* defined within this context has three dimensions.

Firstly, ecological sustainability which recognises that the maintenance of healthy ecosystems and natural resources are preconditions for human well-being and that there are limits to the goods and services which they can provide. It implies that the activities in the area must seek to grow natural capital, not erode capital slowly.

Secondly, Social sustainability implies equity of access to key services (health, education, transport, housing, recreation and employment) for the communities that reside in the area, while equity between generations must also be secured. Future generations must not be disadvantaged by current actions.

Thirdly, economic sustainability recognises that the available resources can be used frugally to develop the local economy on a sustainable basis. The resources should be used in a responsible manner and provide long-term benefits.

*Linking social, economic and ecological sustainability* implies that the interactions between society, nature, the economy and the implications thereof must be better understood and managed if sustainability is to be advanced.

## 11.2 SPATIAL PLANNING AND DEVELOPMENT OBJECTIVES

The primary aim of the SDF is to facilitate the transformation of Umzumbe into an integrated and sustainable spatial system. The SDF will influence directly the substantive outcomes of planning decisions towards the attainment of the following strategic objectives:

- ⇒ To give a spatial expression to the development vision, strategy and multi-sectoral projects as outlined in the IDP.
- ⇒ To promote the spatial integration of social, economic and physical aspects of development.
- ⇒ To Identify areas where development should or should not go.
- ⇒ To create a spatial environment that promotes and facilitates economic development and growth.
- ⇒ To facilitate the development of sustainable human settlements across the continuum and in line with national policy directives.
- ⇒ To promote sustainable development and enhance the quality of the natural environment.
- ⇒ To facilitate sustainable and efficient utilisation of land.
- ⇒ To guide private and public investment to the most appropriate areas in support of the municipal spatial development vision;
- ⇒ To provide a visual representation of the desired spatial form of the Municipality.
- ⇒ To provide a framework for detailed and area specific spatial planning, and formulation of a wall-to-wall scheme.

Moreover, the SDF seeks to influence the substantive outcomes of planning decisions at different levels and to achieve planning outcomes that:



- ⇒ facilitates correction of spatial distortions of the apartheid past;
- ⇒ channel resources to areas of greatest need and development potential;
- ⇒ take into account the fiscal, institutional and administrative capacities of role players, the needs of communities and the environment;
- ⇒ stimulate economic development opportunities in rural areas;
- ⇒ protects and enhances the quality of both the physical and natural environments; and
- ⇒ promote an inherent value of the natural and built environment

### 11.3 SPATIAL PLANNING CONCEPTS

The principles and norms collectively form a vision for land use and planning in Umzumbe. They constitute a single point of reference, and an overarching coherent set of policy guides to direct and steer land development, planning and decision-making in land use so that outcomes thereof are consistent with the development objectives as outlined in the IDP.

#### 11.3.1 AREA / WARD BASED MANAGEMENT

The Area Based Management approach focuses on community facilitation, increasing participation, conflict resolution, community advocacy, the monitoring and speeding of services delivery. The ABM

does not dictate to departments with regard to the implementation of their projects but can advise against fragmented service delivery. It can share information with strategic business units and community at large. It will align stakeholders' plans with those of the council through Community Based Planning methodology and other methodologies. The advantages of the approach are as follows:

- ⇒ integrated service delivery and effective coordination of development initiatives;
- ⇒ bringing local government even closer to communities and streamlines feed-back to communities;
- ⇒ one stop shop to services, payments and enquiries within an easy reach for communities within the cluster;
- ⇒ encourages community participation and conflict resolution;
- ⇒ equitable delivery of services and application of level of service based on the character of the area; and it is not restricted to particular functions

#### 11.3.2 BIODIVERSITY CORRIDORS AND CONSERVATION

The spatial distribution of environmental bio-diversity areas of significance is considered vital to provide the spatial framework for future spatial development planning. Those areas where development needs to be avoided or at best, carefully managed, is of particular importance. This spatial structuring principle focuses on conserving the

core biodiversity areas (wetlands, flood plains, steep slopes and special sensitive bio-diversity areas) where no development should take place and emphasises the importance of the biodiversity corridors (buffer areas), which should link those core areas together. These assets perform a substantial and significant role in conserving biodiversity as well protecting the quality of life of the residents of Umzumbe.

### 11.3.3 DEVELOPMENT CORRIDORS

The logical focus areas of an ordered strategy for rural development is through a system of regional and local transport routes, which link a number of areas. These routes should be seen as activity and investment lines. The structure they give to the area is articulated in the form of movement patterns and systematic distribution of land uses in space.

However, not all regional routes are the same in terms of the intensity of use and ability to attract investment, services, economic activities and settlement. Generally, larger routes linking generators of movement and investment have a greater generative capacity than smaller routes. As such, regional facilities and services should gravitate towards these areas, while smaller facilities requiring smaller thresholds should be located along smaller routes. This has an impact of reducing spatial marginalization, increasing equitable access to all level of services and promoting investment. The location of facilities along major routes recognizes the importance of choice to the rural

communities with respect to services such as education, health and welfare facilities.

### 11.3.4 SUSTAINABLE HUMAN SETTLEMENT & SETTLEMENT WEBS

The scattered nature of rural settlements within Umzumbe, which houses the majority of the population, is not sustainable and renders service delivery and development ineffective. The highest settlement densities are found along main transport routes where a web of local access roads and public facilities holds settlements together. At a regional level, they should be knit together by a system of regional access routes. However, settlements are not static and respond to change, thus they are continuously transforming. The key challenge is to turn these settlements into sustainable human settlements, which has certain implications for detailed planning and development of these settlements:

- ⇒ Centrally located settlements should provide improved access to higher order public facilities, intensive agriculture and other services.
- ⇒ They should generate a wide range of opportunities. Sparsely populated settlements are opportunity areas for agricultural development such as crop production and livestock farming.

- ⇒ A convenient settlement improves the level of choice, encourages creativity and investment while a less convenient settlement imposes a lifestyle on people and results in unnecessary expenses.
- ⇒ Settlements should be equitable in the sense that they should provide a reasonable access to opportunities and facilities to all. It is neither possible nor desirable for settlements to be homogenous hence an emphasis on choice.

#### 11.3.5 SERVICE CENTRES / DEVELOPMENT NODES

The ordering and location of services and facilities, in a manner that promotes accessibility and efficiency in service delivery, is required. This is critical for the performance of the municipal area as a whole and land use integration. As such, the clustering of various activities at appropriate and accessible nodal locations provides the municipality with a network/system of opportunity centres. Some of these nodes have benefited from public and private sector investment in services and infrastructure, which needs to be managed and maintained. Others are located in previously disadvantaged areas, which have suffered from institutionalised neglect. Although the nodes have contrasting characters, profiles and management issues, they cumulatively accommodate the majority of economic activities, employment prospects, an existing/growing residential stock, and access to community facilities and services. As such, the strength and feasibility of the nodal points is directly linked to the functioning and health of

their catchment areas. The concentration of activities in and around these areas will stimulate further development of higher order activities.

#### 11.3.6 COMPACT DEVELOPMENT

More compact settlements areas can be achieved with the maintenance of a settlement edge in order to discourage development sprawling into agricultural land and other natural resource areas. The settlement edge can be used to encourage more efficient use of underutilised land existing in a settlement, through development of vacant land or the re-use of 'brownfield' degraded land areas. It can also be used to manage the investment and characteristics of infrastructure levels according to the needs of communities and economic activities located within settlement edges or outside settlement edges. This requires detailed planning at a settlement level and could best be sustained through the coding or integration of the existing community rules into a land use management system. Certainly, the level of compaction will take into account the nature and character of each settlement, as well as the prevailing spatial development trends and patterns.

#### 11.3.7 PROTECTION OF HIGH VALUE AGRICULTURAL LAND

The need to protect high potential agricultural land is a national priority. This is in light of the fact that high potential agricultural land has become a scarce and an ever-dwindling resource. Encroachment of

development onto agricultural land poses a number of challenges, namely:

- ⇒ low density sprawl which encourages development of inefficient spatial systems;
- ⇒ declining performance and contribution of agriculture into the district and provincial economy;
- ⇒ reduction of land available for food production and against the increasing problem of food shortages and increase in food prices;
- ⇒ need to target high production potential land for the settlement of small and emerging farmers in terms of the land redistribution program.

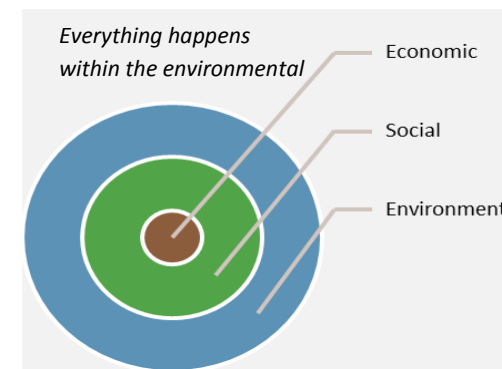
Sub-division and change of land use on agricultural land is governed in terms of the Sub-division of Agricultural Land Act (SALA), Act No. 70 of 1970, and is administered nationally. At present, there is no coherent provincial policy that guides assessment of Act 70 of 1970 applications. The imminent promulgation of the Preservation and Development of Agricultural Land Framework as an Act would be able to provide such guidance. In the interim, it is critically important for the Municipality to include guidelines to manage development on agricultural land.

#### 11.4 SPATIAL PLANNING PRINCIPLES

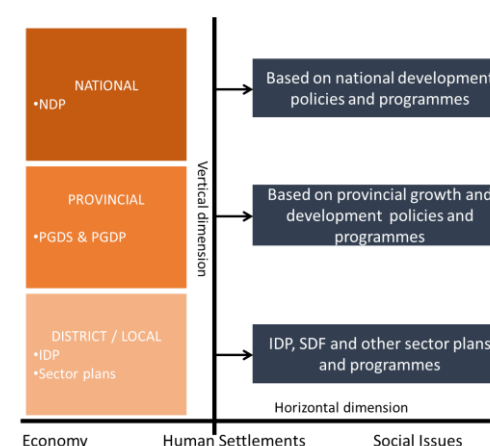
The attainment of the vision and objectives alluded to above requires the Municipality to facilitate the development of a spatial system that

is underpinned by various normative principles. The Spatial Planning and Land Use Management Act, Act 16 of 2013 (SPLUMA) is the foremost spatial planning legislation in the country. Hence, it is pivotal that all spatial plans in the republic adhere to the principles advocated by SPLUMA. The guiding principles can summarised as follows:

**Spatial sustainability:** the principle of spatial sustainability requires sustainable management and use of the resources making up the natural and built environment.



**Good administration:** this principle suggests the adoption of an integrated approach in spatial planning and land development, particularly by all spheres of government.

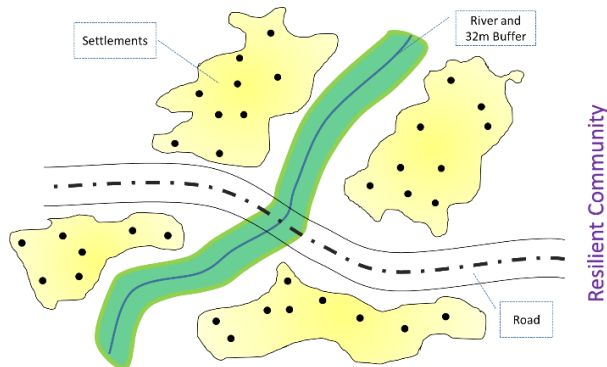


**Spatial justice:** the principle of spatial

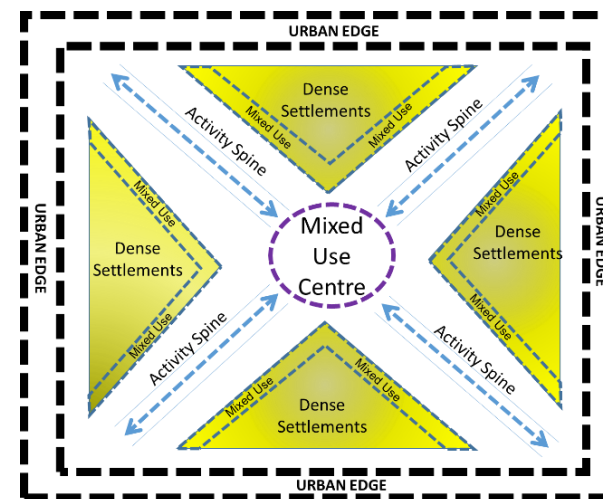


justice aims to redress the spatial imbalances of the past through improved access to land and efficient use of land.

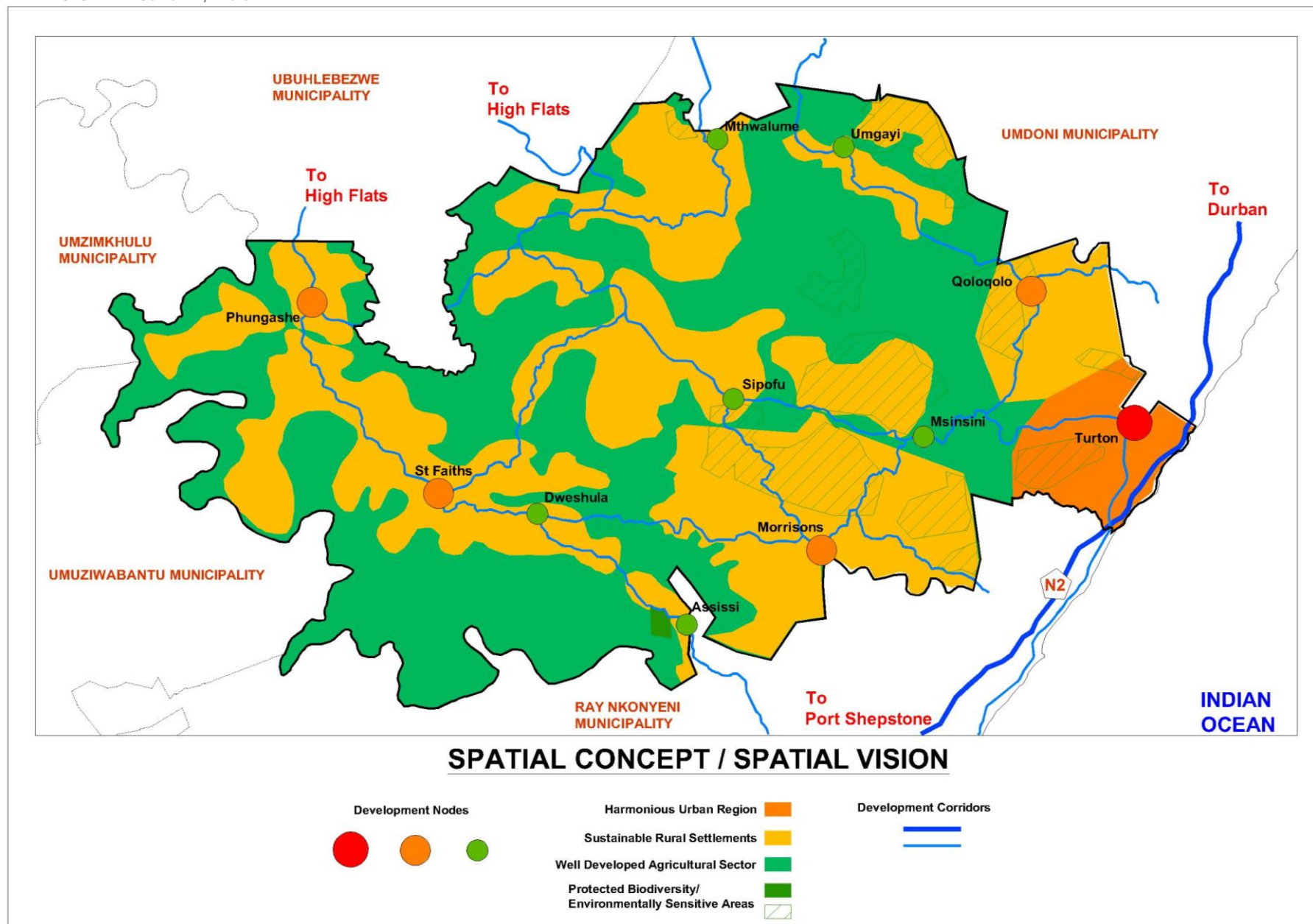
**Spatial resilience:** the principle of spatial resilience advocates for the formulation of spatial plans that will help ensure the creation of sustainable livelihoods, particularly in communities highly vulnerable to climate change and concomitant natural calamities.



**Efficiency:** the principle of efficiency advocates for frugality in the use of resources such as land and optimal use of existing infrastructure.



MAP 25: SPATIAL CONCEPT / VISION



## 12 SPATIAL DEVELOPMENT FRAMEWORK

FIGURE 14: STRATEGIC FOCUS AREAS / SPATIAL STRATEGIES



Eight key spatial strategies have been identified to assist Umzumbe achieve its spatial vision. These strategies are indicated in the figure below and the intent and proposition of each is outlined in the following sections:

### 12.1 AREA / WARD BASED MANAGEMENT SYSTEM

The Area Based Management (ABM) approach involves the grouping of municipal wards into clusters. It takes into account development trends and patterns, functional linkages and settlement pattern. Within Umzumbe, five proposed clusters of municipal wards (ward clusters) have been identified and are discussed in the following sections (refer to Map 26).

#### 12.1.1 CLUSTER A

Cluster A is the smallest of these five clusters in geographic size, however it is the second largest in terms of population size and the largest in terms of the number of wards it encompasses. It comprises of ward 10, 11, 17, 18, 19 and 20. All of these wards fall within the Thulini Traditional Council area. Three major corridors, that is the N2 National/Provincial Corridor, R102 Tourism Corridor and P73 development corridor run through the area making it the most accessible and strategically located part of Umzumbe Municipality. Although, the majority of the land within the cluster belongs to Ingonyama Trust, the area has huge potential for urban development and mixed land use development in Turton. At present, Turton serves as the primary administrative centre for Umzumbe. Critical spatial planning interventions in this cluster include:

- ⇒ Developing strategic partnership between the ITB, the affected traditional councils and the municipality.
- ⇒ Preparation of an Area Based Plan (ABP) for the area.
- ⇒ Preparation of a settlement plan or detailed layout plans for priority areas to be identified as part of the ABP.
- ⇒ Formalisation of the Turton area.
- ⇒ Implementation of the Turton Beach Development Framework.

- ⇒ Development of integrated sustainable human settlements.
- ⇒ Implementation of the land use scheme to guide development and land allocation in the area.

#### 12.1.2 CLUSTER B

Cluster B incorporates municipal wards 5, 13, 14 and 16. Traditional Councils partially covered by this cluster are Ndelu, Thulini, Hlongwa, Qwabe, Mabheleni and Cele K. The cluster is dominated by scattered low-density rural settlements with some denser settlements occurring along the main roads. The cluster is traversed by the P68 Primary Development Corridor on the western portion and the P73 Secondary Corridor on the eastern portion. The roads linking Morrison's Post with Msinsini, KwaDweshula and Sipofu are some of the main collector/distributor roads through the cluster. These roads also link the two corridors alluded to above, ensuring linkages between the eastern and western parts of the cluster. Morrison's Post is the most central point and has potential to develop as a service node/centre for the cluster, with areas such as Assissi and Msinsini playing a supportive role. Critical spatial planning interventions for this cluster should focus on the transformation of the existing rural settlements into sustainable human settlement taking into account the character and location of different settlements. This includes ensuring that settlement occurs in suitable locations, protection and development of good agricultural land and improving road linkages between settlements.

#### 12.1.3 CLUSTER C

Cluster C comprises of wards 8, 9 and 15 situated on the western parts of the municipality and includes the Qoloqolo Traditional Council area. Settlements in this cluster are mainly concentrated along the P254 and P75 development corridors and within the Qoloqolo Traditional Council. The P254 links Umgayi in the north, with Qoloqolo and Msinsini nodes. Umgayi is separated from the rest of the area by agricultural land, and is generally isolated from major settlements in the south. This area should be kept as a low-density settlement with a strong agricultural focus with Umgayi being a smaller rural node and Qoloqolo accommodating more mixed land use development. These may include limited commercial, transport and public facilities targeting the local community.

The southern parts of the cluster, situated in ward 9 should be considered for settlement development with medium densities. Particular focus should be paid to the area around Qoloqolo Node as a means to create sufficient thresholds for public facilities.

#### 12.1.4 CLUSTER D

Cluster D is the largest cluster in terms of the number of households it encompasses. It incorporates municipal wards located mainly around the P68, ranging from Assissi on the south-west to Phungashe on the north-west. These are ward 1, 2, 3 and 4. It includes bands of settlements which have developed around the P68 Primary



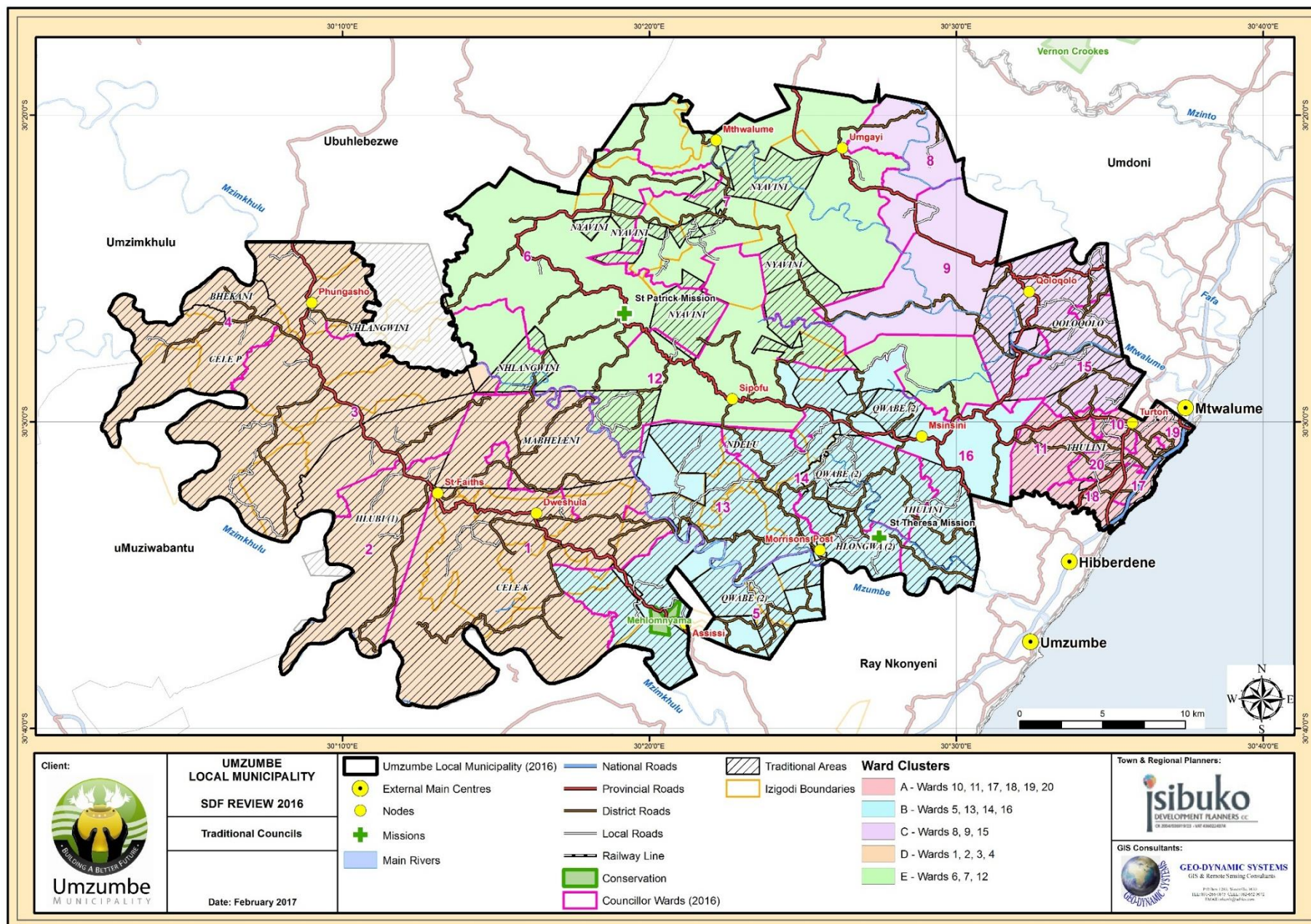
Development Corridor and along some feeder district roads, which makes the P68 a critical structuring element in the development of this cluster. The nodes of Dweshula, St Faiths and Phungashe are also critical cogs in the development of this corridor and the cluster as a whole. Development in this cluster should continue to be clustered along the P68 corridor in order to prevent lateral expansion of settlements and ensure compact development. It should be consistent with the proposals relating to P68 corridor.

The development of social and economic facilities should be driven towards the nodes, particularly Phungashe and St Faiths. Phungashe in particular provides an opportunity for the development of a rural service centre with a mixture of public facilities, commercial outlets and recreational facilities. Areas around Phungashe have a strong functional linkage with Highflats that is identified as a secondary node in Ubuhlebezwe Municipality SDF. Settlement plans focusing mainly in targeted areas should be created.

Vacant undeveloped land also accounts for a significant share of land within this cluster. This mostly includes topographically challenged land, characterised by steep hills, valleys, ridges and canyons on western boundary, where Umzimkhulu River serves as the municipal border. Settlements in this region should be discouraged.

#### 12.1.5 CLUSTER E

Cluster E is the second largest Cluster in terms of geographic size, but the second lowest in terms population size. It covers wards 6, 7 and 12, which includes various segments of the Nyavini Traditional Council area. The main movement route in the cluster is the P73, facilitating extra and intra-municipal access to settlements. The Cluster is characterised by more agricultural attributes, in comparison to the other clusters. It is dominated by forestry plantations, and other privately owned commercial farms. A number of these are subject to land restitution claims. The finalisation of these claims is of critical importance and has implications for the development of this cluster. These will need to be carefully managed. Settlement expansion should be discouraged in this cluster. The nodal areas of Sipofu and Mthwalume should be developed to service the southern and northern settlements of this cluster respectively.



### 12.1.6 SPATIAL BUDGETING FRAMEWORK

The cluster based approach to planning allows for the budgeting of space required for the provision of various social facilities. This is done against the relevant standards / guidelines for the provision of public facilities. Table 3 to 6 below attempt to establish the need for additional space to accommodate public facilities and the extent thereof. It provides a framework that can be used by the municipality to budget space for the development of facilities. This is done using the CSIR Guidelines for Human Settlement Planning and Design, the Guidelines for Planning of Facilities in KwaZulu-Natal, the KZN Department of Education Space Planning Norms and Standards etc.

The amount of land awarded to a particular use has an impact on whether other uses will experience a shortage of land or not. An appropriate pattern of land allocation facilitates the development of an efficient and productive space economy. Land, particularly well-located land, is a scarce resource, thus should be allocated in line with the municipality's development prospects. Land can be regarded as a public good if it is distributed, managed and developed with the interests of the public being first priority. It is considered to be a public good if it is a community resource that benefits the community as a whole. The development of public facilities allows for such a view.

TABLE 22: SPATIAL BUDGET

| Facility                    | Existing No. Of Facilities | No. Of Facilities Required | Additional No. Of Facilities Required | Range (Walking) | Threshold Population | Minimum Site Size     | Space Budgeting: Existing | Space Budgeting: Required |
|-----------------------------|----------------------------|----------------------------|---------------------------------------|-----------------|----------------------|-----------------------|---------------------------|---------------------------|
| <b>CLUSTER A</b>            |                            |                            |                                       |                 |                      |                       |                           |                           |
| Crèche                      | 15                         | 7                          | 0                                     | 750m radius     | 5000 people          | 300m <sup>2</sup>     | 4500 m <sup>2</sup>       | 0 m <sup>2</sup>          |
| Primary School              | 14                         | 16                         | 2                                     | 1.5km radius    | 500 people           | 2.8 ha                | 39.2 ha                   | 5.6 ha                    |
| Secondary / Combined School | 4                          | 5                          | 1                                     | 2.5km radius    | 1500 people          | 4.8 ha                | 19.2 ha                   | 4.8 ha                    |
| Clinic                      | 1                          | 5                          | 4                                     | 2km radius      | 7000-30000 people    | 0.5 ha                | 0.5 ha                    | 2 ha                      |
| Community Hall              | 1                          | 3                          | 2                                     | 10km radius     | 10000 people         | 200-300m <sup>2</sup> | 300 m <sup>2</sup>        | 600 m <sup>2</sup>        |
| Sports Fields               | 2                          | 5                          | 3                                     |                 | 7700-12000 people    | 0.6-1.5ha             | 3 ha                      | 4.5 ha                    |
| <b>Total</b>                | <b>37</b>                  | <b>41</b>                  | <b>12</b>                             |                 |                      |                       | <b>62.38 ha</b>           | <b>16.96 ha</b>           |
| <b>CLUSTER B</b>            |                            |                            |                                       |                 |                      |                       |                           |                           |
| Crèche                      | 10                         | 5                          | 0                                     | 750m radius     | 5000 people          | 300m <sup>2</sup>     | 3000 m <sup>2</sup>       | 0 m <sup>2</sup>          |

| Facility                    | Existing No. Of Facilities | No. Of Facilities Required | Additional No. Of Facilities Required | Range (Walking) | Threshold Population | Minimum Site Size     | Space Budgeting: Existing | Space Budgeting: Required |
|-----------------------------|----------------------------|----------------------------|---------------------------------------|-----------------|----------------------|-----------------------|---------------------------|---------------------------|
| Primary School              | 28                         | 13                         | 0                                     | 1.5km radius    | 500 people           | 2.8 ha                | 78.4 ha                   | 0 ha                      |
| Secondary / Combined School | 12                         | 4                          | 0                                     | 2.5km radius    | 6000-10000 people    | 4.8 ha                | 57.6 ha                   | 0 ha                      |
| Clinic                      | 5                          | 4                          | 0                                     | 2km radius      | 7000-30000 people    | 0.5 ha                | 2.5 ha                    | 0 ha                      |
| Community Hall              | 6                          | 2                          | 0                                     | 10km radius     | 10000 people         | 200-300m <sup>2</sup> | 1800 m <sup>2</sup>       | 0 m <sup>2</sup>          |
| Sports Fields               | 5                          | 3                          | 0                                     |                 | 7700-12000 people    | 0.6-1.5ha             | 7.5 ha                    | 0 ha                      |
| <b>Total</b>                | 66                         | 31                         | 0                                     |                 |                      |                       | 146.48 ha                 | 0 ha                      |
| <b>CLUSTER C</b>            |                            |                            |                                       |                 |                      |                       |                           |                           |
| Crèche                      | 7                          | 5                          | 0                                     | 750m radius     | 5000 people          | 300m <sup>2</sup>     | 2100 m <sup>2</sup>       | 0 m <sup>2</sup>          |
| Primary School              | 11                         | 11                         | 0                                     | 1.5km radius    | 500 people           | 2.8 ha                | 30.8 ha                   | 0 ha                      |
| Secondary / Combined School | 4                          | 4                          | 0                                     | 2.5km radius    | 6000-10000 people    | 4.8 ha                | 19.2 ha                   | 0 ha                      |
| Clinic                      | 2                          | 3                          | 1                                     | 2km radius      | 7000-30000 people    | 0.5 ha                | 1 ha                      | 0.5 ha                    |
| Community Hall              | 8                          | 2                          | 0                                     | 10km radius     | 10000 people         | 200-300m <sup>2</sup> | 2400 m <sup>2</sup>       | 0 m <sup>2</sup>          |
| Sports Fields               | 4                          | 3                          | 0                                     |                 | 7700-12000 people    | 0.6-1.5ha             | 6 ha                      | 0 m <sup>2</sup>          |
| <b>Total</b>                | 36                         | 28                         | 1                                     |                 |                      |                       | 57.45 ha                  | 0.5 ha                    |
| <b>CLUSTER D</b>            |                            |                            |                                       |                 |                      |                       |                           |                           |
| Crèche                      | 11                         | 8                          | 0                                     | 750m radius     | 5000 people          | 300m <sup>2</sup>     | 3300 m <sup>2</sup>       | 0 m <sup>2</sup>          |
| Primary School              | 31                         | 17                         | 0                                     | 1.5km radius    | 500 people           | 2.8 ha                | 86.8 ha                   | 0 ha                      |
| Secondary / Combined School | 16                         | 6                          | 0                                     | 2.5km radius    | 6000-10000 people    | 4.8 ha                | 76.8 ha                   | 0 ha                      |
| Clinic                      | 4                          | 5                          | 1                                     | 2km radius      | 7000-30000 people    | 0.5 ha                | 2 ha                      | 0.5 ha                    |
| Community Hall              | 8                          | 4                          | 0                                     | 10km radius     | 10000 people         | 200-300m <sup>2</sup> | 2400 m <sup>2</sup>       | 0 m <sup>2</sup>          |
| Sports Fields               | 10                         | 5                          | 0                                     |                 | 7700-12000 people    | 0.6-1.5ha             | 15 ha                     | 0 ha                      |



| Facility                           | Existing No. Of Facilities | No. Of Facilities Required | Additional No. Of Facilities Required | Range (Walking) | Threshold Population | Minimum Site Size     | Space Budgeting: Existing | Space Budgeting: Required |
|------------------------------------|----------------------------|----------------------------|---------------------------------------|-----------------|----------------------|-----------------------|---------------------------|---------------------------|
| <b>Total</b>                       | 90                         | 45                         | 1                                     |                 |                      |                       | 181.17 ha                 | 0.5 ha                    |
| <b>CLUSTER E</b>                   |                            |                            |                                       |                 |                      |                       |                           |                           |
| <b>Crèche</b>                      | 7                          | 6                          | 0                                     | 750m radius     | 5000 people          | 300m <sup>2</sup>     | 2100 m <sup>2</sup>       | 0 m <sup>2</sup>          |
| <b>Primary School</b>              | 21                         | 12                         | 0                                     | 1.5km radius    | 500 people           | 2.8 ha                | 28.8 ha                   | 0 ha                      |
| <b>Secondary / Combined School</b> | 19                         | 4                          | 0                                     | 2.5km radius    | 6000-10000 people    | 4.8 ha                | 91.2 ha                   | 0 ha                      |
| <b>Clinic</b>                      | 1                          | 4                          | 3                                     | 2km radius      | 7000-30000 people    | 0.5 ha                | 0.5 ha                    | 1.5 ha                    |
| <b>Community Hall</b>              | 5                          | 3                          | 0                                     | 10km radius     | 10000 people         | 200-300m <sup>2</sup> | 1500 m <sup>2</sup>       | 0 m <sup>2</sup>          |
| <b>Sports Fields</b>               | 1                          | 4                          | 3                                     |                 | 7700-12000 people    | 0.6-1.5ha             | 1.5 ha                    | 4.5 ha                    |
| <b>Total</b>                       | 54                         | 33                         | 6                                     |                 |                      |                       | 122.36 ha                 | 6 ha                      |
| <b>Grand Total</b>                 |                            |                            |                                       |                 |                      |                       | 569.84 ha                 | 23.94 ha                  |

## 12.2 SPATIAL RESILIENCE AND ENVIRONMENTAL SUSTAINABILITY

The protection of natural systems from disturbance and displacement by future development is of critical importance. The spatial distribution of environmental biodiversity areas of significance is considered vital to provide the spatial framework for future development planning, particularly indicating those areas where development needs to be avoided or carefully managed. As such, areas where no or limited development should take place must focus on the conservation of the core biodiversity areas in Umzumbe. These include protected and conservation areas, wetlands, estuaries, flood plains, steep slopes and

special sensitive biodiversity areas. These assets perform a substantial and significant role in conserving biodiversity as well as protecting the quality of life of the residents of Umzumbe. They are also of economic value. Thus, settlement planning must be sensitive to ecological processes. Essentially, rather than imposing settlement development on the environment, co-existence and synergy between man-made and ecological systems should be encouraged.

The protection of environmentally sensitive areas from development also enhances the resilience of settlements. Spatial resilience refers to the ability of an area to withstand environmental shocks. It is thus noted that spatial planning must be geared towards creating resilient

settlements, which are able to bear the impacts of climate change and associated natural catastrophes.

### 12.2.1 PROTECTED AREAS

Umzumbe municipality is endowed with one formally protected area viz. Mehlomnyama Nature Reserve. This area was designated as a protected area in terms of the National Environmental Management Protected Area Act No 57 of 2003. The land within protected areas is mostly covered with natural indigenous forests which provide habitats to various fauna and ensure the preservation of various threatened species of flora. Some of the land is also used for recreational and ecotourism activities.

The municipality will manage land use and development within and surrounding the Protected Area using the relevant guidelines developed by Ezemvelo KZN Wildlife. Moreover, Ezemvelo KZN Wildlife initiated a process to develop Protected Area Managed Plans (PAMP) for all the protected areas in the province. The PAMP is a high-level, strategic document that provides the direction for the development and operation of the protected area. This will also be used once it is available.

Development and land use around the Protected Areas needs to be compatible with the values of the protected areas, with a gradient of development/land use density and scale, as well as type, occurring from the edge of protected area to the outer edge of the buffer. To enable

this gradient the control measures are split into distance subsections with the controls on activities that would result in noise, light, visual, pollution and animal conflict impacts being highest at the edge of the Protected Area and reducing towards the outer edge of the buffer.

Areas of high biodiversity value are important for their intrinsic value in the ecosystem. Care should be taken to ensure that large scale transformation does not occur and that the ecological functioning of these sites is not lost. These areas are afforded legal protection in terms of environmental management legislation. Any development within a protected area is subject to an EIA and will require extensive consultation with all interested and affected parties.

### 12.2.2 CRITICAL AREAS OF BIODIVERSITY

Maintaining ecological processes and functions of natural systems are important and critically important biodiversity areas have therefore been defined by Ezemvelo KZN Wildlife to ensure that terrestrial biodiversity resources remain available to the local inhabitants and future generations. As a measure to protect these areas, EKZN Wildlife has started to develop control measures that should be included in the Umzumbe land use scheme. These include the following:

- ⇒ Expansion of agriculture (crop and intensive animal production, excluding grazing of natural veld) and development footprint requires a biodiversity assessment and may not occur without

authorisation from agriculture and permission from Ezemvelo KZN Wildlife.

- ⇒ Expansion of development footprint in other development zones requires a biodiversity assessment and may not occur without permission from Ezemvelo KZN Wildlife.
- ⇒ Biodiversity management in Umzumbe should further seek to achieve the following outcomes:
- ⇒ Reduction in the rate of ecosystem and species extinction.
- ⇒ Biodiversity assets are protected to secure a sustained supply of ecosystem goods and services over time.
- ⇒ The ability to secure the ecosystem goods and services upon which future communities must build their livelihoods will require short-term responses. This is challenging in a “pro-poor” policy environment where an eco-centric approach to development is neither applicable nor achievable.

There are limits to change and the reality is that Umzumbe contains areas of critically endangered, endangered and vulnerable ecosystems, which need some level of protection. These areas represent the key strategic development conflict of the SDF and it will require responses to satisfy national policy priorities. The following activities should be strengthened:

- ⇒ Participation in the National Protected Area Expansion Strategy.

- ⇒ More detailed spatial linkage plans for core areas where critical biodiversity areas occur.

- ⇒ Applying appropriately restrictive zoning categories for ecologically important areas.

- ⇒ Adhering to regulatory requirements for development that is proposed within critical biodiversity areas.

- ⇒ Examples of opportunities that the municipality can harness for local economic development, presented by threatened ecosystems, include the following:

- ⇒ Accessing national and provincial intervention programmes to implement IDP projects with biodiversity benefits, linked to management of threatened ecosystems (such as clearing of invasive aliens through Working for Water, or other forms of rehabilitation e.g. through Working for Wetlands, Land Care, etc.).

Development within the identified CBA areas needs to accommodate and support the biodiversity network, and the municipality will adopt the following development control measures as per CBA map category:

#### Wetland CBA

Wetlands play a critical role in the ecosystem water management and biodiversity conservation. As such, they are deemed to be no-go areas in terms of development. The following will serve as guidelines for an effective management of wetlands:

- ⇒ No activity that will result in the transformation of wetlands is recommended. Wetlands should be retained for the ecosystem goods and services they supply, therefore only rehabilitation and conservation activities are proposed within the zone.
- ⇒ Modification of the wetland (determined as being to the outer temporary zone) may not occur without an Environmental Authorisation and water use license. Where modification includes hardening of surfaces, clearing of indigenous vegetation, dredging, infilling, draining, etc.
- ⇒ A minimum buffer of 30m of natural vegetation must be maintained around the wetland (determined as the outer temporary zone).
- ⇒ A minimum buffer of 100m should be maintained between hard surfaces and the outer temporary zone of the wetland, where such buffer is maintained as undisturbed soil.
- ⇒ New land uses within 50m of a wetland (determined as being to the outer temporary zone) must undertake an assessment to determine an appropriate buffer.
- ⇒ Storm water runoff may not be discharged directly into the river.

#### River CBA

- ⇒ A minimum buffer of 30m of natural vegetation must be maintained from the edge of the riparian vegetation, or where such does not occur 50m from the bank of the watercourse.

- ⇒ A minimum buffer of 100m must be maintained between hard surfaces and the riparian vegetation or where such does not occur the bank of the watercourse, where such buffer is maintained as undisturbed soil.
- ⇒ Indigenous riparian vegetation may not be cleared.
- ⇒ Storm water runoff may not be discharged directly into the river system.

#### River Ecological Support Areas (ESA)

- ⇒ Indigenous riparian vegetation may not be cleared.
- ⇒ Storm water runoff may not be discharge directly into the river system.
- ⇒ A minimum buffer of 20m must be maintained between hard surfaces and the riverine vegetation or where such does not occur the bank of the watercourse, where such buffer is maintained as undisturbed soil.
- ⇒ Storm water runoff may not be discharge directly into the river system.

#### Ecological Support Areas (ESA) -Species specific

- ⇒ Hardening of surfaces requires a biodiversity assessment and may not occur without authorisation from agriculture and permission from Ezemvelo KZN Wildlife.



### FEPA fish sanctuaries

- ⇒ Indigenous riverine vegetation may not be cleared.
- ⇒ No introduction of exotic, extra-limital or invasive species into the river.
- ⇒ A minimum buffer of 100m must be maintained between hard surfaces and the riverine vegetation or where such does not occur the bank of the watercourse, where such buffer is maintained as undisturbed soil.
- ⇒ Storm water runoff may not be discharged directly into the river system.

#### 12.2.3 WATER RESOURCE MANAGEMENT

Water resource management must seek to achieve the protection of water resource assets to secure a sustained supply of water and ecosystem goods and services over time and to reduce vulnerability to the effects of climate change. Securing a sustained supply of water requires the management of natural assets (water resources management) and the introduction of new infrastructure (water services management). Water management requires that investment into water services and sanitation infrastructure alone will not secure water for growth, and that much more attention must be afforded to the impact of current and proposed development activities on the water resources of the region. This will require

short-term investment into the protection, rehabilitation and management of assets that store water (such as wetlands, floodplains, maintenance of land cover) and the management of activities that degrade or pollute water resources. The following activities should be strengthened:

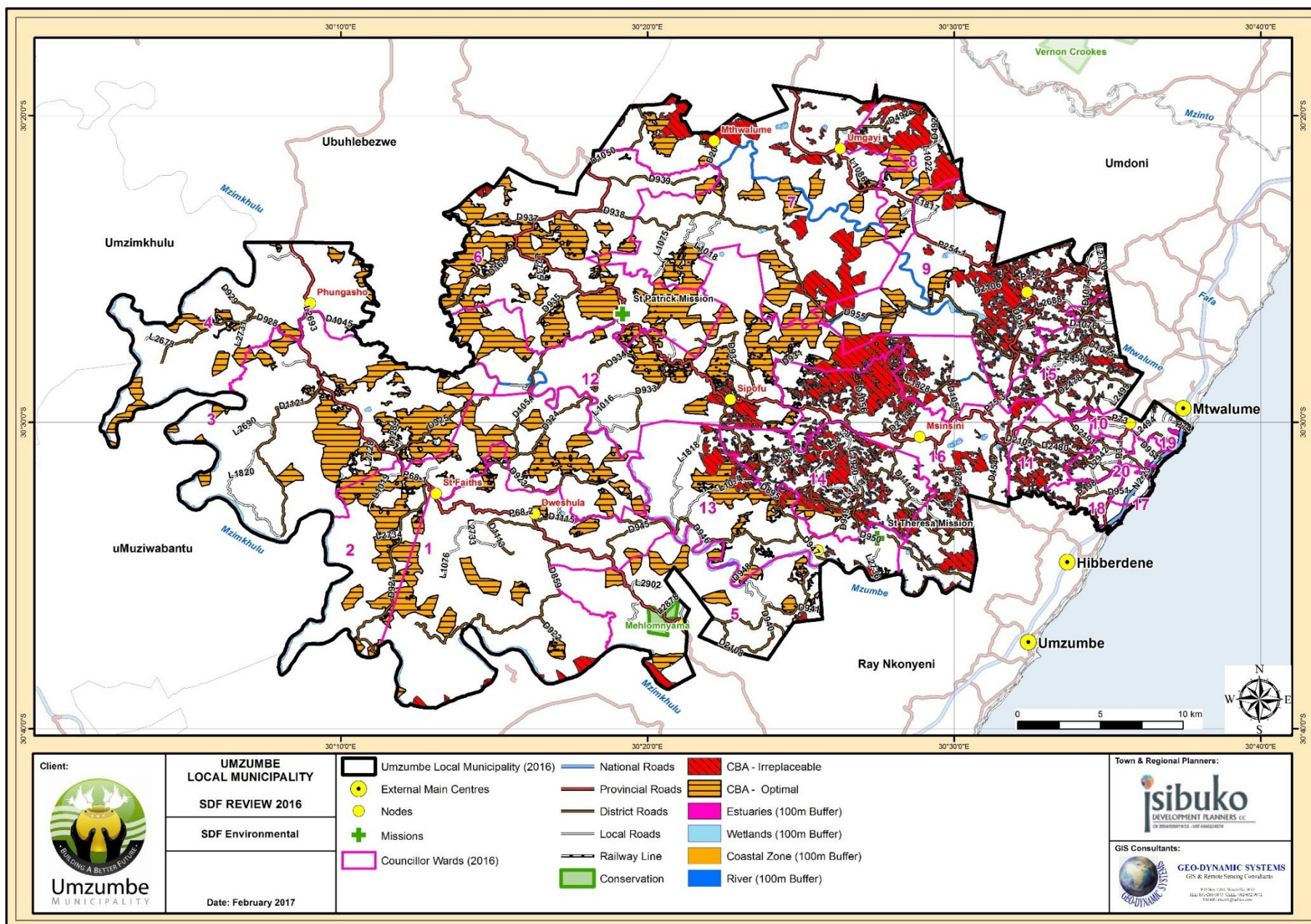
- ⇒ Flood risk areas must be delineated as “no-go” areas. .
- ⇒ Wetlands and riparian zones must be rehabilitated and protected from future development.
- ⇒ Land use practices must conform to the National Freshwater Ecosystem Priority Area Guidelines.
- ⇒ Improving sanitation and waste management infrastructure and services in nodal areas.

The Ugu District to facilitate and assist in establishing effective water quality monitoring programme, as well as the gathering and storage of all information available regarding water quality.

#### 12.2.4 LAND DEGRADATION AND SUSTAINABLE AGRICULTURE

This strategy recognises the negative environmental impacts that are associated with the main development pressures in the area such as the dispersed settlement pattern, commercial agriculture and the area's road network. It further recognises the undesirable changes that occur because of secondary and cumulative environmental impacts of these

MAP 27: ENVIRONMENTAL FRAMEWORK



activities (including the decline in water quality). The land resource strategy therefore seeks to achieve the following outcomes:

- ⇒ The rate and extent of land degradation in Umzumbe has been halted and reversed.
- ⇒ Land is at optimal level of production with a high yield of good quality water.

More resilient communities and long-term sustainable economic returns will only be secured if there are targeted interventions in key areas of Umzumbe. The '*Continuum of sustainable human settlements*' proposal in this SDF will contribute to overall sustainable land management because it will manage and minimize the dispersed settlement pattern in the area and it will target development areas that are not constrained by steep slopes or high erosion susceptibility. Local interventions, through settlement plans, will also minimize negative impacts through land use controls. The following activities must also be strengthened to minimize erosion and pollution of the soil:

- ⇒ A road maintenance programme that uses erosion risk as a key criterion in the allocation of funds will also be required to control land degradation.
- ⇒ Improving sanitation infrastructure, refuse removal and waste management services in nodal areas.

- ⇒ A strategy to protect high potential agricultural land is discussed in section 11.6 of this report.

#### 12.2.5 COASTAL MANAGEMENT

Umzumbe is endowed with 8.2 kilometres of coastline. The Coastal Management Strategy for the area must seek to achieve the following outcome:

- ⇒ Turton an an environmentally sustainable coastal settlement with resilient communities and a healthy marine and coastal environment that sustains tourism and sustainable livelihoods.
- ⇒ Management of the small stretch of coastline in Umzumbe must receive priority in planning and development due to its inherent environmental sensitivity, vulnerability to coastal erosion and the extent of development pressure. An integrated coastal management approach in this area is required which gives attention to the following activities:
- ⇒ Detailed spatial planning to delineate coastal features to be protected such as coastal public property, the coastal protection zone, coastal access land, estuaries and critical biodiversity areas.
- ⇒ Strategies to influence the land allocation system.

#### 12.2.6 CLIMATE CHANGE

The world's climate is changing at rates that humans will be unable to cope with. If not addressed, these changes will directly or indirectly

adversely affect communities, the environment and development. The impacts of climate change are usually felt more in areas dominated by poverty stricken rural communities such as Umzumbe as these areas are more vulnerable and depend on natural resources for survival. Poverty and vulnerability are interlinked in such a way that each causes the other. Poverty and unemployment force people to exploit natural resources as a livelihood strategy and as a result fall victim to climate change impacts. It is however becoming clear that issues of environmental degradation, water quality and scarcity, and limited access to agricultural production potential decrease the coping capacity of poor and vulnerable communities. The following spatial planning interventions can contribute to national and global efforts to mitigate and adapt to climate change:

- ⇒ Increasing energy efficiency of the built environment and introduction of sustainable energy initiatives e.g. solar panels.
- ⇒ Avoiding deforestation and promoting afforestation.
- ⇒ Creation of resilient human settlements, which are able to withstand natural catastrophes associated with climate change e.g. avoiding development on floodplains.
- ⇒ Protecting green infrastructure, rehabilitating and restoring natural systems.

Other measures are included in Section 11.2.6 below.

#### 12.2.7 SPATIAL RESILIENCE

With climate change and concomitant catastrophes posing threats to the sustainability of rural settlements, the resilience of settlements to climate change and extreme weather events has become a critical issue. The notion of spatial resilience has become a key feature in spatial planning in recent years. This is evident in its inclusion as one of the SPLUMA principles, which shall apply to all aspects of spatial planning, land development and land use management. Spatial resilience refers to the ability of an area to withstand, absorb or adapt to from possible environmental shocks. Spatial planning in this regard should ultimately be focused at reducing the vulnerability of settlements. The Umzumbe municipality will implement the following spatial planning interventions to enhance the resilience of settlements:

- ⇒ Implementation of the Disaster Management Plan. This includes the spatial delineation of high flood risk areas and discouraging settlement in such areas.
- ⇒ Introduction of interventions to improve the environmental management capacity of Traditional Leaders and the development of environmental planning standards that are aimed at creating ecological resilience.
- ⇒ Introduction of interventions to maximise community based natural resource management programmes, focused in those areas where land degradation has become a concern.



- ⇒ Anticipating sea-level rises and temperature rises in long-term planning.
- ⇒ Implementation of coastal management plans and enforcement of coastal and river buffer distances.
- ⇒ Protection and rehabilitation of natural systems and ecological infrastructure that act as defences. This includes avoiding wetland, estuary, dune and land degradation.
- ⇒ Undertaking sustainable agriculture and promotion of rainwater harvesting.

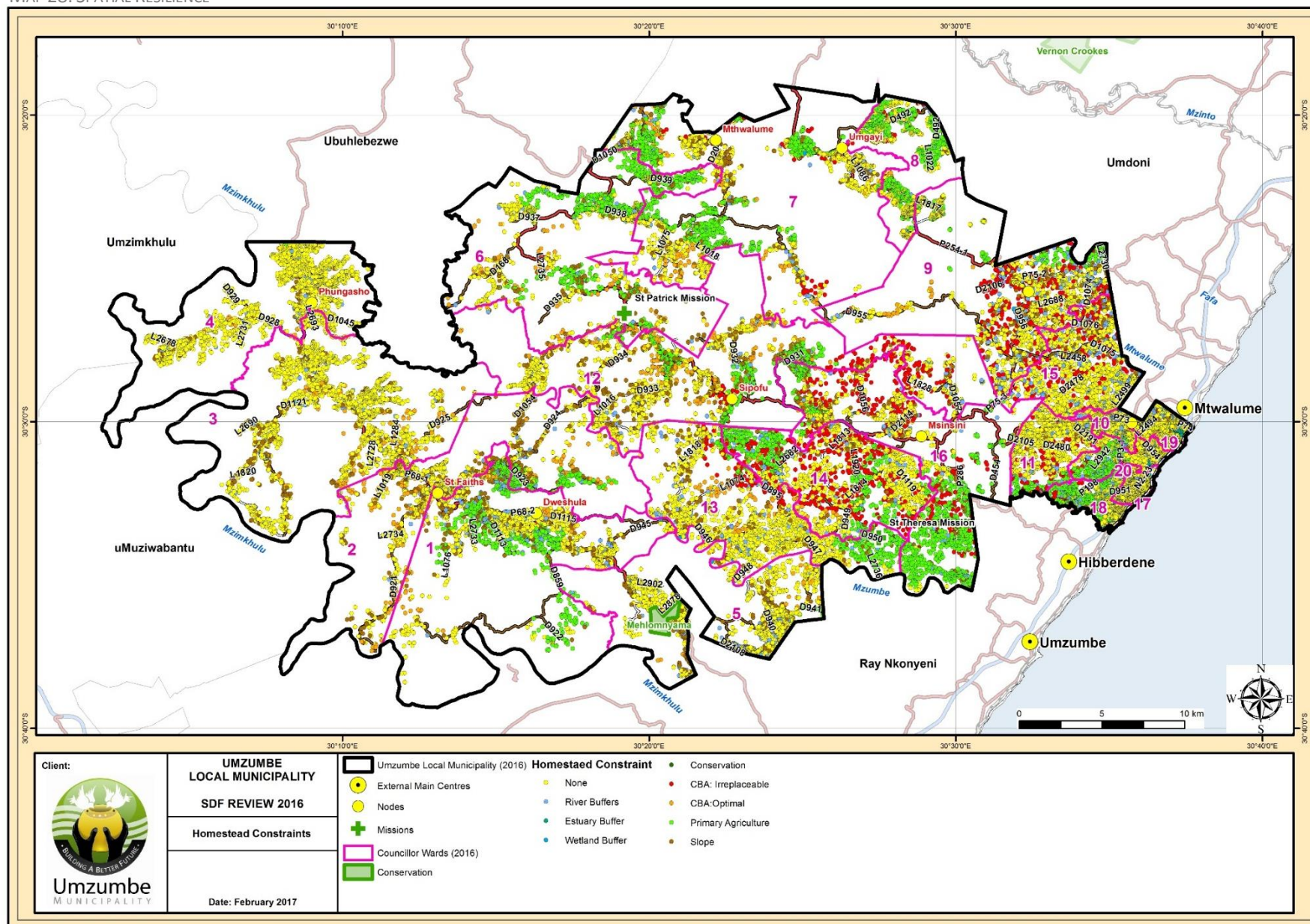
The table and map below indicate the extent of households that are located in undesirable locations. It is clear a considerable number of the households within Umzumbe are susceptible as they are located in vulnerable areas such as within river / wetland buffers and in slopes that are steeper than 1:3. The implementation of rural housing projects can be used as a tool to advice households that are located in vulnerable areas to relocate. Such households can be allocated sites elsewhere, within the project area, as per the settlement plan and provided with sustainable housing.

|                            |      |       |
|----------------------------|------|-------|
| <b>Conservation</b>        | 8    | 0,03  |
| <b>Estuary Buffer</b>      | 32   | 0,10  |
| <b>River Buffers</b>       | 1857 | 5,95  |
| <b>Wetland Buffer</b>      | 43   | 0,14  |
| <b>Slope</b>               | 2765 | 8,86  |
| <b>Primary Agriculture</b> | 5222 | 16,73 |

TABLE 23: SPATIAL RESILIENCE – CONSTRAINED HOUSEHOLDS

| CONSTRAINT                | NO. OF CONSTRAINED HOUSEHOLDS | % OF CONSTRAINED HOUSEHOLDS |
|---------------------------|-------------------------------|-----------------------------|
| <b>No Constraints</b>     | 19296                         | 61,81                       |
| <b>CBA: Irreplaceable</b> | 1272                          | 4,07                        |
| <b>CBA: Optimal</b>       | 723                           | 2,32                        |

MAP 28: SPATIAL RESILIENCE



## 12.3 PROTECTION AND ENHANCEMENT OF AGRICULTURAL LAND

### 12.3.1 AGRICULTURAL LAND REGULATION

#### 12.3.1.1 AGRICULTURAL LAND CATEGORIES

Agriculture and farmland are an integral part of the economy, environment, and overall quality of life. Appropriately, managed agricultural lands can provide groundwater recharge, wastewater infiltration, flood prevention, and habitat protection. While some conversion is inevitable, communities can manage the impact of conversion by implementing one or more regulatory and incentive based farmland protection strategies.

The national Department of Agriculture, Forestry and Fisheries (DAFF) as well as the provincial Department of Agriculture and Environmental Affairs (KZN DAEA) have responded to their mandate to ensure long-term food production, by developing an agricultural land categorisation. These categories focus on mitigating and limiting the impact of any proposed change of land use on agricultural production and to protect agricultural land (specifically high potential and unique agricultural land). The following categories have been included in the KZN Agricultural Land Categories (DAFF & DAEA, 2013):

⇒ Category A land is regarded as very high potential agricultural land that should be retained exclusively for agricultural use. This category is scarce and all efforts should be focussed on retaining

land within this Category exclusively for agricultural production. It includes identified grazing land that has a very high production value for sustained livestock production and has no or very few limitations to agricultural production and can support intensive arable cropping systems. Any change in land use will require detailed natural resources/agricultural study with sufficient motivation to propose a change of land use. Land use will be restricted to support of primary agricultural production only.

⇒ Category B is regarded as high potential agricultural land and has few limitations to agricultural production. Limited change of land use may be supported but only if in direct support to primary agricultural production practices or systems and then these developments must be located on the lowest potential areas within the higher potential zone. A detailed natural resources study must be conducted with sufficient motivation to propose a change of land use in this category. The protection of areas with high biodiversity value in areas with high agricultural potential should be promoted.

⇒ Category C is regarded as land with moderate agricultural potential, on which significant interventions would be required to achieve viable and sustainable food production, although agriculture is the still the majority land use in the rural landscape. These areas are more suitable for extensive grazing, the production of fodder crops in support of livestock production, and, from a natural rangeland grazing perspective, additional feed may be required during winter

months to supplement the seasonal grazing provided by existing rangeland. It is stated that this Category of land may however, have the potential to act as a buffer for adjacent higher potential agricultural land Categories. Thus, Category C land may be retained so as to act as additional protection for adjacent higher potential land. Change of land use from agricultural land use to non-agricultural land uses which are not necessarily in support of the existing agricultural land use may be considered, but only with the specified motivation and a detailed natural resources study.

- ⇒ Category D land is regarded as land with low agricultural potential and requires significant interventions to enable sustainable agricultural production. Extensive areas of land are generally required for viable production (e.g. beef and game farming) although intensive production under controlled environmental conditions (e.g. green housing, poultry, piggeries) is not excluded, nor is intensive production on areas of arable land available e.g. along river systems. Change of land use may be supported, as long as this change does not conflict with the surrounding agricultural activity and the "Right to farm" should in all instances be acknowledged.
- ⇒ Category E land is regarded as land with limited to very low potential for agricultural production. Cultivation within this land category is severely limited in both extent and in terms of the natural resources available, and grazing value will be poor with a

very low carrying capacity. Land within this Category however may have a high conservation or tourism status, depending on the locality, or may act as a buffer for as higher Category of adjacent land. In addition, these land parcels may be required to support the economic viability of an extensive grazing system on adjoining land parcels e.g. large dairy farming system.

The largest part of the municipality is categorised as secondary agricultural land (category D). Significant patches of primary agricultural land (category C) and mixed agricultural land (category E) are also found in various locations throughout the municipality. Patches of threatened agricultural land (category B) are also found at a lesser extent, mainly in the northern parts of Umzumbe. These areas therefore have high agricultural potential. They are characterised mainly by forestry activities.

#### 12.3.1.2 LAND USE SCHEME

The alienation of some productive agricultural land will inevitably occur as a consequence of development, but the municipality will not support such alienation when equally viable alternatives exist. When reviewing or amending the land use scheme, the municipality will assess development in line with the provisions for protecting good quality agricultural land.

Land use schemes should include an evaluation of alternative forms of development, and significant weight should be given to those



strategies, which minimise the impacts on good quality agricultural land. Zoning and subdivision regulations are local regulatory tools that will be used to reduce the impact of development on agricultural land. The review of the municipal land use scheme should include the proposed agricultural zones and management overlays developed by the KZN Department of Agriculture and Rural Development. These zones will ensure that agricultural land is protected and only certain land uses be allowed per agricultural category. It should also consider the Draft Preservation and Development of Agricultural Land Framework Bill as it contains some new proposals concerning the management of agricultural land. The Bill also specifies the processes that need to be undertaken to change the use of land within these areas.

### 12.3.2 LAND AND AGRARIAN REFORM

Rural development is intended to create vibrant, equitable and sustainable rural communities. The national government seeks to achieve this through coordinated and integrated broad-based agrarian transformation, strategically increasing rural development, and improving the land reform programme. Umzumbe has a fair amount of land restitution claims and redistribution projects. Settlement of these land restitution claims should be undertaken in a manner that enhances the productive value of the land and generates economic benefits for the beneficiary communities. In addition, its implementation should be embedded in the notion of sustainable and integrated development.

#### 12.3.2.1 LAND REFORM

The following should guide future implementation of the land reform program within the municipality:

- ⇒ Clustering projects in a geographic area (across products) to optimise development potential, rationalise support services and promote efficient use of scarce resources. Identification of clusters should be based on access, social identity, development opportunities, land use pattern and social relationships. This will provide a framework for a comprehensive approach to the resolution of labour tenant and land restitution claims.
- ⇒ Settlement of the emerging farmers in terms of the Land Redistribution for Agricultural Development (LRAD) or Proactive Land Acquisition Strategy (PLAS) should be located close to transport routes on good agricultural land.
- ⇒ Land reform beneficiaries should be provided with agricultural development support including assistance with productive and sustainable land use, infrastructure support, agricultural inputs, and strategic linkages with the markets. A significant amount of land restitution claims in Umzumbe includes either developed or good potential agricultural land. Settlement of these land restitution claims should be undertaken in a manner that enhances the productive value of the land and generates economic benefits for the beneficiary communities. In the case of Umzumbe, where most

of agricultural land is under either sugar cane or forestry, such linkages should be developed with forestry companies and the sugar mills.

- ⇒ There should be strong partnership and shareholding schemes with the private sector, since the latter exude the required technical skills and access to markets (Ugu District RDP: 2016)
- ⇒ There is a need to promote off-farm settlement as a land delivery approach where the main need for land is settlement. Such land should be located in accessible areas, which can be provided with social facilities and basic services in an efficient and effective manner. It may also form part of a cluster of projects. This will also facilitate housing delivery and development of such settlements as sustainable human settlements.
- ⇒ Investigation of an individual approach to land reform, as opposed to a group approach. Historically, individually operated farms appear to have been more successful than those operated communally (Ugu District RDP: 2016).
- ⇒ Identification of high impact projects and integration into the local value chain or development proposals. These projects should also be integrated into the LED program of the Municipality.
- ⇒ Land tenure upgrading should be undertaken in rural informal settlements as part of a process towards the development of human settlements.

#### 12.3.2.2 AGRICULTURE

Opportunities exist to uplift households in rural settlements using the natural resource of agricultural land. Programmes and projects that can be implemented include:

- ⇒ Food security programmes: opportunities exist for the development of food security programmes, which will not only have social implications, but will also contribute to the development of rural agriculture. The development of these programmes will not only ensure that rural communities are provided with food and job opportunities to an extent, but it will also ensure that land which has high agricultural potential does not lie idle and underutilized and left vulnerable to degradation.
- ⇒ Agricultural programmes: The development of agricultural programmes is also vital to sustainable rural development and agrarian reform, as it has potential to address food security issues. These programmes should be packaged in a manner that enables co-operation and knowledge transfers between existing and emerging farmers (especially those who come from a subsistence background). The proposed agri-park provides an opportunity with regards to the latter. Although the park will be located in Ray Nkonyeni municipality, but it is a district wide project which emerging and established farmers in Umzumbe can benefit as well.

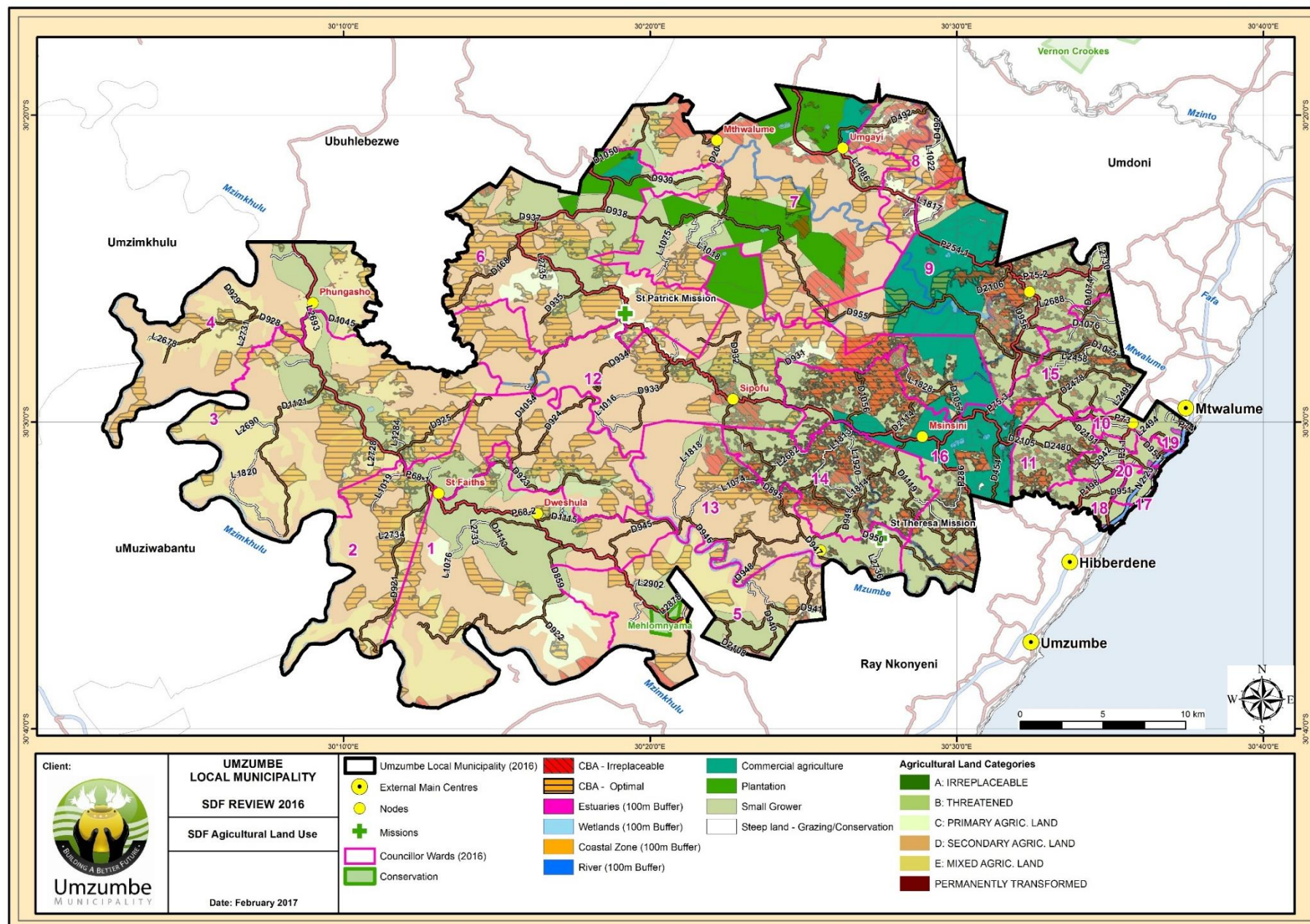
- ⇒ Investigating opportunities for the development of an agri-village within the municipality. Land reform projects and rural housing projects provide an opportunity to implement the rural development concept of agri-villages. Such an initiative can be guided by various programmes, including the Comprehensive Rural Development Programme. It can help organize and mobilize rural dwellers into functional groups that take charge of their own development and this can lead to sustainable agrarian transformation within rural communities. Moreover, it can also assist in settlement making by transforming dysfunctional settlements.
- ⇒ Commercialisation of production on communally held land and facilitating good value chain. This will include facilitating access to markets for small-scale subsistence farmers in the traditional council areas. The Ugu District Rural Development Plan proposes that business plans should be developed for high potential communally held land. It further acknowledges that access to land (in this context) in traditional council areas is limited, thus unlocking the land will have to be one of the key priorities.
- ⇒ Development of a fresh produce market where emerging farmers can sell their products. This is identified as one of the local needs that emerge from the municipality's IDP Public Participation processes. Furthermore, the lack of such market facilities is identified as one of the weaknesses in the municipality's IDP. The

market should be located in a nodal area, where greater intensities of population agglomeration are witnessed and in close proximity to areas where farming is most predominant.

- ⇒ Provision of agricultural training, mentoring and assistance to emerging farmers. The suggested enterprises / commodities that could possibly have a comparative advantage in Umzumbe are sugarcane, goats, beef cattle, banana, amadumbe, potato, vegetables (carrot, sweet potato), macadamia nut, maize and dry bean (Ugu District RDP: 2016). This probability is based on the bio resource units classification found in those areas.
- ⇒ Promotion of the culture of farming / agriculture as a viable livelihood strategy, with a key focus on the youth.
- ⇒ Support and implement government programmes such as one house one garden, school vegetable gardens etc.
- ⇒ Recognising the critical role played by commercial farmers as they form the backbone of the agricultural sector and the economic sector of Umzumbe and provide support to ensure their activities are sustained.

The municipality will develop an implementable agricultural sector plan, which will give direction to the municipality on how to optimize its agricultural potential.

MAP 29: AGRICULTURAL FRAMEWORK





## 12.4 PROMOTING CLUSTERING AND COMPACT DEVELOPMENT

### 12.4.1 CLUSTERING DEVELOPMENT ALONG CORRIDORS

Identification and classification of corridors in Umzumbe is based on function/role, and intensity of use or development along the corridor. Umzumbe LM recognises the significance of the N2 as a national/provincial corridor, and the opportunities it creates for the municipality. Other corridors include the main arterial roads that define the spatial structure and drives settlement pattern, and the major local link roads between different settlements. Some of the local access roads have potential to develop into activity corridors especially where development occurs in a linear form. However, the realisation of this ideal depends on these roads being upgraded and maintained appropriately.

#### 12.4.1.1 N2 NATIONAL CORRIDOR

The N2 national/provincial transportation corridor runs along the eastern part of the Umzumbe LM. It is identified in the NDP and the PGDS as a transportation/trade corridor linking the KwaZulu-Natal and the Eastern Cape. At a provincial level, the corridor is largely a movement corridor between the dominant urban cores of Durban and Port Shepstone. It brings limited development prospects into the municipal area due to its character as a limited access road, its length (8km) and location (along the eastern boundary), except in Umthwalume and Hibberdene where it joins with the regional routes.

Development along the N2 Development Corridor is subject to the rules and regulations of the South African National Roads Agency (SANRAL). The N2 is a national limited access and high speed public transport route. As such, direct access onto this road is limited. The Turton Beach Development Framework proposes a new on and off ramp on to the N2. In addition, it suggests that a Traffic Impact Assessment and Economic Assessment should be undertaken to assess the feasibility of the proposed access points. Nevertheless, the strip of land along the N2 provides an opportunity for the development of mixed land uses to support the development of this area as a recreational and tourism node as indicated in the Framework on Map 41.

#### 12.4.1.2 R102 PRIMARY TOURISM CORRIDOR

The R102 is a provincial tourism corridor that runs along the N2 in a north-south direction. It is the main tourism route in the south coast and links various small tourism towns. The short strip (7km) that runs through Umzumbe provides an opportunity to integrate Umzumbe into this tourism route with Turton serving as a gateway into rural parts of Umzumbe. As such, tourism related developments should be promoted along this corridor.

R102 is one of the two major roads that run through Thulini Traditional Council Area. Settlement densities are higher where it intersects with P73 thus making it one of the major structuring element at this level. Turton node is also located at this point.

The nature of development along this corridor should provide for the road to serve as an alternative mobility route to the N2, and a coastal tourism route. As such, where ribbon development occurs, a service road should also be provided with direct access off the road provided only at key intervals of at least 300m. Possible land use scheme zones along this corridor can include:

- ⇒ Low Impact Mixed Use at strategic points along the corridor and at the intersection with P73 to accommodate tourism accommodation establishments and commercial activities respectively.
- ⇒ High Intensity Traditional Settlement for settlements along the corridor.
- ⇒ Nature and Cultural Based Tourism to promote tourism

#### 12.4.1.3 P68 PRIMARY DEVELOPMENT CORRIDOR

P68 runs along the southern and western part of Umzumbe, and serves as the main access to settlements located within Bhekani, Nhlanguwini, Cele P, Hlubi and Mabheleni traditional council areas. It serves the largest number of communities, and is identified in the PDGS as a tertiary development corridor, and a link road between Ixopo and Port Shepstone. P68 will assume the character of a development corridor with high (by rural standards) density settlements occurring along the road and the associated service centres in strategic locations. These include Phungashe, St Faiths, Dweshula and Assisi. The road has been upgraded and tarred. This infrastructure investment has augmented

the potential of this corridor and is expected to unlock economic opportunities. Possible Land Use Scheme zones along this corridor can include:

- ⇒ Low Impact Mixed Use at the identified nodal areas / intersections along the P68 corridor.
- ⇒ Rural Transitional Settlement, supported by the spatial planning interventions suggested in the SDF for dense rural settlements.

#### 12.4.1.4 P73 SECONDARY DEVELOPMENT / MIXED USE CORRIDOR

P73 runs in an south-east to north-west direction from Turton in the south-east up to Nyavini Traditional Council area in the north. It runs through Msinsini, Sipofu and St Patricks Mission and serves as the major arterial road providing access to traditional council areas such Ndelu, Qwabe, Thulini and Nyavini. With the exception of Thulini TA, which is characterised by generally higher densities, this corridor has low intensity of settlement and land use compared to P68. A significant portion of the road runs through privately owned sugar cane and forestry plantations thus establishing this as a largely agricultural corridor. It plays a major role in terms of the movement of produce from these plantations to their market. The road also runs through the deep and remote picturesque parts of Umzumbe. The upgrading and tarring of this road has improved access to the remote parts of Umzumbe and will unlock economic opportunities in the inland. It will facilitate the realisation of the potential of this road as a development

corridor. The P73 is also partially identified as a mixed use activity corridor in Turton area, where greater densities and land use intensities are experienced. Possible Scheme Zones along this corridor can include:

- ⇒ Low Impact Mixed Use at nodal areas and where the corridor is identified as a mixed use activity corridor.
- ⇒ High Intensity Traditional Settlement for settlements in close proximity to the corridor.
- ⇒ Agriculture for the farms located along the corridor.
- ⇒ Rural Transitional Settlement, supported by the spatial planning interventions suggested in the SDF for scattered rural settlements.

#### 12.4.1.5 P254 SECONDARY DEVELOPMENT CORRIDOR

P254 secondary corridor runs along the eastern part of Umzumbe in a south-north direction. It provides access to traditional council areas such as Nyavini and Qoloqolo. Umgayi and Qoloqolo Development Nodes are all located along this road. It also provides access to some remote parts of Umzumbe. It shares a number of features with P73 Corridor with relatively dense settlement occurring in Qoloqolo area and lesser densities as you move towards the northern parts of the municipality. The road plays an important role in terms of facilitating access to the agricultural areas in the north and linkages with the markets. Possible Scheme Zones along this corridor can include:

- ⇒ Low Impact Mixed Use at nodal areas.

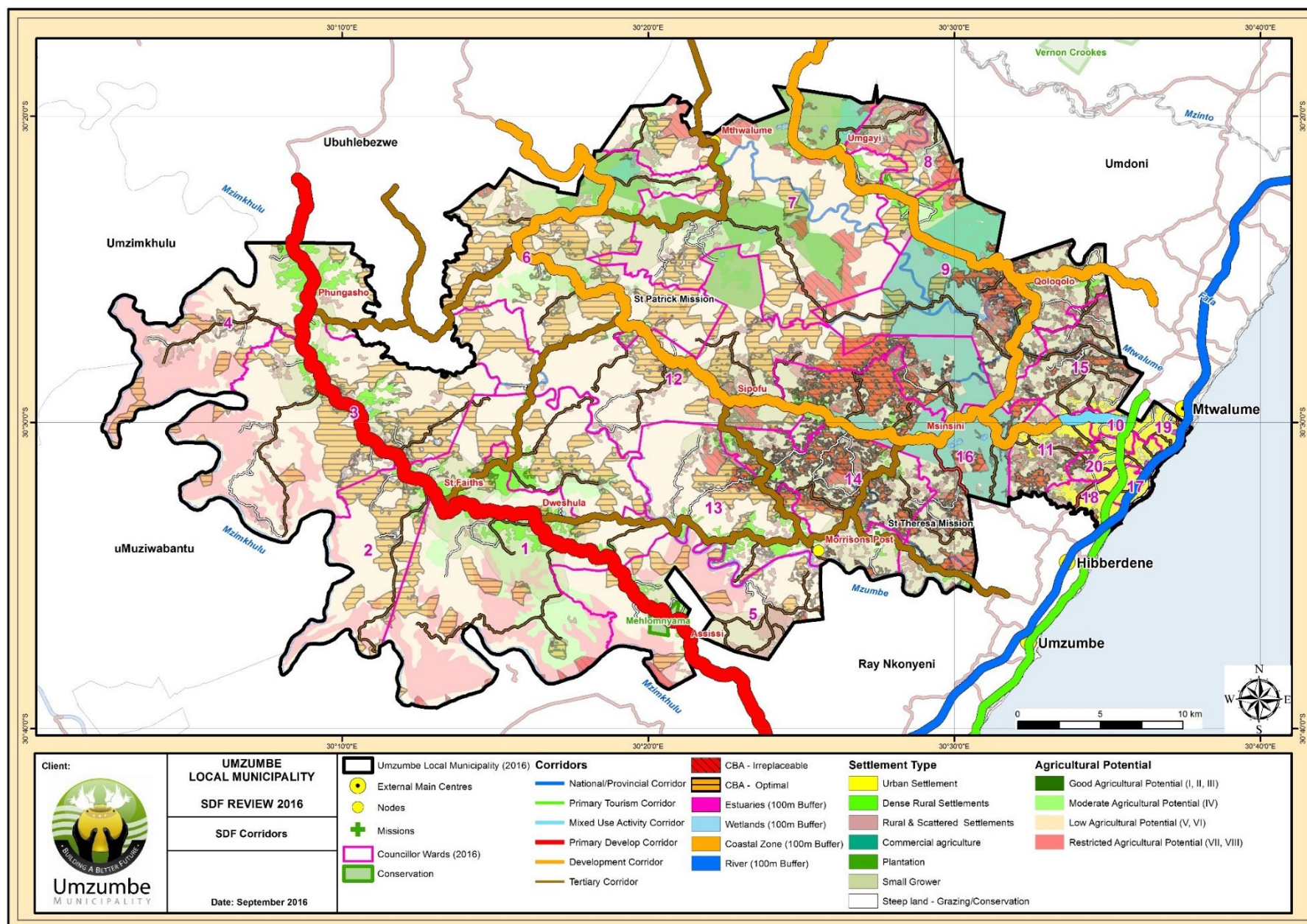
- ⇒ Agriculture for farms along the corridor.

- ⇒ Rural Transitional Settlement, supported by the spatial planning interventions suggested in the SDF for scattered rural settlements.

#### 12.4.1.6 TERTIARY CORRIDORS

Tertiary corridors link development nodes with development nodes, local settlements to development nodes, and provide access to public and commercial facilities at a community level. A number of these are distributed throughout the municipal area and serve to knit together villages at a local level. Some of these roads are also in a substandard condition and require substantial upgrading. The key tertiary corridors include the following:

- ⇒ D1054 – this road directly connects the nodes of St Faiths and St Patricks and also directly connects the P68 and P73 corridors.
- ⇒ D1045 / D168 – these roads combine to link the P68 with the P73 and connect Phungashe with areas in Nyavini Traditional Council.
- ⇒ D1115 / D946 / D949 – these roads combine to link Dweshula with Morrison's Post and Msinsini
- ⇒ D947 / D895 – these roads combine to link Siphofu and Morrison's Post.
- ⇒ D950 – this road links St Theresa mission with settlements on the southern parts of the municipality.





⇒ D938 / D20 – the D938 road branches off from the P73 and links with the D20 to extend towards Mthwalume and beyond.

These roads provide opportunities for the location of a range of community facilities, and serve as the main structuring elements at a settlement cluster level

#### 12.4.2 CLUSTERING PUBLIC FACILITIES AND ECONOMIC ACTIVITIES IN DEVELOPMENT NODES

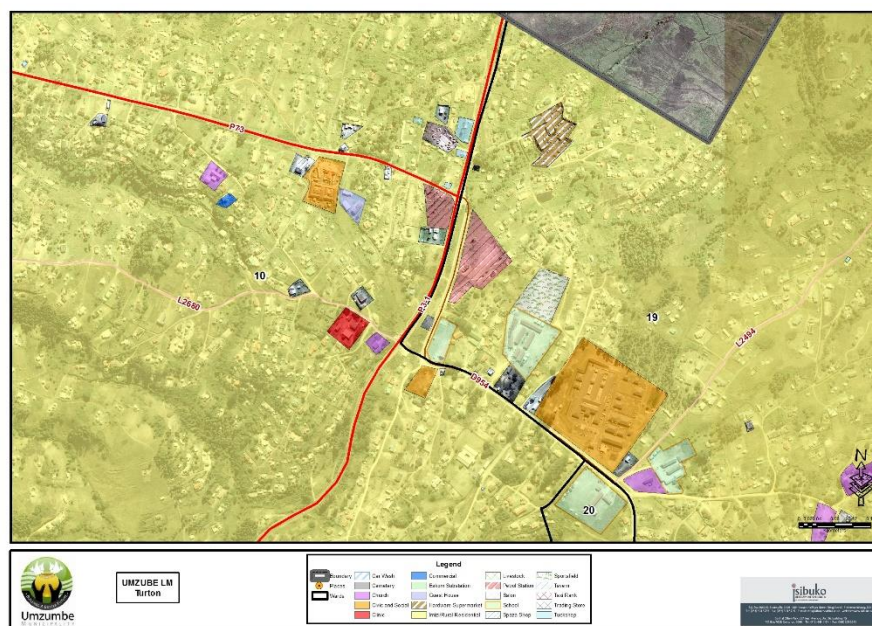
Umzumbe will facilitate and promote the clustering of a range of social services and economic opportunities at central locations as means to improve access and restructure the existing spatial pattern. The establishment of a hierarchy will assist in allocating facilities of various types to their most appropriate locations, based on the facility threshold and the appropriate number of people required within the catchment of that facility. Clustering will create opportunities for facility multi-use, sharing and land savings, cooperation and joint financial planning between the departments and the private sector. If this is achieved within nodes, it can contribute positively to service delivery, spatial restructuring and financial sustainability.

Activity nodes serve as points in the spatial system where potential access to a range of opportunities is greatest, where networks of association create diversity and where people are able to satisfy the broadest range of their day-to-day needs

Being points of maximum economic, social and infrastructure investment, as well as representing established patterns of settlement and accessibility, these nodes must be regarded as primary devices on which to anchor the structure of the sub-regional spatial system.

##### 12.4.2.1 TURTON PRIMARY SERVICE CENTRE

MAP 31: TURTON



Turton is identified as a centre for the coordination of development within Umzumbe Municipality. It is located at the intersection of R102 and P73 corridors within Thulini Traditional Council area. It is developed with a range of public facilities including municipal offices, taxi rank,



range of public and community facilities. These include a magistrate court, post office, government offices, etc. Its catchment area includes Nhangwini, Bhékani and Cele P Traditional Council areas and also areas within Ubuhlebezwe Municipality.

Phungashe is already developed with a range of public facilities and attracts a large number of people from a wide catchment. Phungashe will be developed as a rural service centre for the western part of Umzumbe. Medium to higher order commercial, public and social facilities should be promoted in this area.

Preparation of a nodal development framework for Phungashe will facilitate compact and coordinated development, and development of P68 as a development corridor. Nodal boundaries should be delineated with the participation of Nhangwini Traditional Council area and the local communities. Noteworthy, the municipality has already initiated a process to prepare a Local Area Plan for the Phungashe area.

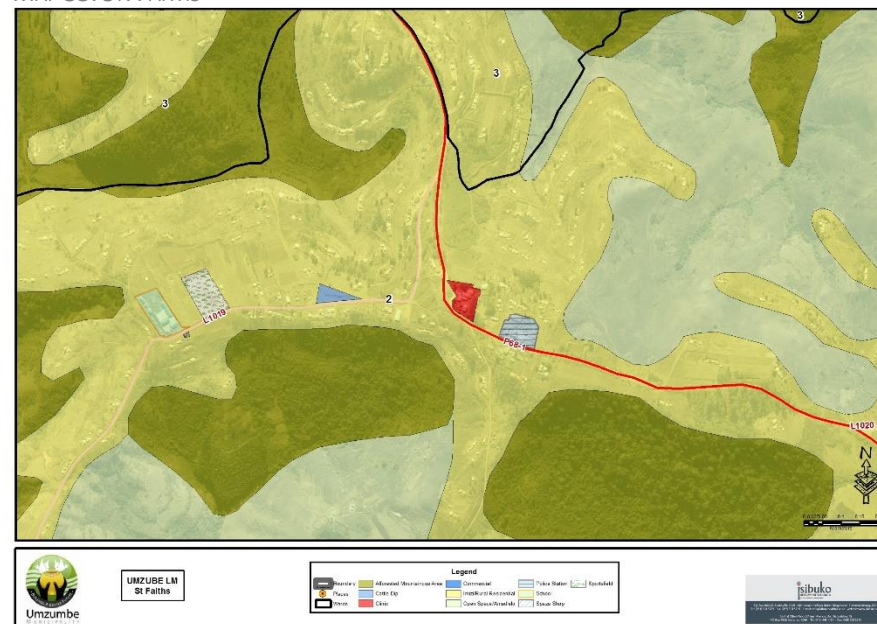
#### 12.4.2.3 ST FAITHS SECONDARY SERVICE CENTRE

St Faiths is located along P68 approximately 40km south of Phungashe. Development in the area comprises of a police station, community hall, some rental accommodation, postal office, clinic, and local convenient shops. Its catchment area includes Hlubi, Mabheleni, and Cele P Traditional Council areas. Topography poses a major constraint to the future development of this node. However, this could be minimized

through careful planning. Development of this area as a service centre will reinforce the role of P68 as a development corridor.

St Faiths is a rural node, and its character should remain as such with some densification (by rural standards) being promoted within at least a 5km radius. It will assume a linear structure (development along the main road) with a service road providing access to facilities along the road. This will limit direct access and prevent encroachment onto P68. Traffic calming measures should be introduced along the part of P68 that runs through the centre.

MAP 33: ST. FAITHS

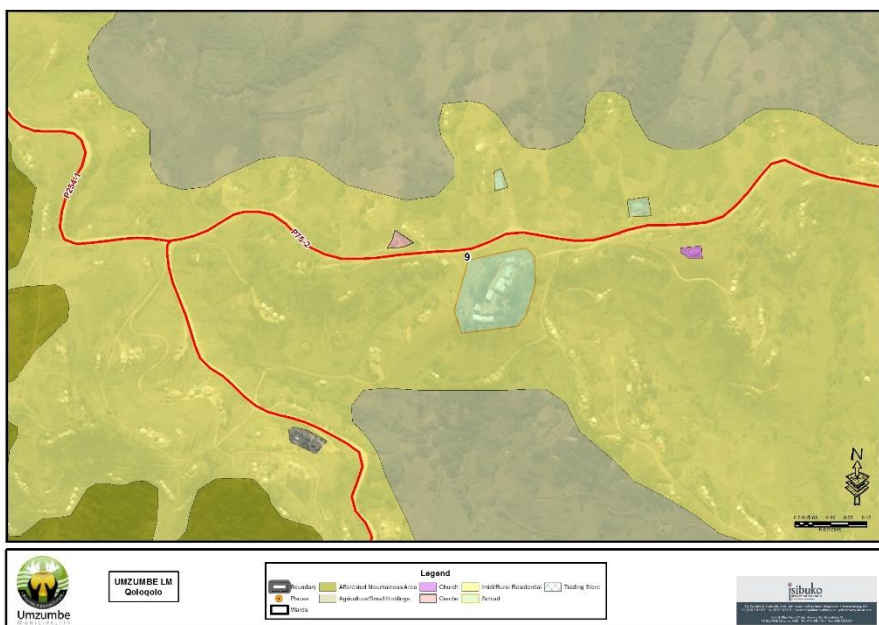




#### 12.4.2.4 QOLOQOLO SECONDARY SERVICE CENTRE

Qoloqolo is located in ward 9 within cluster C. It is located along the P254 secondary development corridor. The node should be developed as a service centre for the settlements that form part of Qoloqolo Traditional Council area. This includes the location of higher order services and public facilities.

MAP 34: QOLOQOLO

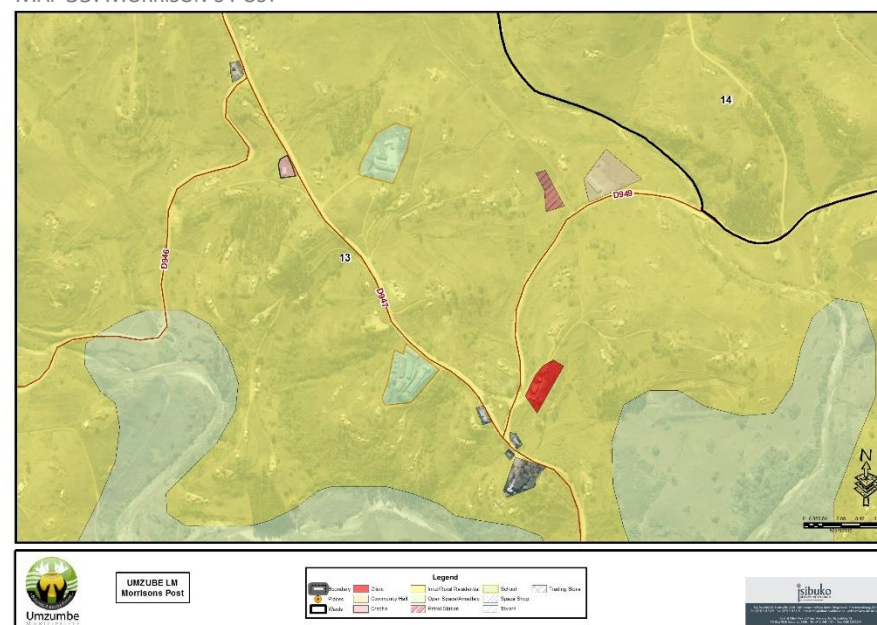


#### 12.4.2.5 MORRISON'S POST SECONDARY SERVICE CENTRE

Morrison's Post is a small incipient node located within cluster B. It is located along the D947, where a number of tertiary corridors converge.

The node is well located to be developed as a service centre for the southern parts of the municipality, including mostly areas forming part of the Qwabe Traditional Council. This includes the location of higher order services. The node forms part of an area where settlement pressure is mounting.

MAP 35: MORRISON'S POST



#### 12.4.2.6 DWESHULA TERTIARY SERVICE CENTRE

KwaDweshula is located along P68, approximately 35km north-west of Port Shepstone within Cele K traditional council area. It is located at the intersection of D1115. The node is located at a very winding part of P68 Corridor on steep slopes which limits the potential expansion of this



node. There exists a bridge over the river right before the central node, which allows one vehicle to pass at a time.

The area is level around the central node (this is the area with the clinic, soccer field, schools). Steep slopes occur again towards the north. KwaDweshula is located within an area with generally low densities and has a small threshold. It is located between two nodes in the form of St Faiths and Assisi. KwaDweshula should be kept as a low order node with tertiary public facilities targeting the surrounding communities.

#### 12.4.2.7 ASSISI TERTIARY SERVICE CENTRE

Assisi is located on the southern boundary of Umzumbe, along P68 approximately 20km North West of Port Shepstone. Although, the node is located in a sparsely settled area, it is identified as a potential node in recognition of its tourism potential. It has a rich heritage. The convent in the area was established in 1922, and has since been declared as a heritage site thus making Assisi one of the potential tourism nodes within Umzumbe. The mission was named in the honour of St. Francis from Italy.

#### 12.4.2.8 SIPHOFU TERTIARY SERVICE CENTRE

Siphofu Node is located along P73 corridor in ward 12 within cluster B. The node is surrounded by small scattered and sparsely populated settlements, which limit the threshold for this node. As such, Siphofu should be developed as a tertiary node with low order services targeting the surrounding communities.

#### 12.4.2.9 MTHWALUME TERTIARY SERVICE CENTRE

Mthwalume node is located on the northwestern tip of Umzumbe Municipality in ward 7 and cluster D. While Siphofu will serve the other part of cluster D, Mthwalume should be developed as a local service centre for the surrounding communities within Nyavini Traditional Council.

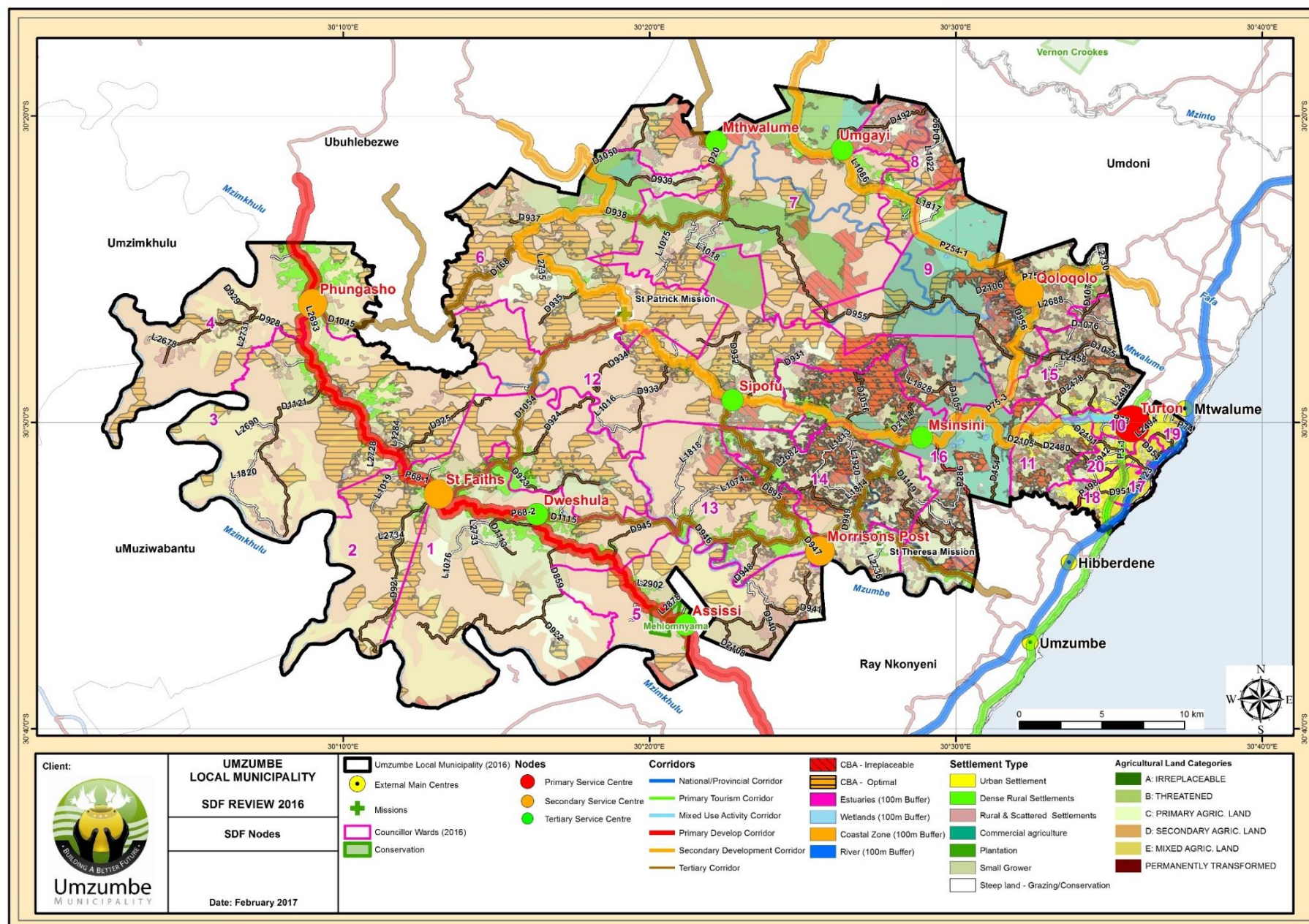
#### 12.4.2.10 UMGAYI TERTIARY SERVICE CENTRE

Umgayi node is located in ward 8 along P254 corridor. This node should be developed as a local service centre for the surrounding settlements most of which are located on privately owned land. It should also be able to service the surrounding agricultural activities. Realization of this ideal is dependent on the proposed upgrading of P254.

#### 12.4.2.11 MSINSINI TERTIARY SERVICE CENTRE

Msinsini is located within ward 16 in Cluster A. It is located along the P73 corridor, between Sipofu and Turton. The node features the Msinsini Police Station as one of the three police stations within the municipality. The node should develop as a local service centre providing a range of public and other facilities, targeting the immediate surrounding communities.

MAP 36: DEVELOPMENT NODES



### 12.4.3 COMPACT DEVELOPMENT

The promotion of compact development will mitigate the negative impact of sprawling settlements by encouraging the planning of co-ordinated, harmonious, sustainable and compact settlements. Growth in peripheral areas is an inevitable process, and needs to be managed in order to facilitate the establishment of planned settlements and to promote sustainable development.

Compact development will further contribute to the protection of sensitive environmental and agricultural areas and will ensure effective and efficient social, engineering and other services.

The municipality is seeking to create housing opportunities for the poor in areas that improve access to opportunities including employment, access to basic services, etc. This includes the development of sustainable human settlements and ensuring that people live in harmony with the environment. The municipality will to achieve this by:

- ⇒ Limiting and containing the urban development footprint within the Urban Development Line (urban edge / growth boundary). The application of growth boundaries and other growth management techniques should take due cognisance of the adequacy of supply of land.
- ⇒ Provide clear guidance on directions for future settlement growth and proposed release of land for development.

- ⇒ Promoting higher “net” residential densities in strategically located areas within core areas, new growth areas and areas prioritised for infrastructure development.
- ⇒ Creating new residential development opportunities that connect fragmented areas and consolidate settlement form around high accessibility routes and nodes.

#### 12.4.3.1 URBAN EDGE

Umzumbe is a predominant rural municipality; essentially, only the areas of Turton is classified as semi-urban. The difference between urban/semi-urban and rural in municipalities such as Umzumbe is not clearly defined. An urban edge is essentially a geographically-based line on a map indicating the edge between land available for urban development (infill and redevelopment) and land that is to remain part of the rural landscape and natural environment. Infill and redevelopment of lands in existing centres reduces the costs associated with infrastructure investments and servicing. It also revitalizes existing commercial centres, creates densities that support transit and neighbourhood shops, and supports economic development by creating clusters of businesses in close proximity. The more that compact settlements can result from containing development within settlement boundaries, the more communities will become transit friendly, walkable and support viable commercial centres and nodes.

#### 12.4.3.2 SETTLEMENT EDGE

The outwards expansion of rural and isolated settlements is of great concern. The government will continue to battle to provide services efficiently and effectively in these areas, unless this situation is halted. It will also be difficult to turn these areas into sustainable human settlements.

The municipality therefore have to work with the landowners, traditional leaders and other relevant authorities to contain further outward expansion of these areas. In particular, the following activities will be undertaken in this regard:

- ⇒ Delineation of settlement edges (outer boundary) beyond, where residential and other physical development will be discouraged. Each boundary will be negotiated with relevant stakeholders.
- ⇒ Working with those responsible for land allocation to formulate standards, develop settlement plans and identify potential sites for future residential use, public facilities, etc.
- ⇒ Clear identification of land reserved for agricultural purposes, public facilities, public open spaces (active and passive) and other state domestic uses.
- ⇒ The level of service will depend on the density of each settlement and whether it is earmarked for densification or not. Dense rural

settlements will be prioritised for upgrading, delivery of bulk services and provision of public facilities.

#### 12.4.3.3 DENSIFICATION

Densification is one of the key elements of compact development and a drive towards building an integrated and efficient spatial form. This can be achieved by limiting settlement sprawl, by promoting higher densities, infill and re-development in and around activity nodes and by the promotion of mixed use activity corridors linking otherwise isolated and non-functional areas with a focus of public transport.

The densification to be adopted are dependent on the spatial context of development, the site specific characteristics, the capacity of existing infrastructure and what the impact of that development will have on the environment. Within the densification strategy, there has to be a balance between compactness and the retention of significant open space to satisfy other social and environmental needs.

The objectives of densification and compaction in Umzumbe are as follows:

- ⇒ Minimising/Reducing the Footprint of the built up areas: Settlements transform natural land and alter the ecosystems in which they are located in a magnitude of ways. This in itself warrants a concerted effort to limit the impact on the affected area of land, as well as the ecosystems involved.



- ⇒ Preventing the Destruction of Agricultural Land: Outward expansion of settlement occurs at the expense of high-value, well located agricultural land, in close proximity to markets. This resource should be protected from settlement intrusion.
- ⇒ Improving the Use of Public Transport and Facilitating Pedestrianisation: One of the key means of improving the use of public transport is increasing residential densities in nodes and along public transport corridors, which has major implications for the way in which areas are built and managed. The other is greater integration between the various entities involved in land use and transport planning.
- ⇒ Improving the Efficiency of dense areas: More compact settlements increase general accessibility, the level of convenience with which people can conduct their daily lives and reduces costs in terms of time, money and opportunity cost, both for local government as well as for its citizens. More compact settlements in which infrastructure investment is planned are more efficient than those in which this is not the case.
- ⇒ Reducing Inequality: One of the objectives of intervening in the form and density of development of settlements is to ensure greater access of all (especially the poor) to the benefits and opportunities of urban living.

- ⇒ Increasing the marketability of the main centre: The physical environment of Umzumbe's main centre, including the quality and liveability, plays a major role in its competitiveness. In addition to this, the message that potential investors get from a centre that seems under control and functions well is that it is well planned and managed in an integrated way. The aim is to ensure a density of development that can facilitate sustainable economic development, job growth and income generation.
- ⇒ To adhere to legislative directives: A wide range of acts and policies has been brought forward by national government urging local authorities to address the issue of sprawl and settlement form. However, in practice, very little has been done to address these legislative directives.

#### 12.4.3.4 DENSIFICATION STRATEGIES

The different methods for achieving densification can occur through:

- ⇒ New development on vacant or under-utilized land at higher densities.
- ⇒ Subdivision of large pieces of land to encourage higher densities.
- ⇒ Infill development on vacant or underutilized parcels of land at higher densities. A range of infill processes may include transfer of development rights, land swaps, land consolidation, public housing projects and so forth.

- ⇒ Cluster development on large parcels of land through a consolidation process.
- ⇒ Conversion of existing building (sometimes vacant/derelict) to other uses.
- ⇒ Allowing additional units to be developed on a single piece of land.
- ⇒ Redevelopment of poorly functional and underdeveloped areas to encourage and facilitate infill.
- ⇒ Introduction of a range of housing products/typologies to meet the densification requirements.

## 12.5 DEVELOPMENT OF SUSTAINABLE HUMAN SETTLEMENTS

Human settlements are the spatial dimension as well as the physical expression of economic and social activity. The creation of sustainable human settlements is inevitably an objective for social development as it defines and conditions the relationship between where people live, play and work on the one hand and how this occurs within the confines of the natural environment. The development of human settlements in Umzumbe will primarily be focussed at:

- ⇒ Reducing the housing backlog in line with the national and provincial norms and standards.
- ⇒ Contributing towards spatial transformation and creation of an efficient settlement and spatial pattern.

- ⇒ Accelerating development and consolidating human settlement development in line with the national policy directives and the IDP of the municipality.

### 12.5.1 HOUSING DELIVERY

A well-contextualised strategy should be followed in the development of human settlements. The land tenure status, socio-economic context and spatial character should inform the form of housing and the extent thereof. Particular focus in the urban edge should be paid to the formalisation of settlements. Dense rural settlements will be prioritised for the development of human settlements through the rural housing subsidy scheme.

### 12.5.2 RURAL HOUSING

Housing in Umzumbe municipality is mainly delivered in the form of government's rural housing assistance programme. This has been designed to complement the realisation of the objectives of the Integrated and Sustainable Human Settlements. It focuses on areas outside formalised townships where tenure options are not registered in the Deeds Office but rather protected in terms of land rights legislation - Interim Protection of Informal Land Rights Act, 1996 (Act No. 31 of 1996). Rural housing development in Umzumbe should acknowledge the existing land tenure systems. The rural housing assistance programme is needs or demand based and designed to provide housing and infrastructure assistance within the specific

circumstances. Dense rural settlements will be for prioritized rural housing.

## 12.6 BULK AND SOCIAL INFRASTRUCTURE DEVELOPMENT

### 12.6.1 BULK INFRASTRUCTURE DEVELOPMENT

Provision of water and sanitation infrastructure is the responsibility of Ugu District Municipality, while other services such as electricity and roads fall within the ambit of other entities such as Eskom and the Department of Transport respectively. Sector plans have been prepared for some of the services. The recommendations thereof, that have implications for Umzumbe Municipality, have been integrated into the SDF for alignment and integration purposes.

#### 12.6.1.1 SANITATION

The Umzumbe IDP indicates that the Municipality still faces sanitation backlogs, particularly in the remote rural settlements. Planning and implementation of sanitation projects should be based on settlement clusters and be integrated with the initiative towards the transformation of rural villages into sustainable human settlements.

Spatial planning standards that should apply to sanitation projects, include the following:

⇒ Settlements located within 100m from wetlands or a river should be provided with lined VIPs.

⇒ Priority should be given to settlements located within priority environmental areas.

⇒ Semi-urban settlements should be provided with water borne sewer, where possible.

⇒ Rural settlements should be developed with either lined VIPs or other septic tanks.

⇒ Alternative forms of sanitation should be investigated.

⇒ Greater use of alternative and improved waste management (both sewage and solid waste by means of increased recycling, biogas capture and utilization and other responses).

#### 12.6.1.2 WATER

Efficient and adequate supply of water services for domestic consumption and for economic development is one of the most important challenges facing Ugu District Municipality in its capacity as the Water Services Authority. The opportunity for rainwater harvesting as a strategy to improve access to water, especially in rural areas and poorer communities, should be investigated. Local communities can be trained in water harvesting and storage, as well as the treatment of water for domestic purposes. Although alternative water sources is not regarded as sustainable alternatives, it does provide additional options to conventional water supply and stimulate a culture of efficient water use. As indicated in the Ugu WSDP (2013:24), it allows users to limit

their dependence on formal water supply and it can assist with subsistence food gardening and in times of severe water restrictions it will provide important relief for basic needs. In this respect, the following opportunities are available:

- ⇒ Promoting greater use of rainwater harvesting via rainwater tanks, both at social facilities and at individual households.
- ⇒ Treatment of grey water.
- ⇒ Optimise the re-use of wastewater.
- ⇒ Supporting subsistence and emerging agriculture and promoting more effective soil erosion control. It should be noted that it is not merely 'technologies' which should be applied but also simple and well known methodologies such as composting, mulching, and the efficient use of water etc.
- ⇒ Ensuring more effective water demand management (reducing the demand for costly and energy expensive purified water by reducing leakages and promoting more responsible consumer usage.
- ⇒ Desalination of sea water can be an option, although preliminary indications suggest that it is still more expensive than other alternative options. It is recognised that at some point it may become economical. (Ugu WSDP (2013:24).

In terms of the National Government's definition of backlogs, households must have access to a formal water supply within 200m

walking distance. The following spatial planning standards should be implemented in all water supply schemes:

- ⇒ Peri-urban settlements should ideally be supplied with water on site or at least within a 200m from each household. The ultimate goal should be to formalise these areas and supply water within the house.
- ⇒ Dense rural settlements should be provided with water at least within 200m from each household.
- ⇒ Scattered rural settlements can be catered for through spring protection and boreholes.

#### 12.6.1.3 ENERGY

The main source of energy in Umzumbe is electricity, provided by Eskom. While the majority of rural households have access to pre-paid reticulated electricity, households in more remote less densely settled areas operate on an off-grid basis and still depend on wood, gas and paraffin for lighting and heating requirements. The following alternative sources of energy, which are more environmentally sustainable and which could be considered in the area, are indicated below:

- ⇒ Improving household living conditions and livelihoods through the facilitation or provision of a range of alternative forms of energy at



the household level, mainly in areas, which are off the main Eskom grid. Amongst the recommended technologies are small photovoltaic systems, small wind turbines, safer and more efficient cookers such as gel fuel, and more efficient and sustainable use of wood fuel.

- ⇒ Solar energy for individual household lighting, as well as within social facilities (e.g. schools) and at emerging service nodes.
- ⇒ Solar water heating utilising the subsidy provided by government for individual household, as well as within social facilities (e.g. schools) and at emerging service nodes.
- ⇒ Wind generated power although the establishment costs are high.
- ⇒ More effective promotion and incentivisation of Eskom's feed in tariffs (i.e. Eskom purchasing excess electricity produced by consumers or developers using alternative technology at a rate higher than the cost of its own main grid electricity – this includes alternative power generation by wind, solar power, landfill gas or small hydro and which is fed back into the grid).
- ⇒ Promoting more energy efficient buildings and industry (by means of a mix of increased standards for compliance on new buildings, incentives such as rates rebates, and education and awareness).

#### 12.6.1.4 MOVEMENT NETWORK AND PUBLIC TRANSPORT

Movement should not be seen as a separate element but as an activity, which occurs within social space. The degree to which it dominates space varies significantly depending on the type of settlement. Equal emphasis should be paid to both spaces, which are entirely pedestrian dominated to spaces, which are entirely vehicle dominated. Pedestrian and public transport are the dominant modes of transport in rural settlements. Public transport is essential in areas that are characterised by low levels of car ownership. As far as possible, transformation of rural settlement into sustainable human settlements should support public transport. Well-located and highly accessible settlements should be allowed to expand and increase in density in order to create sufficient thresholds to support public transport and public facilities.

Higher densities in areas have potential to increase the viability of public transport and should be encouraged along public transport routes. This is critically important as it promotes concentration of activities and gives effect to the notion of nodal development. There is a strong ordering dimension to movement. At all scales, it is necessary to maximise continuities of movement, as this promotes choice and integration. Land uses should be able to respond freely to movement patterns as this encourages diversity and a mix of activities.

### 12.6.2 IMPROVING ACCESS TO SOCIAL FACILITIES

Different communities have different priorities in terms of social facilities, and different types of facilities will work efficiently in certain communities. Large facilities with a municipal wide threshold such as a district hospital may not be located in a small poorly accessible settlement. The important issue is not to predetermine the form of all facilities, but rather the positioning of social institutions valued by the community. The precise nature and form of many of these facilities can be determined over time by the community itself.

Community facilities are important place-making elements and they should be deliberately used, in combination with public space, to make memorable places. They are dependent upon public support and play an important integrating function in and between communities/settlements. They should therefore be “externalised”, by being located in places of high accessibility, and made accessible to the local and surrounding communities. In this way, they bring together people from a number of local areas and are not tied to the dynamics of any one community.

Community facilities are also significant attractors of people and development of settlements around them. Experience shows that people tend to locate in areas that have social facilities nearby. In actual fact, some people even leave their communities in search of areas that are well-provided with social infrastructure. It is clear that public

facilities are pivotal prerequisites to ensure the creation of sustainable human settlements. As such, the SDF, as one of the key instruments in the sustainable human settlement creation process, needs to take cognisance of the public facilities and guide their location.

#### 12.6.2.1 HEALTH

Health considerations must inform all dimensions of settlement-making and design. Health facilities should be accessible and integrated with public transportation. This can be achieved by locating such facilities close to activity areas and regular places of gathering. The location of preventively orientated health facilities, such as clinics, in association with primary and pre-primary schools, offers advantages. Preventive functions, such as inoculation and nutritional programmes are best delivered through schools. Where a multipurpose hall serves a number of schools, a clinic may be beneficially located within or adjacent to that hall.

In line with the provincial planning standards for health facilities, a clinic should be developed for every 7000 - 30000 people where service thresholds allow. Mobile clinic services should be prioritized for areas where thresholds do not allow.

#### 12.6.2.2 MEETING SPACES

Both open-air public spaces and enclosed spaces such as community halls are important parts of social infrastructure. Halls should be located in association with public spaces as this will allow for events in one to

spill over into the other, or provide alternatives in case of weather changes. Halls should also be associated with other public facilities, such as schools and markets. Given the limited number of public facilities, which can be provided in any one settlement, it makes sense to concentrate these to create a limited number of special places, which become the memorable parts of the settlement.

The number and location of meeting places cannot simply be numerically derived. Rather, it is necessary to create “forum” places, places, which over time assume a symbolic significance outstripping their purely functional role.

#### 12.6.2.3 EDUCATION FACILITIES

The creation of environments, which promote learning, forms an integral part of the settlement-making process. Learning has both formal and informal dimensions. Schooling relates to the formal dimension of education. Informal learning stems from exposing people to experiences outside the formal learning environment, such as experiencing nature and social events. In this respect, the informal part of the learning experience can be enhanced by integrating educational facilities with the broader settlement structure. This can be achieved by locating schools, crèches and adult education centres close to places of intensive activity.

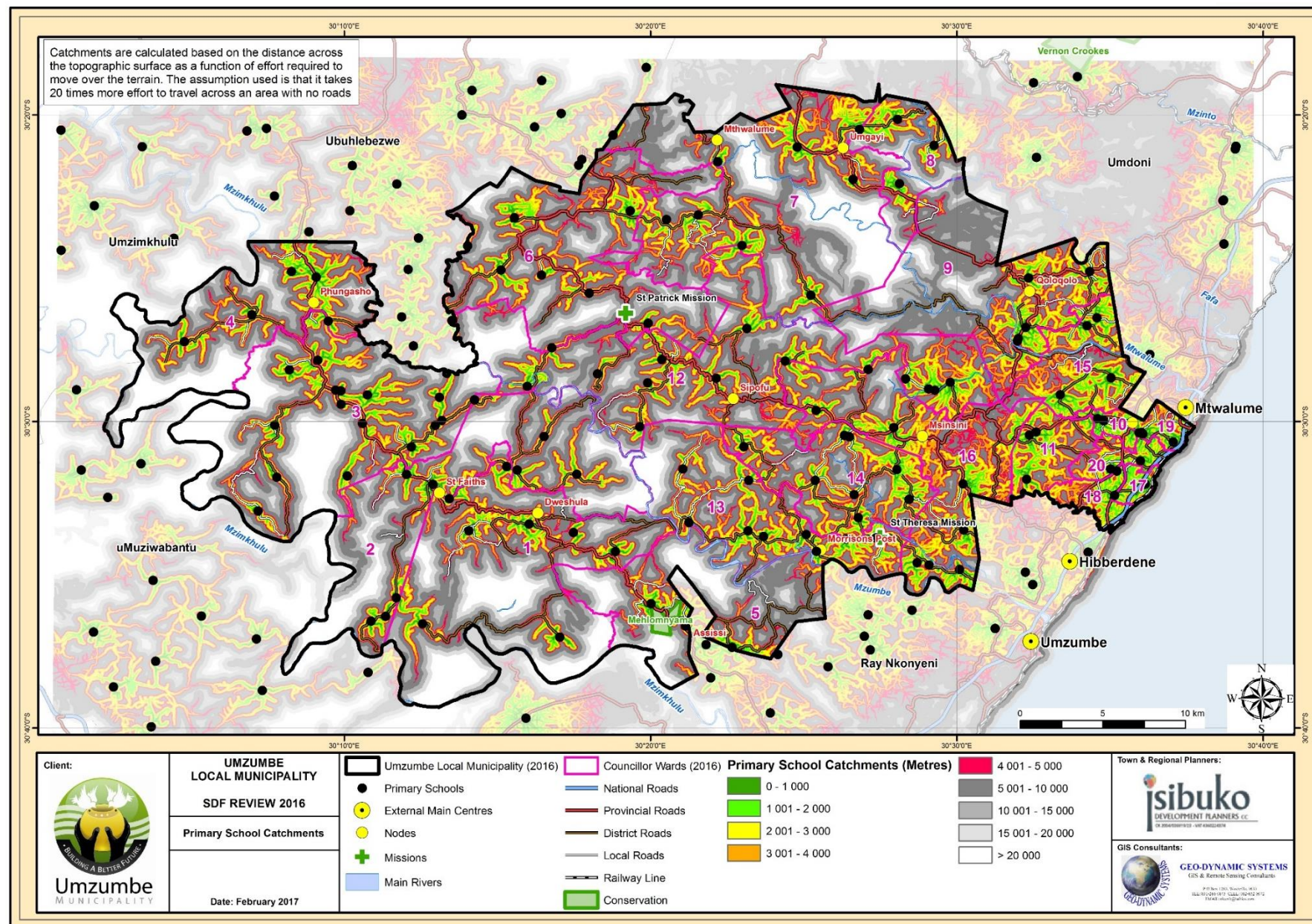
The concept of the specialised self-contained school, accommodated on a spatially discrete site and serving only its pupil population, needs a rethink. Schools should be seen as resources serving both pupils and the broader community. In this regard schools can accommodate the school population during the day and, where possible, adult education during the evenings. Similarly, halls and libraries can serve the school population during the day and the broader community during the evening, ensuring 18-hour usage of facilities.

The need for informal school play space can be supplemented by public space adjacent to which the school is located. Formal sports fields can serve both the school and the broader community. In terms of their location, schools should be part of an accessible, settlement-wide system of education facilities. Accordingly, they should be located close to continuous public transport routes. This will make schools sustainable over a longer period, since they will draw pupils from a larger area, thus becoming less susceptible to fluctuations in the local population.

Provision of education facilities should be based on the KZN Department of Education Space Planning Norms and Standards for Public Schools. In low-income regions, a primary school should be established for every 500 households, while a secondary school is needed for every 1500 households. Future school sites should be located and be integrated into the existing spatial fabric and logic.

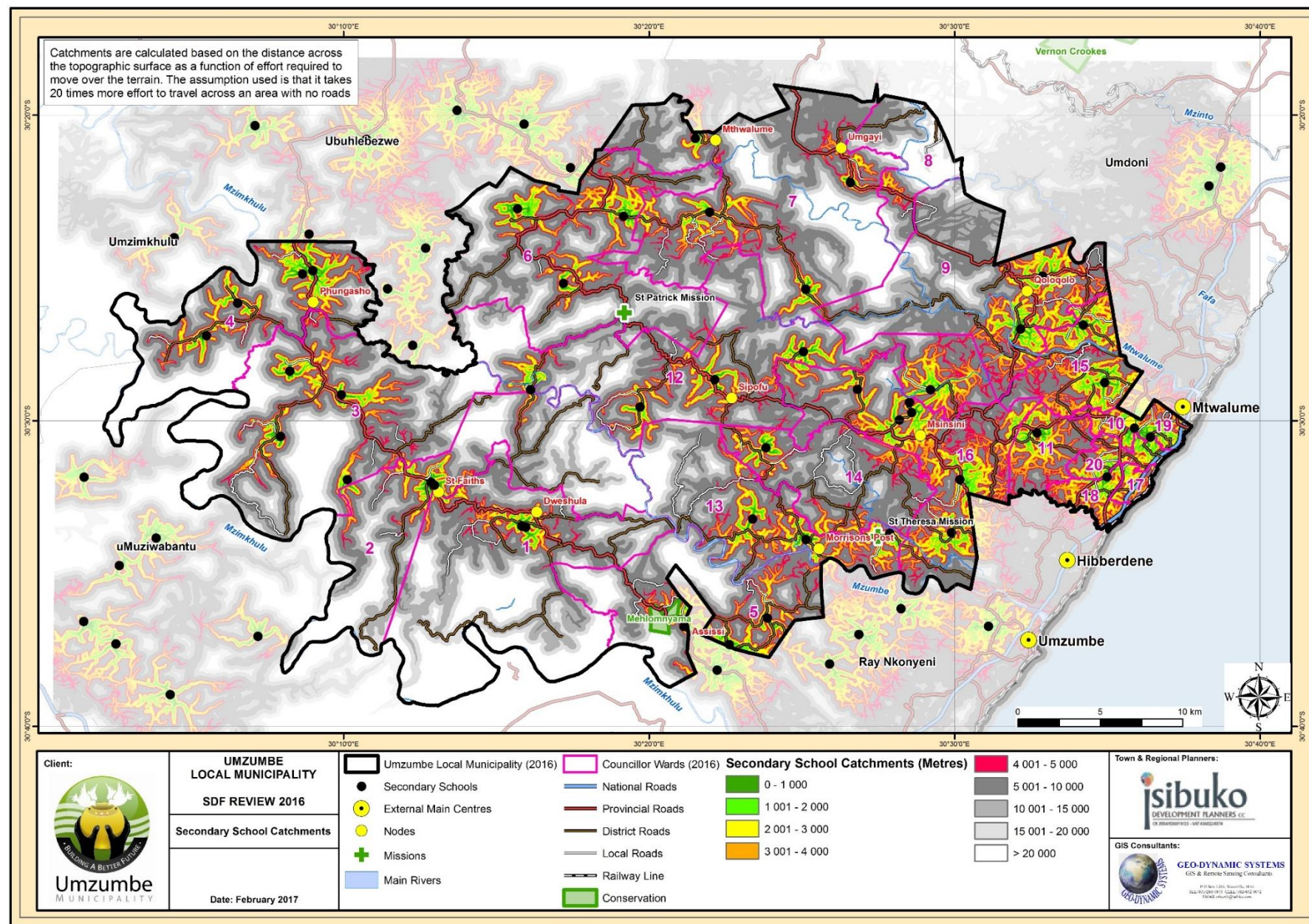


MAP 37: PRIMARY SCHOOL CATCHMENTS



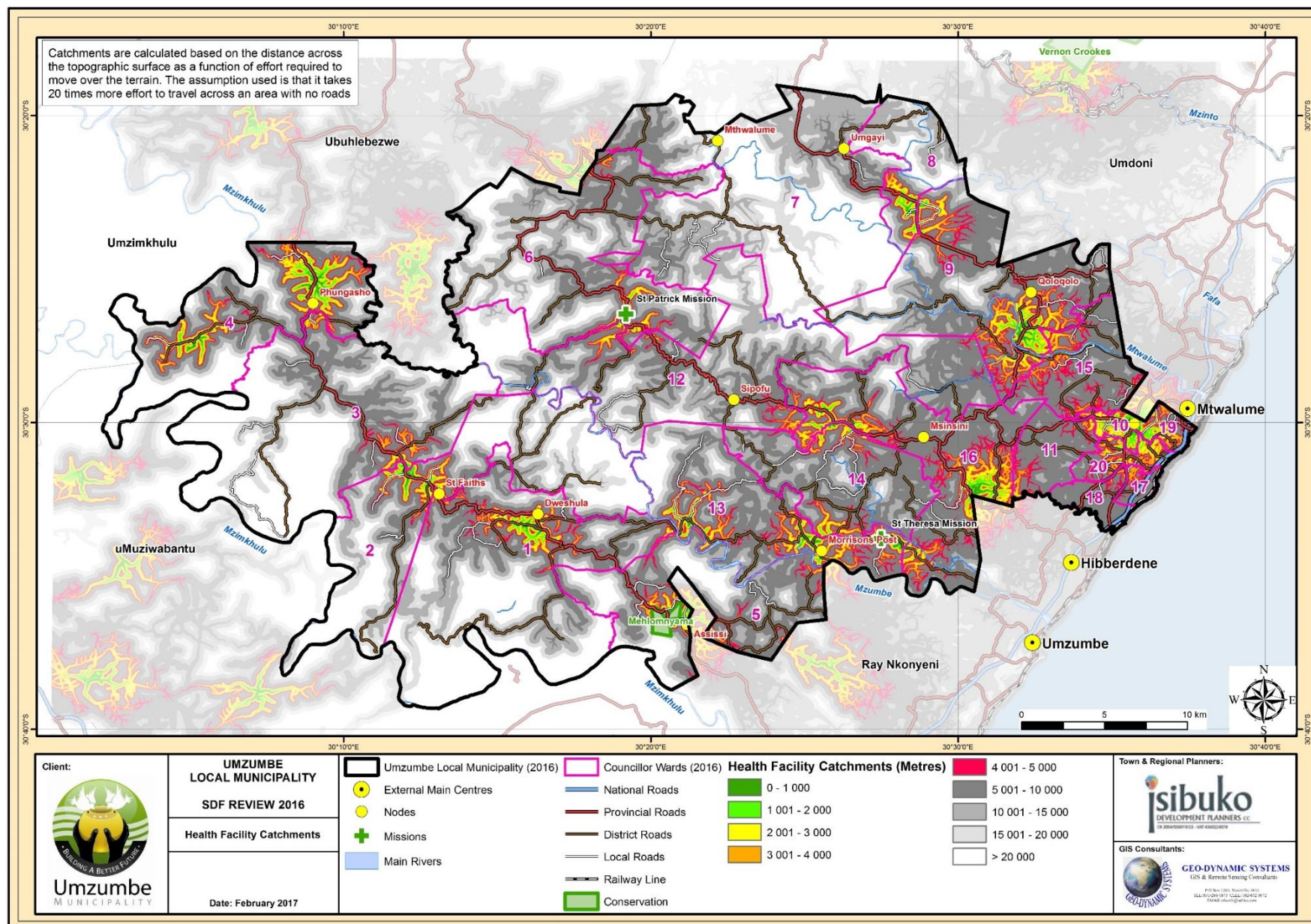


### MAP 38: SECONDARY SCHOOL CATCHMENTS





MAP 39: HEALTH FACILITY CATCHMENTS



Secondary school facilities could be located in areas where they can be shared between or among settlements thus forming the basis of emerging nodes.

## 12.7 UNLOCK ECONOMIC DEVELOPMENT POTENTIAL

The Umzumbe Municipality IDP identifies local economic development (LED) as one of the key performance areas (KPAs), and a strategic area for intervention. The main economic sectors that could enhance local economic development in the area include the tourism, agriculture and manufacturing and informal trading sectors.

### 12.7.1 UMZUMBE TOURISM ROUTE

According to the IDP, Umzumbe Municipality derives potential for tourism development from a range of attractive features such as mountainous terrain, scenic features, and rich bio-diversity. In addition, the municipality is strategically located to integrate into eco-tourism activities in the south coast provincial tourism region. Tourism development should be promoted in the following areas:

- ⇒ Nature based tourism in areas along the Umzimkhulu River.
- ⇒ Rural villages where there is an opportunity to celebrate the tradition, culture and rich heritage of the local communities.
- ⇒ Agro-tourism on commercial farms subject to impact on agricultural land.

- ⇒ Adventure tourism and mountain biking taking advantage of the uneven topographical features of the area.

A number of heritage sites have been identified. These include the following:

- ⇒ Isivivane in Qoloqolo and Cabhane;
- ⇒ Ntelezi Msane site in Kampande Othuthwini;
- ⇒ Siphofu Mountain in Mabheleni;
- ⇒ Shembe Church origins in Mthwalume;
- ⇒ KaNkulunkulu Image of Maria in Mgayi; and
- ⇒ Msikazi Mountain.

The coast also presents an opportunity for beach related tourism development, while the location of Turton along R102 Tourism Corridor establishes the area as a launch pad from which to explore the rural parts of the South Coast Tourism Region. As such, tourism related developments should be supported in Turton. This is in line with Provincial Spatial Economic Development Strategy which identifies the corridor between Scottburgh and Port Edward as an area where beach tourism, amongst other things, should be prioritised.

### 12.7.2 AGRICULTURAL DEVELOPMENT

Agriculture is the main economic activity and source of livelihood in Umzumbe. It occurs in the form of both large-scale commercial farms

and subsistence farming, with the latter occupying the majority of the land and linked to settlements.

- ⇒ In addition to the protection of agricultural land, Umzumbe Municipality will facilitate productive use of agricultural land.
- ⇒ The municipality will support out-grower scheme, and initiate programs to develop small-scale farming. The majority of these are located in the low-lying areas with generally flat land.
- ⇒ Extensive livestock farming should be promoted, particularly in communal areas, but grazing land management programmes should also be introduced to address the increasing problem of soil erosion.
- ⇒ Crop production (irrigated and dry land) should be promoted in low-lying areas and irrigation along the main river tributaries.

#### 12.7.3 INFORMAL TRADING

The municipality should identify and designate land for informal trading. Such areas should be located in each of the development nodes and other strategic locations, and should be linked to a management plan. The designation of these areas will take into account the access to markets, goods being traded, unique needs of the traders and potential impact to the business environment.

#### 12.7.4 COMMERCE AND INDUSTRY

The nodal areas should be prioritized for commercial and industrial (service and light industry) developments, depending on the size of the threshold, role of the node in the local and regional space economy, and availability of suitable land parcels. Turton is the main regional economic hub with huge untapped potential given its sphere of influence and strategic location in relation to the regional and provincial movement and trade routes. However, the area lacks a well-developed physical infrastructure and is endowed with strategically located vacant and/or underutilized land for further expansion.

Commercial developments in areas such as Phungashe and St Faiths should resonate with the role of these areas as secondary centres supporting clusters of settlements in their vicinity. Neighbourhood and community centres should be located in nodes that serve a cluster of settlements. Small-scale manufacturing / activities of a light industrial nature should be supported. The development of small-scale activities such as crafted material and sculptured wood should be linked with, and located close to, tourism areas / routes in order to strengthen forward linkages. From an industrial perspective, the potential for rural communities to develop sustainable quarrying capacity should be investigated.



## 12.8 SUSTAINABLE INTEGRATED SPATIAL PLANNING SYSTEM

### 12.8.1 CONTINUUM OF HUMAN SETTLEMENTS

Umzumbe Municipality will actively facilitate the evolution of a settlement pattern that reflects strong functional linkages between different parts of the municipal area, and the surrounding urban centres.

- ⇒ This pattern has a number of benefits, including:
- ⇒ Maximizing lifestyle choice and where people want to live, and attracting middle to higher income earners into the area.
- ⇒ Providing an effective framework for the service delivery and application of service standards based on character of the area.
- ⇒ Unlocking economic development potential at different scales thus enabling remote rural areas to realize their agricultural economic development potential.
- ⇒ Improving economic performance of the region.

A convenient settlement improves the level of choice, encourages creativity and investment while a less convenient settlement imposes a lifestyle on people and results in unnecessary expenses. Settlements should be equitable in the sense that they should provide a reasonable access to opportunities and facilities to all. It is neither possible nor desirable for settlements to be homogenous hence an emphasis on

choice. Settlements should be located along the main transportation routes and held together by a web of local access roads and public facilities. At a regional level, they should be knit together by a system of regional access routes.

#### 12.8.1.1 SEMI-URBAN SETTLEMENT

The area around Turton in Thulini Traditional Council is the most densely populated area in Umzumbe, however it has not been planned and developed as a formal settlement, and thus is characterised by an informal settlement pattern. The area should be planned and developed as a formal settlement, otherwise, the area will degenerate into an unmanageable rural slum. Critical interventions in the area include the following:

- ⇒ Preparation of a development framework to guide future development and formalisation of Turton.
- ⇒ Preparation of a settlement/layout plan indicating different land use zones, and making provision for a range of housing products.
- ⇒ Implementation / enforcement of the land use scheme.
- ⇒ Infrastructure development to unlock economic and social development potential.

Planning for the area should be undertaken with full participation of Thulini Traditional Council and Ingonyama Trust Board (ITB) to as to ensure that land tenure regime is acceptable to all stakeholders.

In addition to public facilities and economic activities, planning for the future development of Turton, should provide for a range of housing products including medium and high-density housing, middle-income housing and low cost housing.

#### 12.8.1.2 DENSE RURAL SETTLEMENTS

Dense rural settlements in traditional /communal land have emerged because of the breakdown in land administration system in the rural villages, and movement of households from remote areas to well-located settlements along the main transport routes. These areas should be prioritised for settlement planning, and this should entail the following:

- ⇒ Mobilization of traditional councils in support of settlement planning initiative.
- ⇒ Formalization of institutional arrangements and clarification of roles and responsibilities and cooperation between the municipality and institutions of traditional leadership in respect of land allocation and land use management.
- ⇒ Preparation of settlements plans indicating spaces where different land uses may be located and areas where settlement should be discouraged.
- ⇒ Delineation of settlement edge indicating the land required to accommodate further expansion and social development needs

over a defined period of time (five to ten years). The edge will also be used to promote compaction.

- ⇒ Introduction and application of planning standards including average site size.

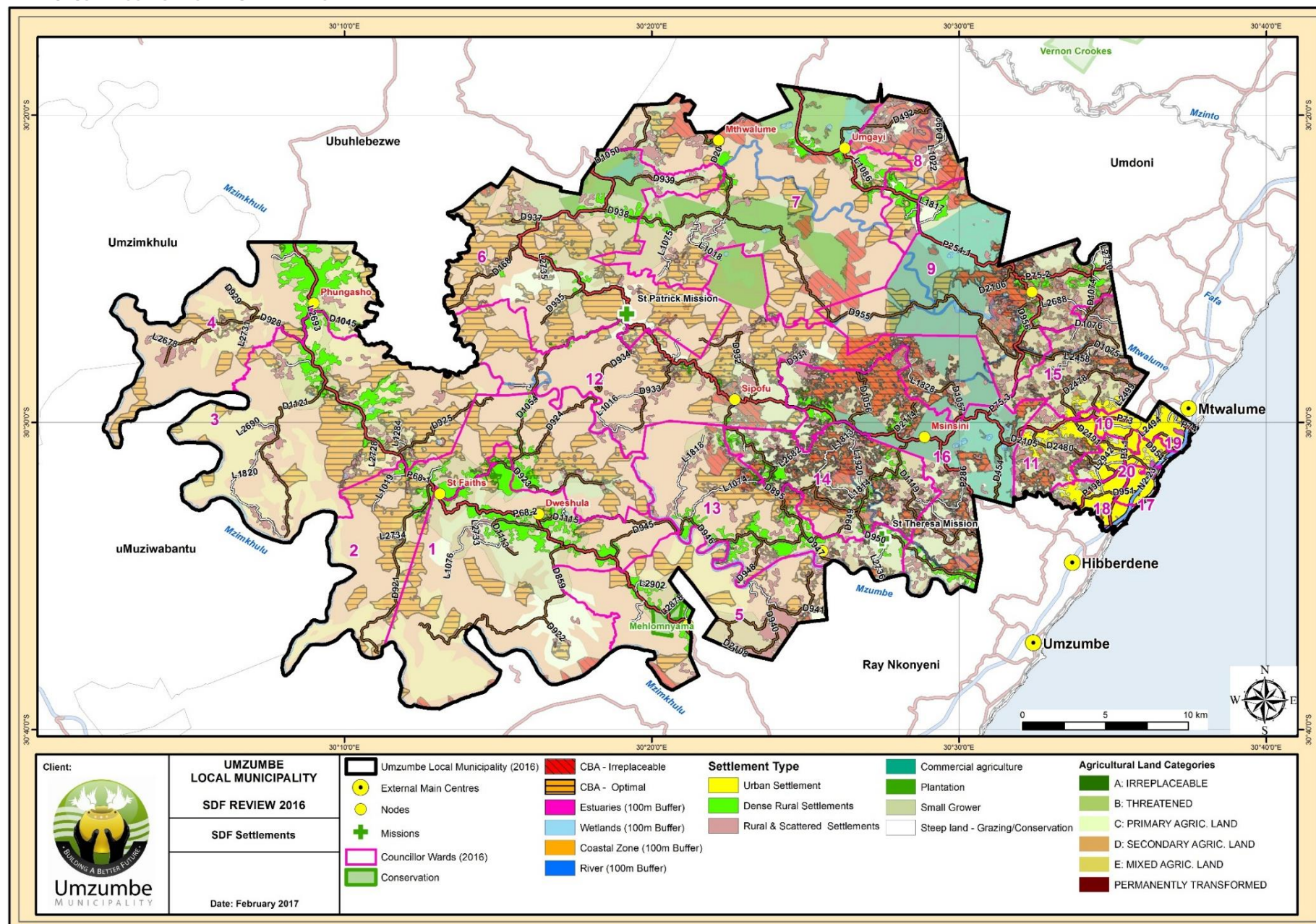
Dense rural settlements should be located within a 5km radius from a service centre or development node, and development corridors. Densification should be undertaken as part of settlement planning and development. These settlements should be prioritized for rural housing development in line with the provincial rural densification policy.

#### 12.8.1.3 SCATTERED RURAL SETTLEMENTS

Further expansion of small-scattered rural settlements should be discouraged in the short to medium term with an intention to enable them to develop into settlements with a strong agricultural character. Spatial planning interventions in respect of these settlements should focus on the following:

- ⇒ Agricultural development particularly protection of agricultural land from settlement.
- ⇒ Management of grazing land including introduction of strategies such as rotational grazing.
- ⇒ Consolidation of settlements as means to create service thresholds.
- ⇒ Remote scattered rural settlements should occur beyond a ten (10) km radius from the existing nodes and development corridors.

MAP 40: CONTINUUM OF HUMAN SETTLEMENTS



### 12.8.2 HIERARCHY OF PLANS

The SDF outlines the spatial development strategy and introduces principle for the transformation of rural settlements into sustainable human settlements. The SDF will be refined and developed further through the formulation of a series of plans with varying degrees of detail and flexibility.

#### 12.8.2.1 LOCAL AREA PLANS

Local Area Plans (LAPs) will be prepared for each of the ward clusters with the priority being put on areas that are currently experiencing development pressure. A Local Area Plans (LAP) is developed to provide locally focused planning guidance for local areas. Their aim is to achieve the following:

- ⇒ establish a shared vision for the local area;
- ⇒ address key local planning issues and capitalise on opportunities;
- ⇒ establish an integrated approach to local planning; and
- ⇒ sensibly manage future development outcomes.

LAPs will deal mainly with the following issues:

- ⇒ Land use zoning and density
- ⇒ Public open space
- ⇒ Private open space

- ⇒ Provision of infrastructure
- ⇒ Conservation of built heritage
- ⇒ Conservation of natural environment
- ⇒ Provision of traveller accommodation
- ⇒ Community facilities
- ⇒ Design and development standards.

The results of local area planning will be integrated and used to refine the SDF. They will also inform the preparation and introduction of a LUS.

#### 12.8.2.2 PRECINCT PLANS

Precinct plans will be prepared for each of the development nodes, with the nodes that are currently facing development pressure being a priority. These plans will establish spatial structure and provide more detail on the land use proposals. Particular attention will be paid on the following:

- ⇒ Housing typology and yields;
- ⇒ Local transport and movement networks;
- ⇒ Open space system;
- ⇒ Design principles and concepts;
- ⇒ Development parameters; and



⇒ Nature and character of land use.

The precinct plans will be incorporated into the local planning scheme to guide the use and development of land in the precinct over the long term. Precinct plans should:

- ⇒ Meet the state and municipal planning policy objectives and resolve competing issues;
- ⇒ Create a structure for nodal development that will deliver practical outcomes;
- ⇒ Provide the framework for statutory planning controls, including specific implementation provisions; and
- ⇒ Give local communities, developers and other investor's greater certainty and confidence about future development in the growth areas.

#### 12.8.2.3 SETTLEMENT PLANS

Fragmented development has high infrastructure costs and should be discouraged. To achieve future environmental, economic and social sustainability settlements should be planned to be able to demonstrate self-reliance and an ability to maximize infrastructure efficiency and service provision. Planning for settlement purposes should identify the constraints and opportunities of the land, and seek to achieve a carefully planned community, enhance the quality of the environmental, and avoid resource and hazard issues. As such:

- ⇒ settlements should be located on land that is suitable for this land use and capable of supporting all of its aspects;
- ⇒ isolated settlements should not be promoted if residents would be dependent heavily on public transport to access basic social and services infrastructure;
- ⇒ development of settlements should avoid areas of natural significance, economic resource, high landscape and areas with cultural heritage value, and potential increased risk associated with impacts of climate change; and
- ⇒ development of settlements on areas adjoining land with the above values should incorporate buffers as necessary to help protect those values and to avoid future land use conflict.

#### 12.8.3 INTEGRATION OF TRADITIONAL LAND ALLOCATION PROCESSES WITH MUNICIPAL SPATIAL PLANNING

Traditional leaders are responsible for the allocation of land for different land uses within their areas of jurisdiction. In some instances, these uses compete for the same space. Most common land uses in traditional council areas include settlement (imizi), grazing, limited agriculture, and limited commercial and community facilities. Although this practice has shown resilience and is practised widely throughout the Province, it can be improved through strategic integration with municipal spatial planning activities.

#### 12.8.3.1 MAPPING OF IZIGODI

Spatial planning in traditional council areas should start with the recognition of the social and management structure, and the manner in which social groups have organised themselves in space. Each traditional council area is divided into izigodi. The boundaries for izigodi are known to the local communities and traditional leaders, and often run along natural features such as rivers, plateau and hills. Identification and mapping of these areas will help planners to understand the spatial structure of rural areas and the spatial dynamics or functional relationship between and among different izigodi. It will generate new spatial data, improve GIS system and enable the municipality to undertake area based spatial and development planning. This exercise will be undertaken with full participation of the traditional leaders and its results will be ratified by the traditional council concerned.

#### 12.8.3.2 MAPPING OF SETTLEMENTS

Each izigodi is made up of different settlements distributed unevenly in space. Like izigodi, spatial identification of settlements will help planners to understand how rural communities have organised themselves in space, functional relationship and movement patterns between different settlements. It will also provide planners with an opportunity to update the existing settlements data including place names.

#### 12.8.3.3 GUIDELINES FOR LAND ALLOCATION

Allocation of land for different land uses is the function of traditional leaders. The guidelines for the allocation of land are intended to document the factors that should be taken into account in this regard, and direct settlement to areas that suited and earmarked for this use. The guidelines should cover the following:

- ⇒ Norms and standards for sites sizes taking into account location and density of settlements.
- ⇒ Factors that should be considered when allocating land for different land uses.
- ⇒ Spatial identification and coding of rights allocated.
- ⇒ Register of land rights holders.

The formulation of the guidelines should be undertaken with full involvement of traditional leaders to ensure buy-in acceptance of the guidelines. They should be consistent with the spatial vision as outlined in the SDF.

#### 12.8.3.4 TRAINING AND CAPACITY BUILDING

Traditional leaders require training and capacity building in a number of areas in order to play an active role in the transformation of rural

settlements into sustainable human settlements. Priority in this regard should be given to the following:

- ⇒ Map reading skills.
- ⇒ Guidelines for allocation of land for different land uses.
- ⇒ Assessment of applications for land rights and land development.
- ⇒ Land allocation and land development.

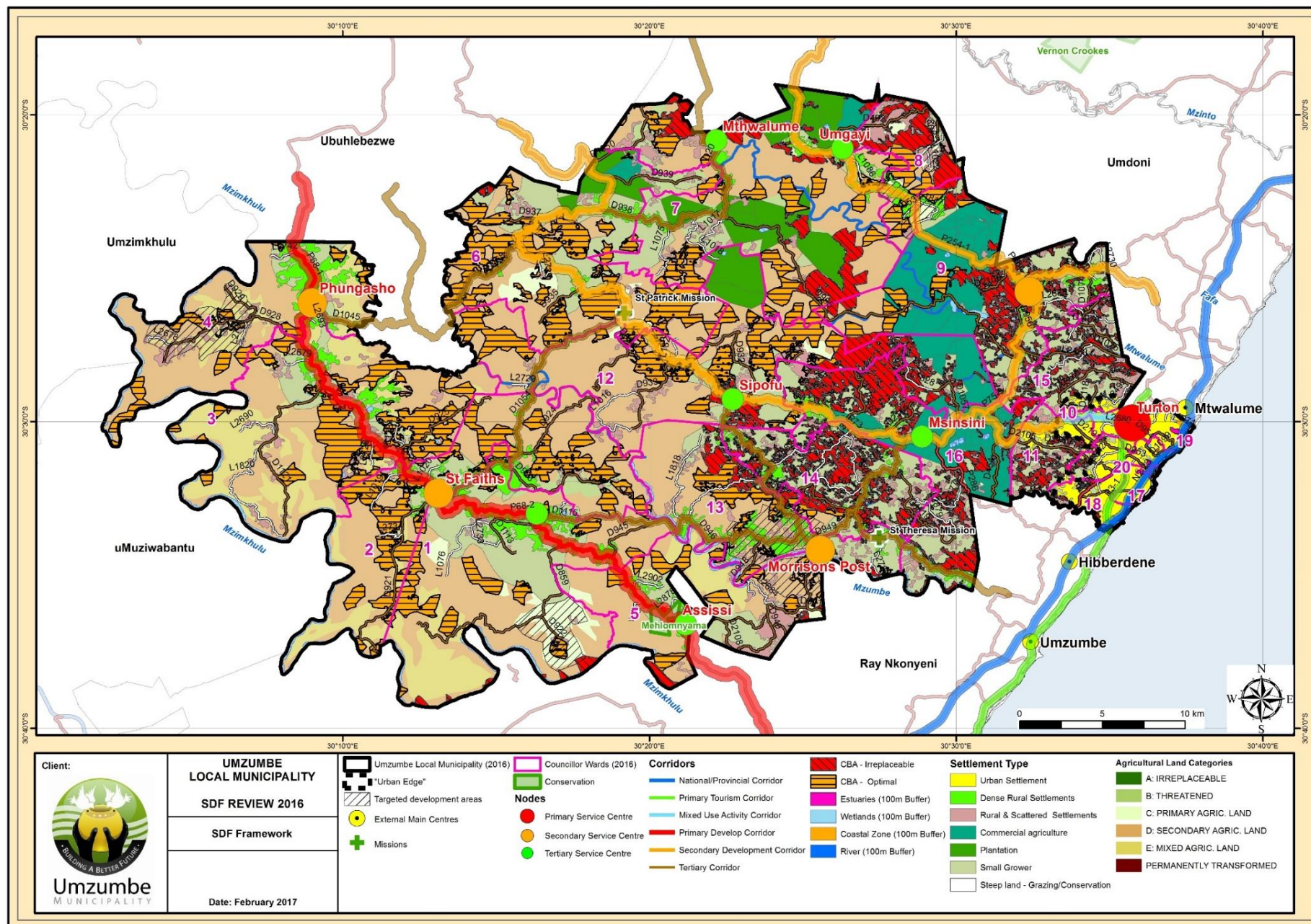
In addition, traditional leaders should be provided with computers, access to the internet (Google Maps) and ability to view maps. They should be provided with Geographic Positioning System (GPS) in order to be able to take coordinates for each site and identify it spatially.

## 12.9 CONSOLIDATED SDF

The SDF is based on a detailed analysis of the spatial development trends and patterns within the municipality. It also takes into account the national and provincial spatial planning imperatives, and seeks to contribute to spatial transformation within Umzumbe. It advocates for densification, compaction and transformation of rural settlements into sustainable human settlements and development of Turton and other small service centre as municipal development nodes. It seeks to achieve this through a number of strategic initiatives, particularly the following:

- ⇒ Establishing and developing a system of development corridors operating at different levels but connecting local areas with the centre and integrating the municipality.
- ⇒ A system of development nodes providing services and access to facilities at different scales.
- ⇒ Promoting a continuum of settlements ranging from dense settlements to scattered sparsely populated rural settlements.
- ⇒ Focusing development in strategically located areas as a means to unlock the economic opportunities and facilitate spatial integration.
- ⇒ Acknowledging the importance of the natural environment and assigning the necessary importance thereto.

MAP 41: SPATIAL DEVELOPMENT FRAMEWORK





## 12.10 SDF POLICY / LEGISLATIVE ALIGNMENT

The Spatial Planning and Land Use Management Act requires the consideration and application of the development principles contained in the Act. This means that the spatial strategies developed as part of the SDF need to be in line with and give effect to these principles. The Table 24 below provides an indication of which spatial strategies are structured towards giving effect to which particular development principle. Furthermore, the SDF should also align with various policy prescripts. Table 25 and 26 indicate how the SDF is aligned with strategic goals advocated in some of the policies.

TABLE 24: SDF SPLUMA ALIGNMENT

| SPLUMA PRINCIPLES             | SDF SPATIAL STRATEGIES  |
|-------------------------------|---|
| <b>Spatial Justice</b>        | <ul style="list-style-type: none"> <li>• Clustering development in rural service centres</li> <li>• Formalisation of certain strategic areas</li> <li>• Land identification and land release</li> <li>• Supporting and guiding the implementation of the land reform programme</li> </ul> |
| <b>Spatial Sustainability</b> | <ul style="list-style-type: none"> <li>• Sustainable Use of Natural Resources</li> <li>• Protection and Management of Agricultural Land</li> <li>• Promotion of compact development</li> <li>• Investigation of alternative sources of energy</li> </ul>                                  |

|                            |  |
|----------------------------|--|
| <b>Spatial Resilience</b>  | <ul style="list-style-type: none"> <li>• Promotion of Compact Development</li> <li>• Mitigation of, and adaptation, to climate change</li> <li>• Reduction of human vulnerability</li> <li>• Maximizing social-ecological resilience</li> <li>• Delineation high flood risk areas,</li> <li>• Implementation of disaster management plan.</li> <li>• Minimising land degradation and ensuring sustainable agriculture</li> </ul> |
| <b>Efficiency</b>          | <ul style="list-style-type: none"> <li>• Focusing development along development corridors</li> <li>• Clustering Public Facilities and Economic Activities in Development Nodes</li> <li>• Development of a continuum of human settlements.</li> <li>• Application of spatial planning standards in infrastructure development</li> </ul>   |
| <b>Good Administration</b> | <ul style="list-style-type: none"> <li>• Development of a Sustainable Integrated Spatial Planning System</li> <li>• Integration of Traditional Land Allocation Systems with Municipal Planning</li> </ul>  |

TABLE 25: SDF PGDS ALIGNMENT

| PGDS STRATEGIC GOALS             | SDF SPATIAL STRATEGIES  |
|----------------------------------|---|
| <b>Inclusive Economic Growth</b> | <ul style="list-style-type: none"> <li>• Unlock economic development potential through agriculture, tourism, commerce, industry and informal trading</li> </ul> |

|  |  |
|--|--|
|  | <ul style="list-style-type: none"> <li>• Protection and management of agricultural land</li> <li>• Development and support of emerging farmers</li> </ul>  |
| <b>Human Resource Development</b>      | <ul style="list-style-type: none"> <li>• Training and capacity building of traditional leaders on land allocation and land use management</li> <li>• Provision of agricultural training, mentoring and assistance to emerging farmers</li> </ul>   |
| <b>Human and Community Development</b> | <ul style="list-style-type: none"> <li>• Implementation of food security and agricultural programmes</li> <li>• Promotion of compact development</li> <li>• Creation of a continuum of human settlements</li> <li>• Clustering Public Facilities and Economic Activities in Development Nodes</li> <li>• Focusing development along development corridors</li> </ul>   |
| <b>Infrastructure Development</b>      | <ul style="list-style-type: none"> <li>• Application of spatial planning standards in infrastructure development</li> <li>• Ensure water resource management</li> </ul>  |
| <b>Environmental Sustainability</b>    | <ul style="list-style-type: none"> <li>• Sustainable Use of Natural Resources</li> <li>• Protection and Management of Agricultural Land</li> <li>• Promotion of compact development</li> <li>• Investigation of alternative sources of energy</li> <li>• Reduction of human vulnerability</li> <li>• Maximizing social-ecological resilience</li> <li>• Delineation high flood risk areas,</li> <li>• Implementation of disaster management plan.</li> </ul> |

|                              |   |
|------------------------------|---|
|                              | <ul style="list-style-type: none"> <li>• Minimising land degradation and ensuring sustainable agriculture</li> <li>• Mitigation of, and adaptation, to climate change</li> </ul>  |
| <b>Governance and Policy</b> | <ul style="list-style-type: none"> <li>• Development of a Sustainable Integrated Spatial Planning System</li> <li>• Integration of Traditional Land Allocation Systems with Municipal Planning</li> </ul>   |
| <b>Spatial Equity</b>        | <ul style="list-style-type: none"> <li>• Supporting and guiding the implementation of the land reform programme</li> <li>• Promotion of Compact Development</li> <li>• Implementation of land use scheme</li> <li>• Land identification and land release</li> <li>• Formalisation of certain strategic areas</li> <li>• Implementation of Inclusionary Housing Policy</li> <li>• Clustering development in rural service centres</li> </ul> |

TABLE 26: SDF DRDP ALIGNMENT

| DRDP FRAMEWORKS    | SDF SPATIAL STRATEGIES  |
|--------------------|---|
| <b>Agriculture</b> | <ul style="list-style-type: none"> <li>• Protection and Management of Agricultural Land</li> <li>• Implementation of food security and agricultural programmes</li> <li>• Supporting and guiding the implementation of the land reform programme</li> </ul> |
| <b>Services</b>    | <ul style="list-style-type: none"> <li>• Application of spatial planning standards in infrastructure development</li> </ul>   |

|                      |  |
|----------------------|--|
|                      | <ul style="list-style-type: none"> <li>• Ensure water resource management</li> <li>• Investigation of alternative sources of energy</li> </ul>   |
| <b>Environmental</b> | <ul style="list-style-type: none"> <li>• Sustainable Use of Natural Resources</li> <li>• Reduction of human vulnerability</li> <li>• Maximizing social-ecological resilience</li> <li>• Delineation high flood risk areas,</li> <li>• Implementation of disaster management plan.</li> <li>• Minimising land degradation and ensuring sustainable agriculture</li> <li>• Mitigation of, and adaptation, to climate change</li> </ul> |
| <b>Institutional</b> | <ul style="list-style-type: none"> <li>• Development of a Sustainable Integrated Spatial Planning System</li> <li>• Integration of Traditional Land Allocation Systems with Municipal Planning</li> </ul>  |

framework for future land use management and activities, including the location, size and operating conditions of land uses. As such, the potential impact that the SDF may have on the environment was assessed by giving consideration to the spatial location of strategies, the potential impacts that may be associated with these strategies, and possible risks and consequences.

The environmental assessment of the SDF strategies has revealed that the Umzumbe SDF does not propose major changes in the structural form of the area and the majority of the SDF strategies are likely to result in positive impacts and contribute significantly to the specified sustainability outcomes. Moreover, some of the SDF strategies are geared towards conserving the natural environmental assets of the municipality and embody the concept of environmental sustainability

#### 12.11 ENVIRONMENTAL ASSESSMENT OF THE SDF

The need for considering the potential effect of the SDF on the environment is underlined by the significant impacts it may cause as a

TABLE 27: ENVIRONMENTAL ASSESSMENT OF SDF

| SDF STRATEGY                             | ENVIRONMENTAL ASSESSMENT   |
|--|--|
| <b>Ward/Area Based Management System</b> | The introduction of ABM will have a positive impact on environmental governance as it will recognise the key institutions in rural land use management and it will facilitate improved opportunities for community |

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|  | <p>participation in decisions affecting the environment. In addition, it will also facilitate the cooperation of other government sectors.</p> <p>This strategy will therefore promote a whole range of NEMA principles relating to environmental justice and equity; participation empowerment and transparency; and cooperative governance. Efforts to achieve sustainability outcomes in area based management must however recognise the need to integrate sustainability considerations into spatial planning interventions. This means that area based plans must incorporate environmental priorities and funding for development initiatives must also set aside resources to promote compliance with legislated and other requirements for integrated environmental management.</p>  |
| <b>Spatial Resilience and Environmental Sustainability</b> | <p>This strategy is geared towards ensuring the environmental sustainability of the SDF as a whole and will thus yield positive impacts from an environmental perspective. Its purpose is twofold. Firstly, it is to ensure the consideration of environmental attributes in land use decision-making and secondly, to minimise the vulnerability of communities to climate change and associated impacts. It promotes the principles of ecological integrity, sustainable development, and spatial resilience and provides the basis for linking social and ecological sustainability into all spatial areas. Adherence to the environmental and resilience principles and guidelines alluded to in this document is pivotal in ensuring that the SDF is taken to the implementation arena in an environmentally sound and sustainable manner.</p> |
| <b>Protection and Enhancement of Agricultural Land</b>     | <p>The proposal to protect and enhance agriculture as an integral part of the economy, environment and overall quality of life will have a significant positive impact on the desired sustainability outcomes. It promotes the protection of high biodiversity areas in areas with high agricultural land potential. This strategy is expected to promote social and ecological resilience.</p>   |



The potential impacts associated with climate change must be recognised and climate change mitigation and adaptation strategies must be implemented. To this end, NSSD 1 recommends interventions aimed at diversification of economies to reduce dependence on climate-sensitive sectors.

Programmes for the preservation of agricultural land must also recognise the potential opportunities for contribution to the green economy. This implies the creation of green jobs through the eradication of invasive alien species in areas with agricultural potential and rehabilitating wetlands and riparian zones.

The proposal on land and agrarian reform will be positive for the environment. It suggests that projects be clustered to optimise development potential, rationalise support services and promote efficient use of scarce resources. It also recommends that land reform beneficiaries should be provided with agricultural development support including assistance with productive and sustainable land use, infrastructure support, agricultural inputs, and strategic linkages with the markets. This will promote the efficient use of natural resources and build sustainable communities.

This proposal also calls for off-farm settlement that will facilitate housing delivery and development of such settlements as sustainable human settlements. It should once again be noted that human settlements can only be sustainable if there is integration between communities and the environment.

|  |  |
|--|--|
| <p><b>Promoting Clustering and Compact Development</b></p> | <p>An improved access and movement framework will facilitate access to public facilities such as schools, clinics, community centres and places of economic activity. Improved access will enhance opportunities for development and have a positive impact on the desired sustainability outcomes.</p> <p>The environmental consequences of this strategy must be taken into account, especially the erosion risk that is associated with road construction and maintenance and the associated impacts this may have on sediment yield and water quality in the catchment. On-going degradation of access routes may also affect the tourism potential of the area as land degradation has a negative impact on landscape character, sense of place and the tourism experience. This will require the special attention of the municipality's road maintenance programme.</p> <p>The proposal to cluster various activities in a hierarchy of development nodes will enhance opportunities for development and have a positive impact on the desired sustainability outcomes as defined by NSSD 1. It will enhance spatial planning; promote social cohesion and integration between communities. It will also facilitate access to basic infrastructure and social services. The challenge will be to recognise that development nodes are areas of concentrated environmental impact and that an increase of human activities in these nodes will intensify impacts to the natural environment.</p> <p>Investment in nodal areas must not neglect the need to improve basic water and sanitation infrastructure as well as waste services in order to avoid, minimise and manage soil and water pollution. This will improve integration between communities and the environment and promote the NEMA principles of sustainable development.</p> <p>Moreover, nodal development in areas such as Turton should take into consideration that this area is surrounded by sensitive environments such as estuaries; hence the magnitude and texture of proposed developments should be assessed in line with the relevant guidelines for the protection of such areas.</p> |
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|   |   |
|---|---|
| <b>Development of Sustainable Human Settlements</b> | <p>The proposal to establish sustainable human settlements through housing delivery will contribute positively to the sustainability outcomes as defined by NSSD 1. The majority of housing projects in Umzumbe are implemented through the rural housing policy. This means houses are mainly constructed within the existing homestead footprint, thus no vegetation clearing, degradation or transformation of virgin land takes place. The implementation of housing projects also provides an opportunity to improve sanitation infrastructure and relocate households located in environmentally sensitive area, thus contributing to NEMA principles of sustainable development.</p> |
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|   |  |
|---|--|
| <b>Bulk and Social Infrastructure Development</b> | <p>The SDF encourages the planning and implementation of sanitation projects based on the continuum of settlements and integration with the initiative towards the transformation of rural villages into sustainable human settlements. It further encourages sanitation standards that consider the nature and character of each settlement as well as service standards with respect to spatial location of settlements in relation to the landscape and sensitive environmental attributes. These measures will have a positive impact on the environment.</p> <p>Access to formal water is also a major sustainability challenge. This is specifically relevant to the scattered rural settlements that may not be able to receive basic access to water in the short-term. This situation underlies the importance of land management and the associated impacts of land use practices on the quality and quantity of local water resources upon which rural settlements rely.</p> <p>The same applies to the energy requirements of households. This situation should also compel the municipality and its strategic partners to start considering alternative energy options such as solar water heaters and other measures to reduce the dependency on fossil fuels.</p> <p>The delivery of social infrastructure such as social facilities, health care services, meeting spaces and education facilities must not only take social needs into account. The location of facilities is also important and should avoid areas with sensitive environmental attributes such as wetlands, drainage lines or critically endangered veld types. The development of such facilities must also consider the management of waste in order to avoid soil and water contamination and health risks to people. The development of unnecessary access roads should be discouraged to avoid habitat fragmentation and land degradation.</p> |
| <b>Unlock Economic Development Potential</b>      | <p>Local economic prosperity is dependent on social well-being and a healthy environment. This strategy is therefore aimed at achieving sustainability outcomes by harnessing the inherent development potential of the area and using available environmental assets. It recognises the eco-tourism and cultural resource potential as</p>  |



|   |  |
|---|--|
|   | key assets for reducing human vulnerability in the area, and the link between environmental quality and local economic development. The proposal to facilitate agricultural development as the main economic activity and source of livelihood has huge potential to contribute to the sustainability outcomes as defined by NSSD 1.   |
| <b>Sustainable Integrated Spatial Planning System</b> | <p>The development of a continuum of human settlements and the introduction of a sustainable integrated spatial planning system will have a positive impact, since areas with sensitive environmental attributes will be integrated into the hierarchy of plans. This will be done by drawing on the spatial information produced by the SDF and taking new data into account; improving local data such as delineating flood risk areas, wetlands, areas of alien plant infestations, community harvesting areas, and features of cultural heritage; and consulting traditional leaders to ensure that traditional knowledge of the area is recognised and captured accordingly.</p> <p>It should be recognised that human settlements are important locations of consumption and production that generate a large amount of movement and all kinds of negative environmental impacts. Human settlements can therefore only be sustainable if there is integration between communities and the environment. The improvement of waste infrastructure in settlements will contribute positively to the NEMA principles of sustainable development but significant investment will be required to ensure that soil and water contamination risks are avoided and minimised.</p> <p>The implementation of settlement edges will discourage development sprawling into prime agricultural land and other sensitive natural resource areas, and will minimise the current land degradation impacts and trends. It is also important to recognise the role of the traditional land tenure system in promoting sustainable settlements. Decisions that support expansion of scattered rural settlements should thus be discouraged.</p> |

## 13 IMPLEMENTATION PLAN

### 13.1 ALIGNMENT OF SPATIAL DEVELOPMENT FRAMEWORKS

Umzumbe forms part of a larger system of local governance and regional economic development in the form of Ugu District and the greater South Coast region. It shares boundaries with five other local municipalities, these include:

- ⇒ Ray Nkonyeni Local Municipality (Ugu District) to the south and southwest.
- ⇒ Umdoni Local Municipality (Ugu District) to the north-east and east.
- ⇒ Umzimkhulu Local Municipality (Harry Gwala District) to the north-west.
- ⇒ Ubuhlebezwe Local Municipality (Harry Gwala District) to the north.
- ⇒ Umuziwabantu Local Municipality (Ugu District) to the west.

Umzumbe LM is influenced by, and influences, development within the neighbouring local municipalities. Therefore, it is critically important to maintain alignment with the spatial planning of the neighbouring municipalities in a manner that facilitates cross-boundary planning and development.

Cross-border planning issues have become more prevalent and significant. The main focus is on strategic or shared development issues that would benefit from a joint approach, and engaging with the

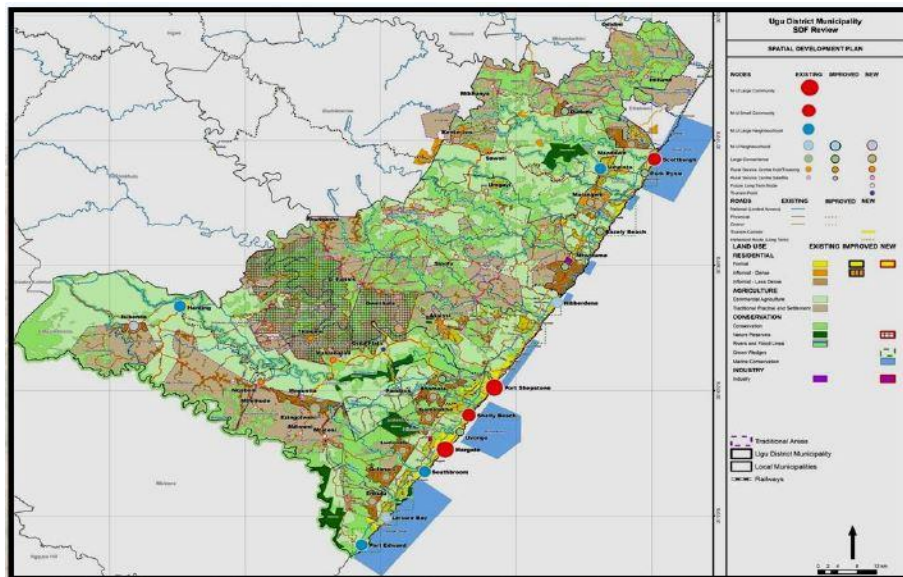
relevant neighbouring authorities to explore joint working potential and mutually beneficial opportunities.

Noteworthy, there have been significant boundary changes in the municipalities that surround Umzumbe municipality. These were a result of the Municipal Demarcation Board ward delimitation and boundary re-demarcation processes. These culminated in the disestablishment of the municipal area of Ezingoleni Local Municipality, and its inclusion into the municipal area of Hibiscus Coast Local Municipality and also the disestablishment of Vulamehlo Municipality and incorporation of its components into Ethekwini Metropolitan Municipality and Umdoni Local Municipality. The former case culminated in a new municipality name viz. Ray Nkonyeni Local Municipality.

As a result of these boundary changes, the number of municipalities in the Ugu District has changed from six to four. Furthermore, the number of municipalities that share boundaries with Umzumbe has decreased from seven to five. The affected municipalities of Umdoni and Ray Nkonyeni are still in the process of formulating reviewed Spatial Development Frameworks, which take into account the boundary changes. Thus, the following analysis will be based on the currently existing SDFs of the previous municipalities.

### 13.1.1 UGU DISTRICT MUNICIPALITY

MAP 42: UGU SDF



SOURCE: UGU SDF (2012)

Umzumbe Municipality covers the central and northern parts of the Ugu District. The Ugu District Municipality developed its SDF in 2012. Cross boundary issues between the Ugu District and Umzumbe include:

- ⇒ Both SDFs recognise the significance of the N2 as a high-level limited access route which facilitates inter-regional and inter-provincial access.

- ⇒ The Ugu SDF identifies the P254, P68 and P73 as the major arterial roads within Umzumbe. The significance of these routes as development corridors is also recognised in the Umzumbe SDF.

- ⇒ The Ugu SDF identifies Turton as a Convenience Shopping Cluster that needs to be improved. This is in line with the upgrading / formalisation that is posited in the Umzumbe SDF. Furthermore, it also identifies other Umzumbe SDF nodal areas as Rural Service Centres. These include Phungashe and Assissi.

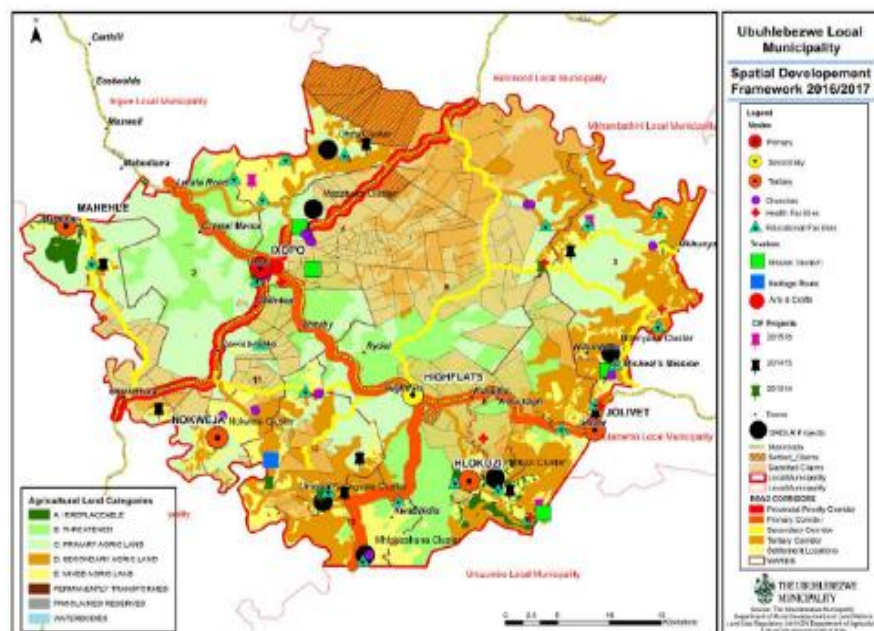
- ⇒ The Ugu SDF identifies Umzumbe, Mthwalume and Umzimkhulu as rivers that need to be protected through development buffers. This is in line with the Umzumbe SDF which emphasizes the protection of water resources and also introduces buffers to that effect.

### 13.1.2 UBUHLEBEZWE LOCAL MUNICIPALITY

Ubuhlebezwe is located to the north of Umzumbe. Issues of cross-border planning between these two areas include the following:

- ⇒ Both SDF's identifies the P68 as a primary corridor. This road is one of the primary linkage roads in Umzumbe that connects to Port Shepstone in the south and Highflats in the north. This is also identified as a Secondary Provincial Corridor in the PGDS.
- ⇒ The P73, which continues from Ubuhlebezwe into Umzumbe, is identified as a tertiary corridor, continues through Umzumbe and runs through Sipofu and Msinsini to Turton.

MAP 43: UBULEBEZWE SDF



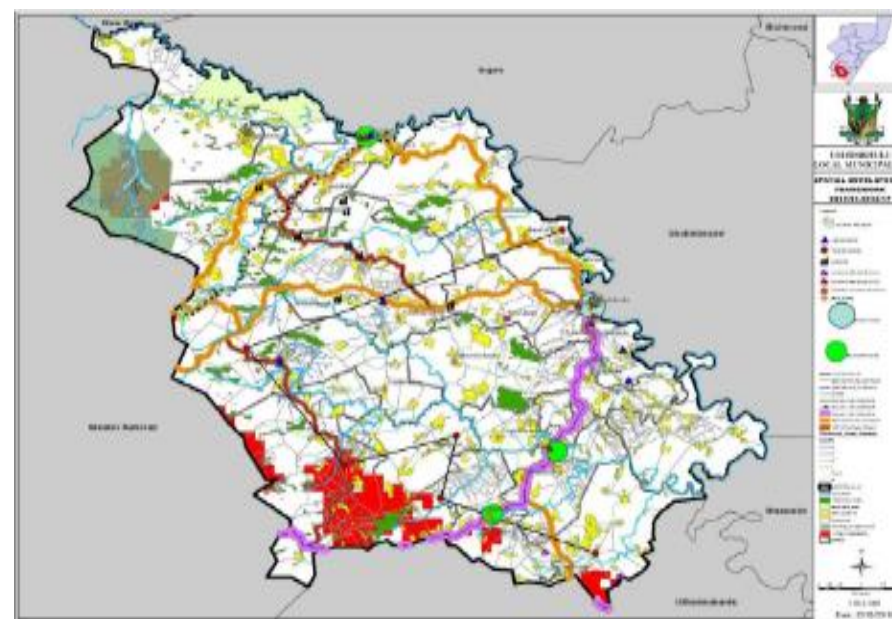
SOURCE: UBULEBEZWE SDF (2012)

- ⇒ The P64 is a secondary corridor in Ubuhebezwe and connects to the R612 which in turn links the municipality to area of St Faiths in Umzumbe municipality and further to Port Shepstone in Ray Nkonyeni.
- ⇒ Phungashe and other settlements located on the northern parts of Umzumbe are closer to Highflats (secondary node in Ubuhebezwe SDF) in Ubuhebezwe. They are located approximately 20 km from Highflats. This creates functional linkages between the two areas as movement is generally flows to the Highflats area. This may be one

of the factors that have led to Umzumbe Municipality losing a significant portion of ward 4 to Ubuhebezwe Municipality, as part of the municipal boundary re-demarcations.

### 13.1.3 UMZIMKHULU LOCAL MUNICIPALITY

MAP 44: UMZIMKHULU SDF



SOURCE: UMZIMKHULU SDF (2012)

Umzimkhulu is located to the northwest of Umzumbe and the SDF identifies Umzimkhulu town as the primary node. Important cross-boundary issues are as follows:



- ⇒ There are limited linkages between Umzimkhulu and Umzumbe, save the connection via district roads.
- ⇒ The R56 is the main transport route passing through the Umzimkhulu Municipal area linking the municipal area with KwaZulu Natal to the North and Eastern Cape Local Municipalities to the south.
- ⇒ The Umzimkhulu River partially forms the municipal boundary of both Umzimkhulu and Umzumbe. Both SDFs recognise the significance of this river and include policy statements to facilitate its protection.

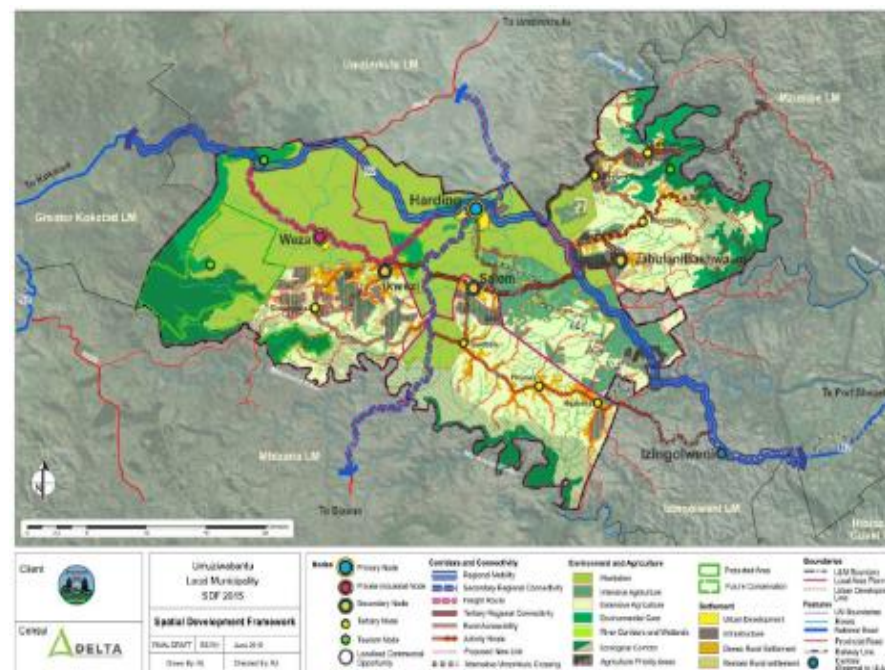
#### 13.1.4 UMUZIWABANTU LOCAL MUNICIPALITY

Umuziwabantu LM is located to the west of Umzumbe and shares the Mzimkhulu River as a boundary. Some issues between these two areas include the following:

- ⇒ There exists no direct cross-boundary road linkages between Umzumbe and Umuziwabantu Municipality. This is attributed to the existence of Umzimkhulu River as a boundary between the two municipalities and also the rugged terrain and undulating topography prevailing where the municipalities share boundaries. The D1121 and D928 (tertiary corridors), which branch from the P68, serve as potential direct links across Umzimkhulu River to Umuziwabantu Municipality. However, the feasibility and cost implications of this would have to be assessed.

- ⇒ A proposed game reserve is located on both sides of the Mzimkhulu River, which can provide opportunities for eco-tourism and game farming. This area is characterised by rugged terrain, which complicates development and linkages across the river and between the two municipalities. This proposed development will require coordinated management between the two municipalities.

MAP 45: UMUZIWABANTU SDF



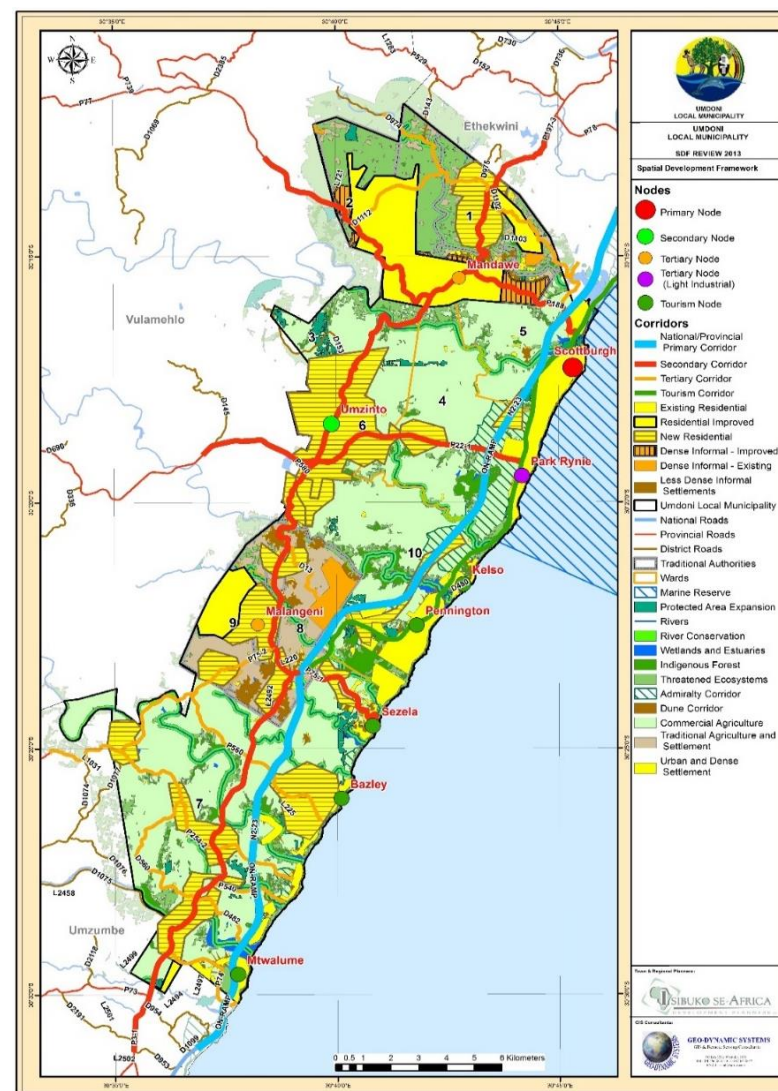
SOURCE: UMUZIWABANTU SDF (2015)

### 13.1.5 UMDONI LOCAL MUNICIPALITY

Umdoni is located along the coastline and to the north-east of Umzumbe. Cross-boundary planning issues between the two municipalities include the following:

- ⇒ Both SDF's identify the N2 as a National/provincial corridor, which is an important link to major economic areas. Opportunities exist to locate mixed use developments at key road intersections along the N2.
- ⇒ Both municipalities are located along the coast, which is biodiversity corridor, and are thus subject to common coastal management initiatives.
- ⇒ There are massive opportunities to extend the coastal tourism from the Umdoni area through Umzumbe down to Ray Nkonyeni with beach related activities being the major products and services.
- ⇒ Specific attention is required in terms of agricultural land, which mostly comprises of sugarcane and the integration of disadvantaged areas and traditional council areas into this industry. There exists a belt of sugar-cane land that straddles across both municipalities and forms the core for the supply of sugar-cane to the mill in Sezele.

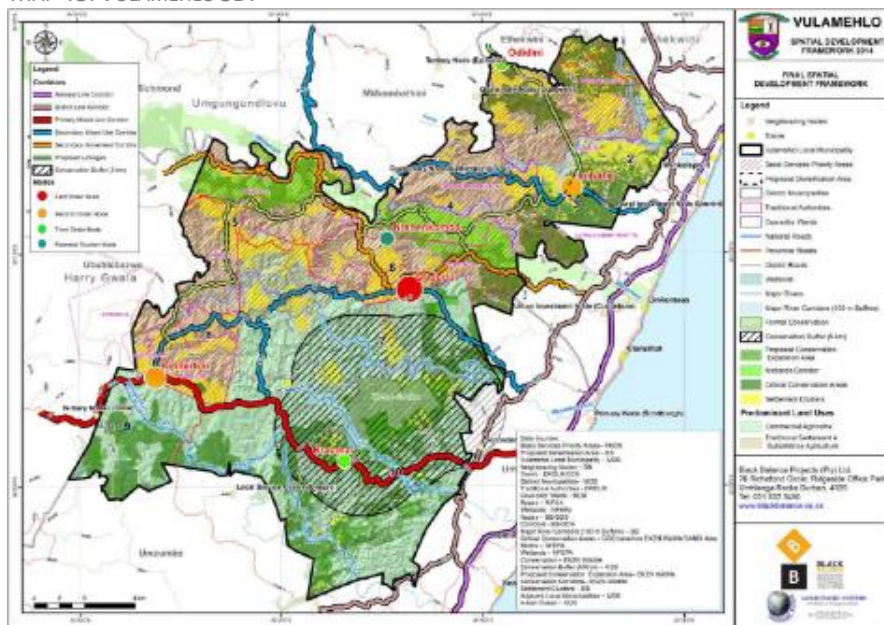
MAP 47: UMDONI SDF



SOURCE: UMDONI SDF (2014)

### 13.1.6 VULAMEHLO (UMDONI) LOCAL MUNICIPALITY

MAP 48: VULAMEHLO SDF



SOURCE: VULAMEHLO SDF (2015)

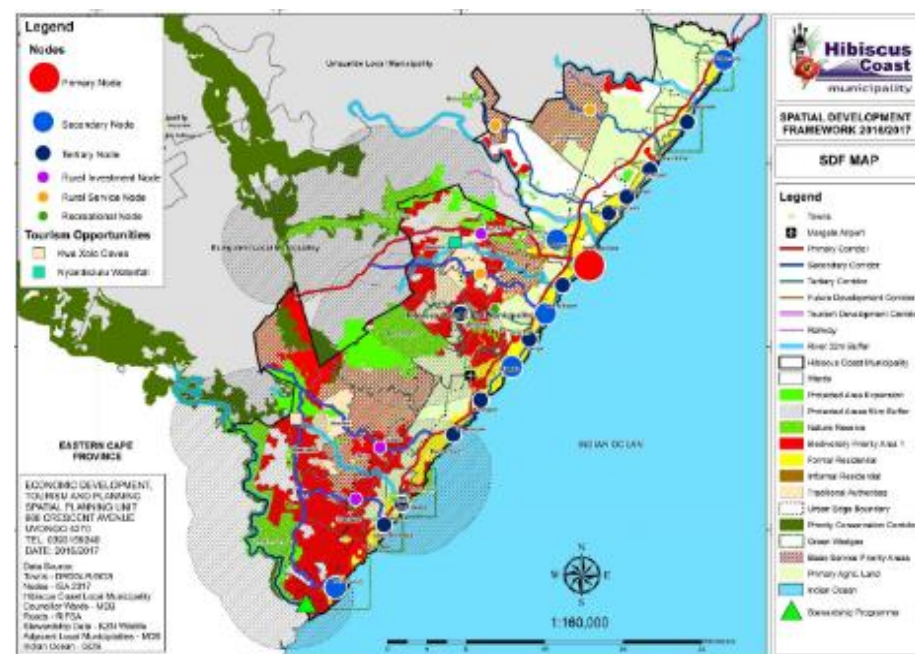
Vulamehlo is situated to the north and north-east of Umzumbe. Issues of importance between these two areas include the following:

- ⇒ There are poor road linkages between these two municipalities. The P254-2 provides a link between Umgayi and Sawoti and Kenterton in Vulamehlo.
- ⇒ The municipality also has poor north-south linkages. Other cross-border issues could relate to the proper management of agricultural

land and sensitive environmental areas between these two municipalities

### 13.1.7 HIBISCUS COAST (RAY NKONYENI) LOCAL MUNICIPALITY

MAP 49: HIBISCUS COAST SDF



SOURCE: HIBISCUS COAST SDF (2016)

Hibiscus Coast municipality is located to the south and southeast of Umzumbe. The primary node of the Hibiscus Coast is Port Shepstone, which is also a secondary provincial node. Issues of importance between these two areas include the following:



- ⇒ Umzumbe is a sub- economic area of the greater Port Shepstone area.
- ⇒ The two municipalities are connected via the N2 National road, which joins the settlements of Hibberdene and Port Shepstone to Turton in the north (Umzumbe).
- ⇒ Primary east-west corridors link the coast to St Faiths in Umzumbe Local Municipality. This takes on the form of the P68, which connects St Faiths, Dweshula and Assissi in Umzumbe, to Port Shepstone. In addition, the P286 (which forms an important route through the central part of Umzumbe to the north) connects Msinsini in Umzumbe to Hibberdene in Hibiscus Coast.
- ⇒ Specific attention should be drawn to the proper management of the coastal strip and associated development along the coast. The linkage and coordination of tourism activities along the coastal tourism is also a matter of importance.

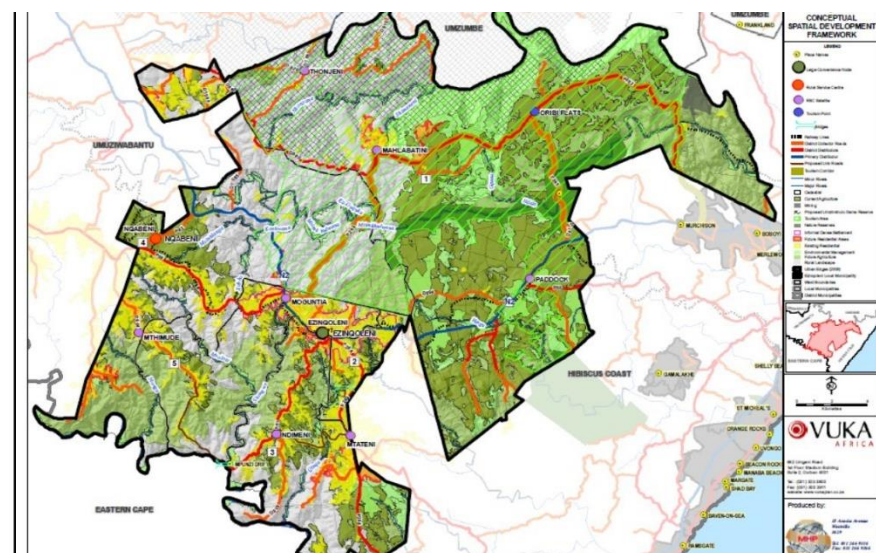
#### 13.1.8 EZINQOLENI (RAY NKONYENI) LOCAL MUNICIPALITY

Ezinqoleni is located to the south of Umzumbe, with the primary node located at the settlement of Ezinqoleni. Issues of importance between these two areas include the following:

- ⇒ There are poor road linkages between Ezinqoleni and Umzumbe.

- ⇒ The Mzimkhulu River serves as the border between the two municipalities, which limits road linkages due to the rugged terrain.
- ⇒ The area along the river can provide opportunities for tourism and game farming.
- ⇒ The joint environmental management of this area is vital for both water management as well as protecting one of the tourism attractions of Ezinqoleni.

MAP 50: EZINQOLENI SDF

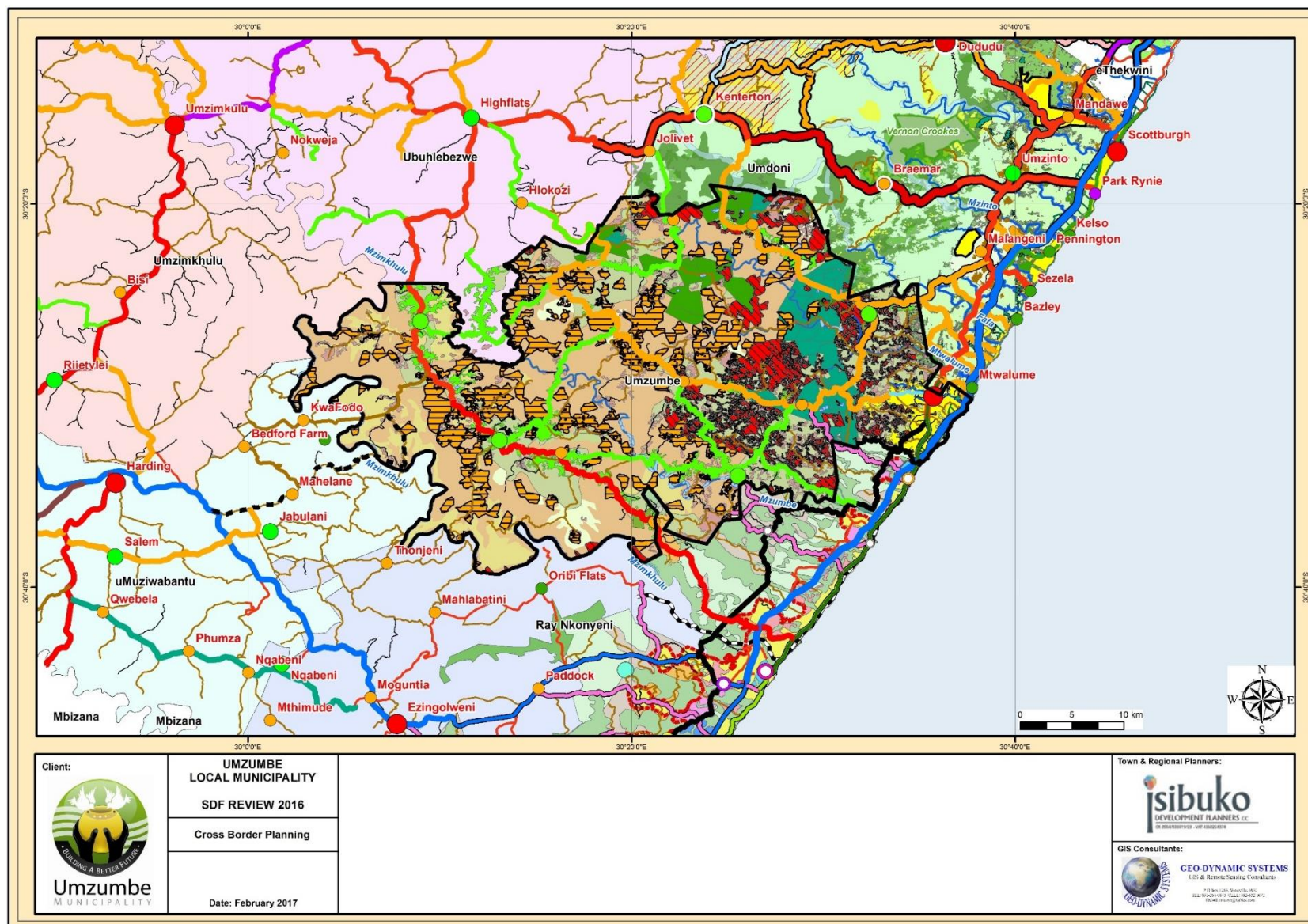


SOURCE: EZINQOLENI SDF (2016)

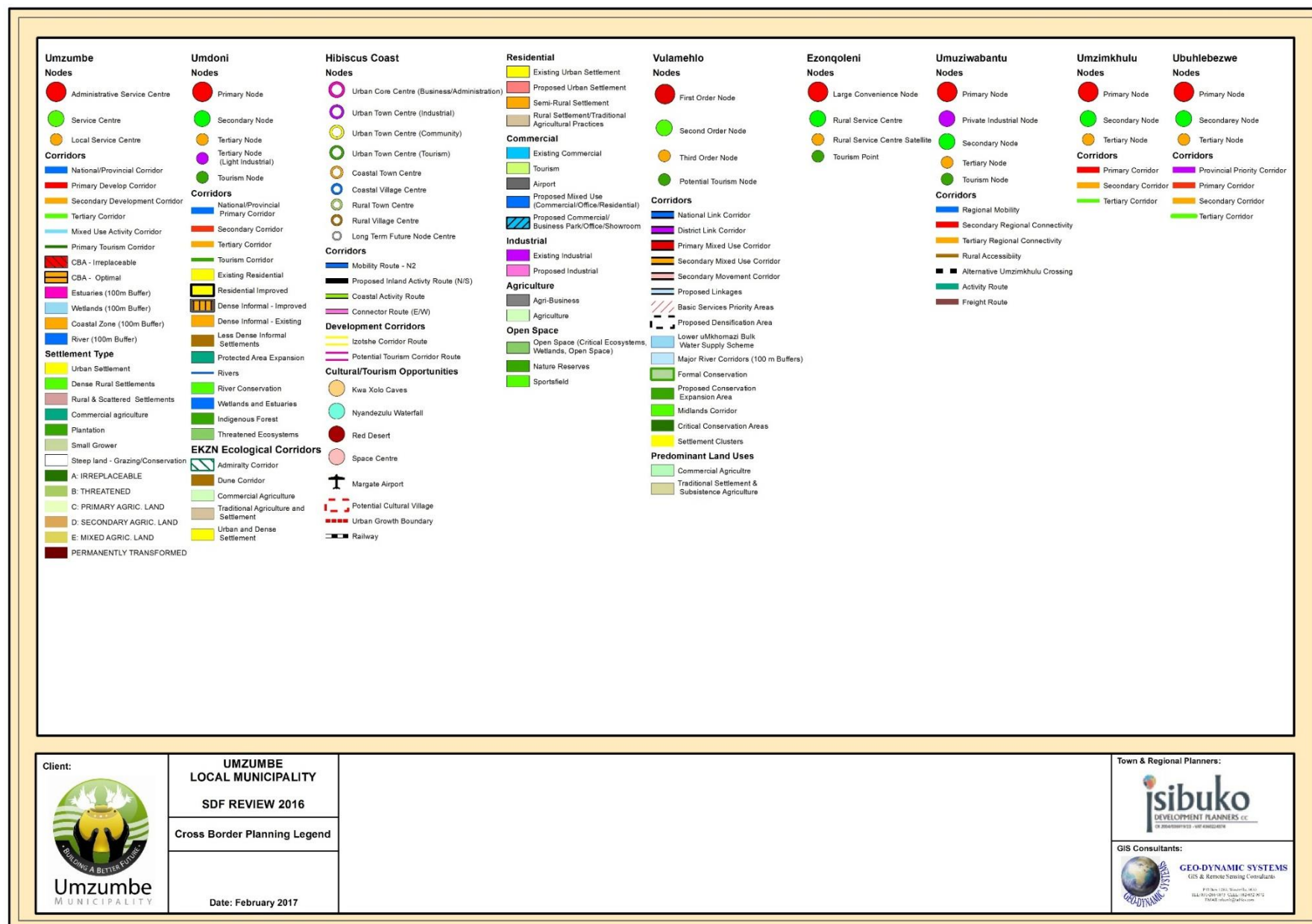


### 13.1.9 SDF CROSS-BORDER ALIGNMENT

## MAP 51: SDF CROSS BORDER PLANNING



MAP 52: CROSS BORDER PLANNING - LEGEND



Client:



UMZUMBE  
LOCAL MUNICIPALITY  
SDF REVIEW 2016

Cross Border Planning Legend

Date: February 2017

Town &amp; Regional Planners:



GIS Consultants:



GEO-DYNAMIC SYSTEMS

GIS &amp; Remote Sensing Consultants

P.O. Box 1216, Secunda 3150  
T: 031 924 9171 Fax: 031 924 9172  
Email: info@geosystems.co.za



### 13.2 DETAILED PLANNING: TURTON BEACH FRAMEWORK

The SDF is implemented through further detailed planning, which is informed by lower level plans, such as precinct plans. To this end, the municipality has developed a number of strategic development plans that provide guidance to the development of certain nodal areas. These include the Turton Beach Framework Plan.

The Turton Beach Framework is intended to provide stakeholders with a clear vision and strategy as to how Turton Beach can best be utilised to the benefit of all people in the region. It forms part of a broader agenda to enhance Turton as one of the main service centres within the municipality and ensure that the area is able to undertake this role effectively. It focuses on the beach area, with the aim of enhancing its existing role as a social and recreational node. It indicates the desired patterns of land use within the precinct, in line with spatial

reconstruction imperatives. Spatial development in Turton Beach will be informed by the land use proposals and development strategies posited in the subject framework plan.

MAP 53: TURTON BEACH DEVELOPMENT FRAMEWORK



### 13.3 UMZUMBE MUNICIPALITY LAND USE SCHEME

The Scheme can be an effective tool in implementing the spatial strategies of the SDF. The SPLUMA requires the municipality to develop, adopt and implement a wall-to-wall land use scheme for its area of jurisdiction. Such a scheme must be in place within five years from the date on which the provisions of the Act that deals with schemes were promulgated. The SPLUMA came into operation in 2015 which means that all municipalities should have a wall-to-wall land use scheme by 2020. To this effect, Umzumbe Municipality has initiated and concluded the process of preparing a wall-to-wall Land Use Scheme for its area of jurisdiction.

#### 13.3.1 LAND USE MANAGEMENT SYSTEM

The Land Use Management System (LUMS) refers to all the tools, systems and procedures a municipality requires in order to manage land and its use effectively. The SDF and the scheme are some of the critical components of the LUMS. Other typical elements of a Land Use Management System include, strategic plans such as sector plans dealing with land development.

Therefore, the scheme is not the sum total of LUMS, but just one component of a comprehensive and ideally integrated system. Neither is the SDF. Although capable of serving as standalone tools, different components of the LUMS should function in unison as an integrated system.

#### 13.3.2 DEFINITION AND PURPOSE OF SCHEME

The KwaZulu-Natal Guidelines for the Preparation of Schemes defines a scheme as:

*a tool used by a municipality to guide and manage development according to the vision, strategies and policies of the Integrated Development Plan and Spatial Development Framework, and in the interest of the general public to promote sustainable development and quality of life.*

A land use scheme essentially indicates what may or may not occur on particular areas of land. According to SPLUMA, the purpose of a Land Use Scheme is to promote efficient land development, social inclusion, economic growth, and minimal impact on public health, the environment and natural resources.

The Umzumbe scheme divides the municipal area into zones and regulates the use of land and buildings on the one hand, and the nature, extent and texture of development on the other. It establishes a single regulatory land use management system that can be applied throughout the municipality. It gives effect to the spatial development framework and the integrated development plan of the municipality.

#### 13.3.3 LINKAGE BETWEEN THE SPATIAL DEVELOPMENT FRAMEWORK AND THE SCHEME

The relationship between broader Strategic Planning (Spatial development frameworks) and the Scheme is central to ensuring



consistent and thorough decision-making around land use management and change. This relationship ensures that land use decisions do not contradict larger policy goals.

Thus, the Umzumbe Scheme is used to enforce the broader policies contained in the municipality's Integrated Development Plan (IDP) and Spatial Development Framework (SDF) at a property level. The IDP and SDF guide development, and thus inform the management of land use in terms of the Scheme.

The following two points are noted:

- ⇒ firstly, capacity to interpret strategic objectives correctly in land use decision-making is essential; and
- ⇒ secondly, a spatial planning system that allows for the translation of strategic objectives into land use decision-making is required.

Also important is the development of a spatial planning system that allows for the translation of strategic objectives into land use decision-making tool. However, the scheme is not a master plan. It will change continuously as scheme amendment applications are approved by the municipality.

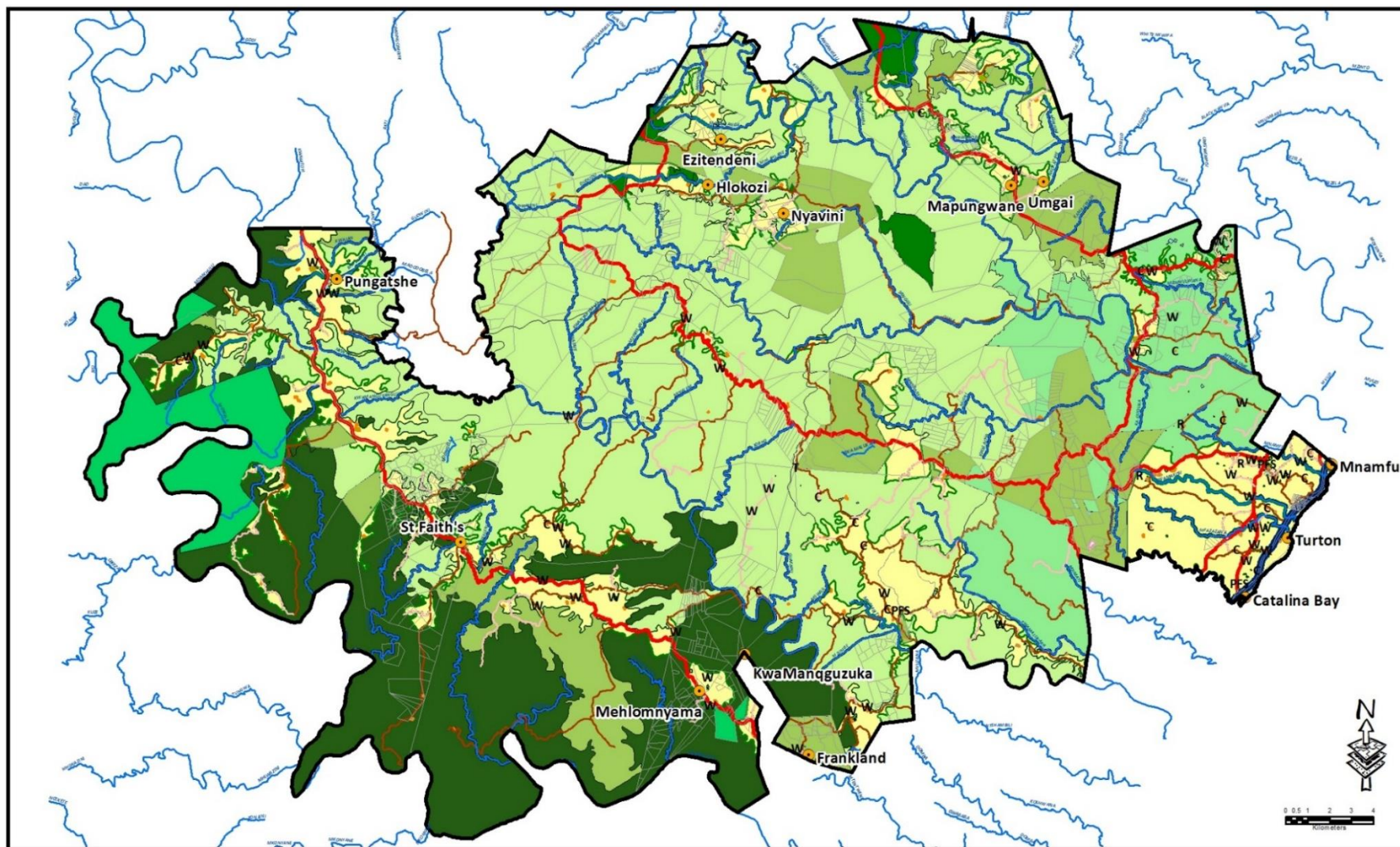
#### 13.3.4 UMZUMBE SCHEME STRUCTURE

The wall-to-wall scheme covers the entire spatial system of Umzumbe and provides certainty to land users and land development applicants,

irrespective of location. The municipality has developed a comprehensive scheme with a range of zones. These include:

- ⇒ Agriculture
- ⇒ Agriculture 2
- ⇒ Low Impact Mixed Use
- ⇒ High Intensity Traditional Settlement
- ⇒ Rural Transitional Settlement (Imizi)
- ⇒ Education
- ⇒ Quarrying And Mining
- ⇒ Worship
- ⇒ Health And Welfare
- ⇒ Transportation, Access, Utility Facilities, River And Amenity Reserves
- ⇒ Environmental Services
- ⇒ Nature Reserve
- ⇒ Nature and Cultural Based Tourism

MAP 54: LAND USE SCHEME



**ZONING**  
April 2016

(Source: Ugu DM and Umzumbe LM)

| Legend           |                 |                   |                        |                                     |                                   |
|------------------|-----------------|-------------------|------------------------|-------------------------------------|-----------------------------------|
| Umzumbe Boundary | National Road   | Active Open Space | Environmental Services | Imizi/Rural/Transitional Settlement | Nature Reserves                   |
| Places           | Provincial Road | Agriculture 1     | Existing Road          | Light Industry                      | Nature and Cultural Based Tourism |
| Main Rivers      | District Road   | Agriculture 2     | Forestry               | Low Impact Mixed Use                | Utilities and Services            |
| Cadastral        | Local Road      | Education         | Health and Welfare     | Municipal and Government            | Worship                           |



## 13.4 MONITORING AND EVALUATION FRAMEWORK

### 13.4.1 SPATIAL MONITORING APPROACH AND PROCESS

Monitoring, evaluation, reporting and adaptive management are widely recognised as fundamental components for effective municipal planning. This often takes the form of a Performance Management System (PMS), and forms an integral part of the IDP. Similarly, monitoring and evaluation of the impact of the SDF should not be considered as a once-off and separate exercise, but a continuous and iterative process that forms part of the overall assessment of the performance of the municipality. It helps to identify aspects or components of the SDF that need to be amended or strengthened, and thus keeps the SDF relevant to the strategic spatial agenda of the municipality.

Monitoring and evaluation is a fundamental management tool to document environmental impacts, both natural and anthropogenic, and assess the effectiveness of management actions.

Evaluating the impact of the SDF seeks to establish whether its operational mechanisms support achievement of the objectives or not and understand why. It will look at activities, outputs, and outcomes, use of resources and causal links. Improve efficiency and efficacy of operational processes. Where possible and necessary, it will measure changes in outcomes (and well being of target population) attributable to a specific intervention. It will inform high-level officials on extent to which intervention should be continued or not, and if any potential modifications needed.

#### 13.4.1.1 WARD/AREA BASED MANAGEMENT SYSTEM

| KEY PERFORMANCE AREAS | KEY PERFORMANCE INDICATORS   | SOURCES OF VERIFICATION   | ASSUMPTION  |
|-----------------------|--|---------------------------|---|
| Area Based Plans      | <ul style="list-style-type: none"> <li>Prioritization of Area Based plans</li> <li>Number of Area Based Plans developed</li> </ul> | Municipal IDP and budget. | The municipality accepts / adopts the cluster approach to planning. |
| Spatial budgeting     | <ul style="list-style-type: none"> <li>Extent of space budgeted / developed for public facilities</li> </ul>                       | Municipal IDP and budget. |   |

## 13.4.1.2 SPATIAL RESILIENCE AND ENVIRONMENTAL SUSTAINABILITY

| KEY PERFORMANCE AREAS           | KEY PERFORMANCE INDICATORS   | SOURCES OF VERIFICATION | ASSUMPTION  |
|---------------------------------|--|-------------------------|---|
| Range management                | <ul style="list-style-type: none"> <li>Application of carrying capacity standards to grazing land management.</li> </ul>   | DARD                    | The municipality will collaborate with relevant government departments and other relevant actors to promote environmental management and sustainable development. |
| Alien plant management          | <ul style="list-style-type: none"> <li>Amount of land cleared of alien plants.</li> <li>Programme to remove alien plants.</li> </ul>   | EMF<br>DWAS             |   |
| Conservation through production | <ul style="list-style-type: none"> <li>Initiatives to rehabilitate land affected by soil erosion.</li> <li>Protection of indigenous forestry.</li> </ul>                                     | EMF<br>DARD<br>DEDTEA   |   |
| Protected area development      | <ul style="list-style-type: none"> <li>Proclamation of environmentally sensitive areas that are not currently protected.</li> </ul>  | EMF<br>DEDTEA           |   |
| Wetland management              | <ul style="list-style-type: none"> <li>Delineation of all major wetlands.</li> <li>Observation of a 32m buffer from each wetland.</li> </ul>   | EMF                     |   |
| Biodiversity zones              | <ul style="list-style-type: none"> <li>Management of bio-diversity corridors.</li> <li>Environmental overlays.</li> </ul>  | EMF                     |   |
| Coastal management              | <ul style="list-style-type: none"> <li>Application of coastal management plans / actions.</li> </ul>   | EMF                     |   |
| Catchment management            | <ul style="list-style-type: none"> <li>Catchment management programme.</li> <li>Catchment management agency.</li> <li>Participation in national catchment management initiatives.</li> </ul> | EMF<br>DWAS             |   |
| Climate change                  | <ul style="list-style-type: none"> <li>Climate change mitigation and adaptation measures</li> </ul>  | EMF<br>DEDTEA           |   |



|                    |  |  |  |
|--------------------|--|--|--|
| Spatial resilience | <ul style="list-style-type: none"> <li>Extent of vulnerability of new and existing settlements</li> <li>Number of households relocated from undesirable locations</li> </ul> | Disaster Management Plan<br>DHS<br>HSP |  |
|--------------------|--|--|--|

#### 13.4.1.3 PROTECTION AND ENHANCEMENT OF AGRICULTURAL LAND

| KEY PERFORMANCE AREAS                   | KEY PERFORMANCE INDICATORS  | SOURCES OF VERIFICATION | ASSUMPTION   |
|---|---|-------------------------|--|
| <b>AGRICULTURAL LAND REGULATION</b>     |   |                         |  |
| High potential agriculture              | <ul style="list-style-type: none"> <li>Size and use of high potential agricultural land.</li> <li>Scheme clauses designed to protect high potential agricultural land.</li> </ul>   | IDP<br>LED<br>LUS       | The municipality will not allow non-agricultural uses on high potential agricultural land.                 |
| Good agricultural potential agriculture | <ul style="list-style-type: none"> <li>Size and use of good potential agricultural land.</li> <li>Scheme clauses designed to protect good potential agricultural land.</li> </ul>   | IDP<br>LED<br>LUS       | The municipality will allow a limited number of non-agricultural uses on high potential agricultural land. |
| Low agricultural potential land         | <ul style="list-style-type: none"> <li>Size and use of low potential agricultural land.</li> <li>Scheme clauses designed to manage low potential agricultural land.</li> </ul>  | IDP<br>LED<br>LUS       | The municipality will permit non-agricultural uses on low potential agricultural land.                     |
| <b>LAND AND AGRARIAN REFORM</b>         |   |                         |  |
| Emerging farmer settlement              | <ul style="list-style-type: none"> <li>Number and location of LRAD projects</li> <li>Quality of land for small farmer settlement.</li> <li>Number and location of PLAS projects.</li> <li>Number of land reform projects receiving post-settlement support.</li> <li>Cluster approach to land reform implementation.</li> </ul> | DRDLR<br>DARD           | The municipality will support developmental land reform.   |

|                          |   |               |   |
|--------------------------|---|---------------|---|
|                          | <ul style="list-style-type: none"> <li>Percentage increase in agricultural land registered in the name of black people.</li> </ul>  |               |   |
| Land tenure upgrading    | <ul style="list-style-type: none"> <li>Number of labour tenants and ESTA cases resolved.</li> <li>Number and location of new agri-villages.</li> <li>Number and location of settlements that are receiving land tenure upgrading.</li> <li>Number of land owners benefiting from title adjustment.</li> </ul> | DRDLR         | Land tenure upgrading in the rural areas is required in order to unlock land for settlement purposes. |
| Agricultural development | <ul style="list-style-type: none"> <li>Number of food security programmes / projects.</li> <li>Number of agricultural programmes / projects.</li> <li>Development of an agri-village.</li> <li>Number of farmers benefitting from support.</li> <li>Development of an agricultural sector plan</li> </ul>     | DRDLR<br>DARD | The municipality will initiate programmes and projects to support agriculture.                        |

#### 13.4.1.4 PROMOTING CLUSTERING AND COMPACT DEVELOPMENT

| KEY PERFORMANCE AREAS                         | KEY PERFORMANCE INDICATORS   | SOURCES OF VERIFICATION                                   | ASSUMPTION   |
|---|--|---|--|
| <b>CLUSTERING DEVELOPMENT ALONG CORRIDORS</b> |  |   |  |
| N2 National Development Corridor              | <ul style="list-style-type: none"> <li>Nodal development at strategic points along each of these corridors.</li> <li>National/provincial initiatives along the corridor.</li> <li>National and provincial support to tourism and agriculture.</li> </ul> | National and provincial government initiatives, e.g. SIP2 | The national and provincial governments will initiate projects that give effect to the corridor concept along the N2 |
| Primary tourism corridor                      | <ul style="list-style-type: none"> <li>Number of tourism initiatives along the R102.</li> </ul>  | Municipal IDP and budget.                                 | The municipality will focus tourism initiatives along the R102.  |

|  |   |  |  |
|--|---|--|--|
| Primary development corridor   | <ul style="list-style-type: none"> <li>• Number, size and character of projects located along the primary development corridors.</li> <li>• New developments along the corridor.</li> <li>• Level of access and ease of movement.</li> </ul>  | Municipal IDP and budget.  | The municipality will focus most of the capital expenditure in areas located along the corridors.                                      |
| Secondary development corridors  | <ul style="list-style-type: none"> <li>• Number, size and character of projects located within settlements located along these corridors.</li> <li>• Level of spatial linkage and integration between different settlements.</li> <li>• Number and character of nodes located along these corridors</li> </ul>                | Municipal IDP and budget.  | The municipality will focus most of the capital expenditure in areas located along the corridors.                                      |
| Tertiary corridors   | <ul style="list-style-type: none"> <li>• Access and ease of movement within settlements.</li> <li>• Number and character of nodes located along these corridors.</li> <li>• KMs of roads upgraded.</li> </ul>   | Municipal IDP and budget.  | Community development projects will be located along these corridors.  |
| <b>CLUSTERING PUBLIC FACILITIES AND ECONOMIC ACTIVITIES IN DEVELOPMENT NODES</b> |   |  |  |
| Primary Administrative Service Centre  | <ul style="list-style-type: none"> <li>▪ Amount of capital spent on Turton per annum.</li> <li>▪ Implementation projects for Turton Beach Development Framework.</li> <li>▪ Formalisation and development of Turton as a Primary node.</li> <li>▪ Number, size and character of projects located within this area.</li> </ul> | Municipal budget<br>SDBIPs<br>Town Planning<br>Register<br>Buildings Plans | The municipality will focus a significant share of the capital expenditure in this area.   |
| Service Centre   | <ul style="list-style-type: none"> <li>▪ Number, size and character of projects located within these areas.</li> <li>▪ Level of access and location of public facilities serving different communities.</li> </ul>  | Municipal budget<br>SDBIPs<br>Town Planning<br>Register<br>Buildings Plans | The municipality will facilitate the location of initiatives that benefits a group or cluster of communities in these service centres. |

|                            |   |   |   |
|----------------------------|---|---|---|
| Local Service Centre       | <ul style="list-style-type: none"> <li>▪ Number, size and character of projects located within these areas.</li> <li>▪ Level of access and location of low order public facilities in these nodes.</li> <li>▪ Promoting clusters of public facilities as a means to encourage nodal development.</li> </ul> | Municipal budget<br>SDBIPs<br>Town Planning Register<br>Buildings Plans | The municipality will facilitate the location of projects that benefits a community within these service centres.<br><br>Development nodes have potential to improve access to basic and public services. |
| <b>COMPACT DEVELOPMENT</b> |   |   |   |
| Urban edge                 | <ul style="list-style-type: none"> <li>• Percentage reduction in capital expenditure outside of the urban edge.</li> <li>• Location of new urban settlements within the urban edge.</li> <li>• Upgrading of peri-urban settlements.</li> </ul>  | IDP<br>HSP<br>SDBIP   | The municipality will not discourage urban development located outside of the urban edge.   |
| Settlement edge            | <ul style="list-style-type: none"> <li>• Stakeholder agreement on settlement edges.</li> <li>• Percentage reduction in rural capital expenditure outside of the settlement edge.</li> <li>• Development of sustainable human settlements.</li> </ul>  | IDP<br>HSP<br>SDBIP   | The municipality will facilitate mapping of all settlements within its area and delineation of lines beyond which settlements may not expand.   |
| Densification              | <ul style="list-style-type: none"> <li>• Detailed densification strategy.</li> <li>• Land use scheme.</li> <li>• Number and location of infill developments.</li> <li>• Percentage increase in the number of higher density developments.</li> </ul>  | IDP<br>HSP<br>SDBIP   | The municipality will develop and implement a densification strategy with clear targets for densification.  |



## 13.4.1.5 DEVELOPING SUSTAINABLE HUMAN SETTLEMENTS

| KEY PERFORMANCE AREAS | KEY PERFORMANCE INDICATORS   | SOURCES OF VERIFICATION | ASSUMPTION   |
|-----------------------|--|-------------------------|--|
| Land release          | <ul style="list-style-type: none"> <li>Size and location of land released for new housing projects.</li> <li>Land release and acquisition strategy</li> </ul>  | HSP<br>IDP              | The municipality and private sector will release land for housing development. |
| Rural housing         | <ul style="list-style-type: none"> <li>Number and location of new rural housing projects.</li> <li>Strategic link between settlement planning and rural housing.</li> <li>Number of people with secured land tenure rights.</li> </ul> | HSP<br>IDP              | Rural housing will be implemented mainly in dense rural settlements.           |

## 13.4.1.6 BULK AND SOCIAL INFRASTRUCTURE DEVELOPMENT

| KEY PERFORMANCE AREAS                  | KEY PERFORMANCE INDICATORS  | SOURCES OF VERIFICATION | ASSUMPTION  |
|--|---|-------------------------|---|
| <b>BULK INFRASTRUCTURE DEVELOPMENT</b> |   |                         |   |
| Sanitation                             | <ul style="list-style-type: none"> <li>Peri -urban settlements are provided with water bourne sewer, where possible.</li> <li>All dense rural settlements are provided with lined pit latrines.</li> </ul>  | WSDP<br>IDP<br>Budget   | The municipality will facilitate provision of sanitation as part of the development of sustainable human settlements. |
| Water                                  | <ul style="list-style-type: none"> <li>All settlements within the urban edge have water on-site or at least 200m from each household.</li> <li>All dense rural settlements are provided with communal standpipes within 200m.</li> <li>Upgrading of water infrastructure to accommodate new development.</li> </ul> | WSDP<br>IDP<br>Budget   | The municipality will facilitate provision of water as part of the development of sustainable human settlements.      |
| Electricity                            | <ul style="list-style-type: none"> <li>Percentage increase in the number of households within the urban edge that are connected to the grid.</li> </ul>   | IDP<br>Budget           | The municipality will facilitate provision of electricity as part of the  |

|   |  |                                       |  |
|---|--|---------------------------------------|--|
|   | <ul style="list-style-type: none"> <li>Percentage increase in the number of households within the dense rural settlements that are connected to the grid.</li> <li>Percentage increase in the number of households in scattered rural settlements receiving alternative forms of power.</li> <li>Initiation of alternative, environmentally friendly sources of energy.</li> </ul> | ESKOM                                 | development of sustainable human settlements.  |
| <b>IMPROOVING ACCESS TO SOCIAL FACILITIES</b> |  |                                       |  |
| Health  | <ul style="list-style-type: none"> <li>Clinic for every 7000 people</li> <li>All households access a health facility within a 5km radius.</li> <li>Number and location of new health facilities.</li> <li>Weakly mobile clinics in all local service centres.</li> </ul>   | Department of Health                  | Health facilities will be provided in accordance with the relevant planning standards.     |
| Meeting Spaces                                | <ul style="list-style-type: none"> <li>Community hall for each settlement where the need exists.</li> </ul>  | IDP Budget                            | All communities will have access to a hall.  |
| Education                                     | <ul style="list-style-type: none"> <li>Primary school for every 500 households.</li> <li>Secondary school for every 1500 households.</li> <li>Primary school within 3km radius from each household.</li> <li>Secondary school within 5km radius from each household</li> </ul>   | IDP Budget<br>Department of education | Education facilities will be provided in accordance with the relevant planning standards.  |
| Waste sites                                   | <ul style="list-style-type: none"> <li>Weekly waste collection within the urban edge.</li> <li>Waste collection centres within each dense rural settlement.</li> <li>Location and accessibility of a landfill site.</li> </ul>   | IDP Budget                            | Waste removal and disposal will be undertaken in accordance with the relevant regulations. |

## 13.4.1.7 UNLOCK ECONOMIC DEVELOPMENT POTENTIAL

| KEY PERFORMANCE AREAS | KEY PERFORMANCE INDICATORS  | SOURCES OF VERIFICATION   | ASSUMPTION   |
|-----------------------|---|---|--|
| Tourism               | <ul style="list-style-type: none"> <li>Number of new tourism facilities and products.</li> <li>Branded Tourism Route.</li> <li>Preservation and registration of heritage sites</li> </ul>                                     | Tourism statistics  | The municipality will facilitate tourism development.                                  |
| Agriculture           | <ul style="list-style-type: none"> <li>Location and extent of land reserved for agriculture only.</li> <li>High impact agriculture in dense rural settlements.</li> <li>Agricultural support for emerging farmers.</li> </ul> | Land Use Scheme<br>IDP<br>Budget  | The municipality will facilitate the productive and economic use of agricultural land. |
| Commerce and industry | <ul style="list-style-type: none"> <li>Percentage increase in commercial land.</li> <li>Commercial &amp; industrial development applications received by the municipality.</li> </ul>   | Municipal budget<br>SDBIPs<br>Development<br>Planning Register<br>Buildings Plans | The municipality will facilitate commercial development in strategic nodal areas.      |
| Informal Trading      | <ul style="list-style-type: none"> <li>Amount of land identified and designated for informal trading in development nodes.</li> <li>Development of informal trading infrastructure.</li> </ul>                                | IDP<br>Budget   | The municipality will embrace informality.   |

## 13.4.1.8 SUSTAINABLE INTEGRATED SPATIAL PLANNING SYSTEM

| KEY PERFORMANCE AREAS                 | KEY PERFORMANCE INDICATORS   | SOURCES OF VERIFICATION | ASSUMPTION                                     |
|---------------------------------------|--|-------------------------|--|
| <b>CONTINUUM OF HUMAN SETTLEMENTS</b> |  |                         |  |
| Peri-urban settlements                | <ul style="list-style-type: none"> <li>Upgrading and formalization of peri-urban settlements.</li> </ul> | IDP<br>Budget           | The municipality will facilitate upgrading and |

|   |  |   |  |
|---|--|---|--|
|   | <ul style="list-style-type: none"> <li>• Formalisation of peri-urban settlements.</li> <li>• Settlement taking place in an orderly and planned fashion.</li> <li>• All new developments will occur within the urban edge which will also serve as a service delivery line – compaction.</li> <li>• Renewal initiatives.</li> </ul> | SDBIP   | formalization of peri-urban settlement into urban settlements.<br>The municipality will develop systems and procedures for effective management of semi-urban settlements. |
| Dense rural settlements                               | <ul style="list-style-type: none"> <li>• Release of land for housing development.</li> <li>• Land tenure upgrading.</li> <li>• Settlement plans.</li> <li>• Containment of outward expansion.</li> </ul>   | IDP<br>Budget<br>SDBIP  | The land owners will release land for housing development and land tenure upgrading.   |
| Scattered rural settlements                           | <ul style="list-style-type: none"> <li>• Agricultural development.</li> <li>• Management of grazing land.</li> <li>• Consolidation of settlement into agri-villages.</li> <li>• Structured engagement with DRDLR.</li> </ul>   | IDP<br>Budget<br>DRDLR Programme of action  | Scattered rural settlements will be developed into agri-villages.  |
| <b>SUSTAINABLE INTEGRATED SPATIAL PLANNING SYSTEM</b> |  |   |  |
| Hierarchy of plans                                    | <ul style="list-style-type: none"> <li>• Development of Local Area Plans for each ward cluster</li> <li>• Development of precinct plans for development nodes</li> <li>• Developing settlement plans</li> </ul>  | <ul style="list-style-type: none"> <li>• Number of LAP's prepared</li> <li>• Number of precinct plans developed for nodes experiencing development pressure</li> <li>• Number of approved settlement plans</li> </ul> | The municipality will refine the SDF and develop it further through the formulation of a series of plans with varying degrees of detail and flexibility.                   |



|  |  |   |  |
|--|--|---|--|
| Integration of traditional land allocation practices with municipal spatial planning | <ul style="list-style-type: none"> <li>▪ Mapping of izigodi</li> <li>▪ Mapping of settlements within each izigodi</li> <li>▪ Development of Guidelines for land Allocation</li> <li>▪ Training and Capacity Building of Traditional leaders</li> </ul> | <ul style="list-style-type: none"> <li>▪ Generation of new spatial data</li> <li>▪ Improved GIS system and data</li> <li>▪ Accepted norms and standards for site sizes.</li> <li>▪ Identified factors that should be considered when allocating land for different land uses.</li> <li>▪ Spatial identification and coding of rights allocated.</li> <li>▪ Register of land rights holders</li> <li>▪ Improved capacity and understanding of spatial information by Traditional leadership</li> </ul> | The municipality will work together with Traditional leadership to Integrate Traditional Land Allocation Processes with Municipal Spatial Planning |
|--|--|---|--|

### 13.5 INSTITUTIONAL FRAMEWORK

The effective implementation of the Spatial Development Framework requires an adequately capacitated institutional framework. Moreover, the SDF is regarded as a key element in the integration of development processes applicable to different sectors. This also includes the Departments within the municipality that are responsible for infrastructure development and community services. The implementation of the SDF is the responsibility of the Development Planning Unit. Development Planning in the Umzumbe municipality is located under the Office of the Municipal Manager. This unit currently has four permanent positions. The permanent positions include the Manager: Development Planning, two Development Planners, and a Building Inspector. All positions are filled as illustrated in Figure below.

FIGURE 15: ORGANIZATIONAL STRUCTURE



### 13.6 CAPITAL INVESTMENT FRAMEWORK

The aim of the Capital Investment Plan is to review the projects contained in the IDP taking into account activities, which have already been undertaken by the municipality. The objectives of the Capital Investment Plan can be summarized as follows:

- ⇒ To link capital projects with potential sources of funding;
- ⇒ To strive to ensure appropriate budget - IDP linkages; and
- ⇒ To provide practical and appropriate alignment regarding capital investment.

The projects have also been spatially referenced, where possible, to assist the municipality with the evaluation of where capital expenditure will be focussed in the municipal area. Thus, the intent is capital investment that lays the foundations for sustainable development.

The table below presents the five year capital investment framework for the municipality. Projects have been grouped according to the spatial strategies identified in the SDF. This framework is spatially presented on map 55-57. The table is a summary, the complete table is attached to the document as Annexure A.

TABLE 28: CAPITAL INVESTMENT PROJECTS

| PROGRAMME/PROJECTS                                  |         |   |                     | PHASED ANNUAL INVESTMENT COSTS |                |              |              |
|---|---------|---|---------------------|--------------------------------|----------------|--------------|--------------|
| NO  | Map No. |   | LOCATION            | TOTAL ESTIMATED COST           | 2017/18        | 2018/19      | 2019/20      |
| AREA/WARD BASED MANAGEMENT SYSTEM                   |         |   |                     | R 1 650 000,00                 | R 550 000,00   | R 550 000,00 | R 550 000,00 |
| 1,1   | 1       | Area based plan for Cluster A (Turton area)                         | Cluster A           | R 550 000,00                   | R 550 000,00   |              |              |
| 1,2   | 2       | Area based plan for other clusters (as prioritised by municipality) | Clusters B, C,D, E  | R 1 100 000,00                 |                | R 550 000,00 | R 550 000,00 |
|   |         |   |                     |                                |                |              |              |
| SPATIAL RESILIENCE AND ENVIRONMENTAL SUSTAINABILITY |         |   |                     | R 5 165 000,00                 | R4 665 000,00  | R 425 000,00 | R 75 000,00  |
| 2,1   |         | Environmental Management  |                     | R 705 000,00                   | R 205 000,00   | R 425 000,00 | R 75 000,00  |
|   | 3       | Community environmental awareness programme                         | Entire municipality | R 225 000,00                   | R 75 000,00    | R 75 000,00  | R 75 000,00  |
|   | 4       | Strategic Environmental Assessment (SEA) Review for Umzumbe LM      | Entire municipality | R 350 000,00                   |                | R 350 000,00 |              |
|   | 5       | Integrated Waste Management Plan Review                             |                     |                                |                |              |              |
|   | 6       | Skip Bin for Dumping  |                     | R 30 000,00                    | R 30 000,00    |              |              |
|   | 7       | Development of a recycling station                                  |                     | R 100 000,00                   | R 100 000,00   |              |              |
|   | 8       | Formulation of waste management bylaws                              |                     |                                |                |              |              |
|   | 9       | Waste Collections   |                     |                                |                |              |              |
| 2,2   |         | Disaster Management   |                     | R 4 460 000,00                 | R4 460 000,00  |              |              |
|   | 10      | 5x Water Hydrants   |                     | R 50 000,00                    | R 50 000,00    |              |              |
|   | 11      | Establishment of Disaster Management Centre                         |                     |                                | x              |              |              |
|   | 12      | Removal of foreign trees  | Ward 19             |                                |                |              |              |
|   | 13      | Update/Review of DMP  |                     | R 300 000,00                   | R 300 000,00   |              |              |
|   | 14      | DM Advisory Forum Meetings  |                     | R 20 000,00                    | R 20 000,00    |              |              |
|   | 15      | Training/capacity Buildings   |                     | R 400 000,00                   | R 400 000,00   |              |              |
|   | 16      | Volunteer Program   |                     | R 720 000,00                   | R 720 000,00   |              |              |
|   | 17      | Incident Support  |                     | R 1 000 000,00                 | R 1 000 000,00 |              |              |
|   | 18      | Lightning Conductors  |                     | R 750 000,00                   | R 750 000,00   |              |              |
|   | 19      | Awareness Campains  |                     | R 800 000,00                   | R 800 000,00   |              |              |

|  |                                 |  |                               |                       |                       |                     |            |
|--|---------------------------------|--|-------------------------------|-----------------------|-----------------------|---------------------|------------|
|  | 20                              | Provide Lighting Conductors                                  | Ward 5,15 / Bopheni/ Nkangala |                       |                       |                     |            |
|  | 21                              | Awareness Campains   |                               | R 50 000,00           | R 50 000,00           |                     |            |
|  | 22                              | Trainee Fire Fighters  |                               | R 120 000,00          | R 120 000,00          |                     |            |
|  | 23                              | Capacity Building  |                               | R 100 000,00          | R 100 000,00          |                     |            |
|  | 24                              | Fire and DM Control Room                                     |                               | R 150 000,00          | R 150 000,00          |                     |            |
|  |                                 |  |                               |                       |                       |                     |            |
| <b>PROTECTION AND ENHANCEMENT OF AGRICULTURAL LAND</b> |                                 |  |                               | <b>R 2 215 000,00</b> | <b>R 1 865 000,00</b> | <b>R 350 000,00</b> | <b>R -</b> |
| <b>3,1</b>   | <b>Land and Agrarian Reform</b> |  |                               | <b>R 2 215 000,00</b> | <b>R 1 865 000,00</b> | <b>R 350 000,00</b> | <b>R -</b> |
|  | 25                              | Agricultural sector plan                                     | Entire municipality           | R 350 000,00          |                       | R 350 000,00        |            |
|  | 26                              | one home one garden  |                               | R 165 000,00          | R 165 000,00          |                     |            |
|  | 27                              | Seed Distribution  |                               | R 800 000,00          | R 800 000,00          |                     |            |
|  | 28                              | Assistance of 5 community Gardens                            |                               | R 300 000,00          | R 300 000,00          |                     |            |
|  | 29                              | Shinga Community Garden                                      |                               | R 600 000,00          | R 600 000,00          |                     |            |
|  | 30                              | Jojo Tank for Agriculture Project                            | 8/Nyavini                     |                       |                       |                     |            |
|  | 31                              | Send tractors to community gardens                           | 3                             |                       |                       |                     |            |
|  | 32                              | Community Gardens  | 1/Nyamane                     |                       |                       |                     |            |
|  | 33                              | Seeds for Farming  | 2/Pongolo                     |                       |                       |                     |            |
|  | 34                              | Identify areas for cattle farming                            | 2/Pongolo                     |                       |                       |                     |            |
|  | 35                              | Sand Mining  | 2/Nguza                       |                       |                       |                     |            |
|  | 36                              | Send tractors to community gardens                           | 17                            |                       |                       |                     |            |
|  | 37                              | Livestock Farming  |                               |                       |                       |                     |            |
|  |                                 |  |                               |                       |                       |                     |            |
| <b>PROMOTING CLUSTERING AND COMPACT DEVELOPMENT</b>    |                                 |  |                               | <b>R 900 000,00</b>   | <b>R 600 000,00</b>   | <b>R 300 000,00</b> |            |
| <b>4,1</b>   | <b>Development Nodes</b>        |  |                               | <b>R 600 000,00</b>   | <b>R 600 000,00</b>   | <b>R -</b>          |            |
|  | 38                              | Phungashe Local Area Plan                                    | Ward 3/4                      | R 600 000,00          | R 600 000,00          |                     |            |
| <b>4,2</b>   | <b>Compact Development</b>      |  |                               | <b>R 300 000,00</b>   | <b>R -</b>            | <b>R 300 000,00</b> |            |
|  | 39                              | Preparation of a densification strategy for the municipality | Entire municipality           | R 300 000,00          |                       | R 300 000,00        |            |
|  |                                 |  |                               |                       |                       |                     |            |
| <b>DEVELOPMENT OF SUSTAINABLE HUMAN SETTLEMENTS</b>    |                                 |  |                               | <b>R 250 000,00</b>   | <b>R 250 000,00</b>   |                     |            |
| <b>5,1</b>   | 40                              | Housing Sector Plan Review                                   | Entire municipality           |                       |                       |                     |            |
|  | 41                              | Cluster A: Phase 2 (2000 units)                              |                               |                       |                       |                     |            |
|  | 42                              | Cluster B: Application for tranche two of 2000 units         |                               |                       |                       |                     |            |
|  | 43                              | Cluster C Construction of 1000 units and phase two planning  |                               |                       |                       |                     |            |



|            |    |  |                         |                        |                       |                     |
|------------|----|--|-------------------------|------------------------|-----------------------|---------------------|
|            | 44 | Cluster D: Application for Construction 1000 units |                         |                        |                       |                     |
|            | 45 | Cluster E: Planning for 500 units                  | Ward 3/Thaleni          |                        |                       |                     |
|            | 46 | Rural Housing                                      |                         |                        |                       |                     |
|            | 47 | Rural Housing                                      | Ward 9/ Mzikhwana       |                        |                       |                     |
|            | 48 | Rural Housing                                      | 12/ Thofethi            |                        |                       |                     |
|            | 49 | Cluster C Phase 1 (400 units)                      |                         |                        |                       |                     |
|            | 50 | Nhlangwini housing (178 units)                     | Ward 2/Pongolo          |                        |                       |                     |
|            | 51 | Low cost housing                                   | Ward 2                  |                        |                       |                     |
|            | 52 | Low cost income housing to private lands           | Ward 11/Esiphakameni    |                        |                       |                     |
|            | 53 | Rural Housing                                      | Ward 9/Zamani           |                        |                       |                     |
|            | 54 | Rural Housing                                      | Ward 15/Zamani          |                        |                       |                     |
|            | 55 | Rural Housing (3000 units)                         | Ward 15/Odadeni         |                        |                       |                     |
|            | 56 | Rural Housing                                      | Ward 5/Gwala Gwala      |                        |                       |                     |
|            | 57 | Finish Housing in Private land                     | 13/Thembabantu          |                        |                       |                     |
|            | 58 | Rural housing                                      | Ward 9                  |                        |                       |                     |
|            | 59 | Rural housing                                      | Ward 16                 |                        |                       |                     |
|            | 60 | Rural housing                                      | Ward 16/Nkehlamandla    |                        |                       |                     |
|            | 61 | Rural housing for a disabled member                | Ward 19                 |                        |                       |                     |
|            | 62 | Rural housing                                      | Ward 05/Nkulu, Hlanzeni |                        |                       |                     |
|            | 63 | Rural housing                                      | Ward 1                  |                        |                       |                     |
|            | 64 | Rural housing                                      | Ward 18                 |                        |                       |                     |
|            | 65 | Provide rural housing                              | Ward 4                  |                        |                       |                     |
|            | 66 | Provide rural housing                              | Ward 12                 |                        |                       |                     |
|            | 67 | Low cost housing                                   | Ward 13/Baphumile       |                        |                       |                     |
|            | 68 | Rural housing                                      |                         | R 250 000,00           | R 250 000,00          |                     |
|            | 69 | Rural Housing                                      | Ward 4 /Phungashe       |                        |                       |                     |
|            | 70 | Houses   | Ward 8/Mgai             |                        |                       |                     |
|            |    |  |                         |                        |                       |                     |
|            |    | <b>BULK AND SOCIAL INFRASTRUCTURE DEVELOPMENT</b>  |                         | <b>R 38 135 396,57</b> | <b>R37 937 651,93</b> | <b>R 150 212,62</b> |
| <b>6,1</b> |    | <b>WATER AND SANITATION INFRASTRUCTURE</b>         |                         |                        |                       | <b>R 40 226,17</b>  |
|            | 71 | Infrastructure Master Plan                         |                         |                        |                       |                     |

|     |                                       |                               |  |  |  |
|-----|---------------------------------------|-------------------------------|--|--|--|
| 72  | Provide jojo tanks                    | Ward 11/Magwaza/ Eringini     |  |  |  |
| 73  | Provide toilets                       | Ward 11/Msikazi               |  |  |  |
| 74  | Add jojo tanks                        | Ward 11/Ifafa                 |  |  |  |
| 75  | Add more jojo tanks                   | Ward 16/Ntengo                |  |  |  |
| 76  | Add more jojo tanks                   | Ward 16/Santu (near hospital) |  |  |  |
| 77  | Water connection to households        | Ward 14/Khathi                |  |  |  |
| 78  | Water trucks to households            | Ward 14/Khathi                |  |  |  |
| 79  | Running water for taps                | Ward 5/Masulmaneni            |  |  |  |
| 80  | Water connection to older citizens    | Ward 16/Cabhane               |  |  |  |
| 81  | Provide water tanks                   | Ward 16/Cabhane/ Kamagadla    |  |  |  |
| 82  | Provide water tanks                   | Ward 16/Kwamadadane/ Vememeze |  |  |  |
| 83  | Provide more Stand Pipes              | Ward 7/Ngwenya                |  |  |  |
| 84  | Fill water tanks regularly            | Ward 7/Bhanoyi                |  |  |  |
| 85  | Provide more stand pipes              | Ward 13                       |  |  |  |
| 86  | Provide more stand pipes              | Ward 7/Bhanoyi                |  |  |  |
| 87  | Improve all Water Schemes             | Ward 11/Ngoyeleni             |  |  |  |
| 88  | Provide jojo tanks                    | Ward 18/Esilengeni            |  |  |  |
| 89  | Water Connection                      | Ward 9                        |  |  |  |
| 90  | Water Connection closer to households | Ward13                        |  |  |  |
| 91  | Static tanks                          | Ward 11                       |  |  |  |
| 92  | Static tanks                          | Ward 5/ Gwalagwala            |  |  |  |
| 93  | Static tanks                          | Ward 14/ Rosterville          |  |  |  |
| 94  | Provide toilets                       | Ward 14                       |  |  |  |
| 95  | Provide toilets                       | Ward 15                       |  |  |  |
| 96  | Fill the water tanks regularly        | Ward 15                       |  |  |  |
| 97  | Water Provision                       | Ward 17/Mgangeni              |  |  |  |
| 98  | Water supply                          | Ward 17                       |  |  |  |
| 99  | Improve water connection              | Ward 2                        |  |  |  |
| 100 | Provide more toilets                  | Ward 15/Msikezi               |  |  |  |
| 101 | Provide water connection              | Ward 11                       |  |  |  |
| 102 | Provide Toilets                       | Ward 18                       |  |  |  |
| 103 | Improve water connection              | Ward 15                       |  |  |  |
| 104 | Jojo tank for Ezisukumele area        | Ward 8/Nyavini                |  |  |  |

|  |     |   |                                  |  |  |  |  |
|--|-----|---|----------------------------------|--|--|--|--|
|  | 105 | Phase 2 of water project                        | Ward 16/Ndunge                   |  |  |  |  |
|  | 106 | Provide jojo tanks                              | Ward 16/Ndunge                   |  |  |  |  |
|  | 107 | Pipes connection to houses with Disabled people | Ward 16/Ndunge                   |  |  |  |  |
|  | 108 | Add Jojo tank                                   | Ward 12/Sangu                    |  |  |  |  |
|  | 109 | Fix Static Tank at the River                    | Ward 6/ Number 7                 |  |  |  |  |
|  | 110 | Water Provision                                 | Ward 12/ Diphini, Nqolobaneni    |  |  |  |  |
|  | 111 | Fencing of Reservoir                            | Ward 5/Qwabe                     |  |  |  |  |
|  | 112 | Add Jojo tank                                   | Ward 7/Hlokozi                   |  |  |  |  |
|  | 113 | Provision of Clean Water                        | Ward 7/Mbele                     |  |  |  |  |
|  | 114 | Provide Stand pipes                             | Ward 13/Odeke                    |  |  |  |  |
|  | 115 | Jojo tanks to the built houses                  | Ward 14/Hlongwa                  |  |  |  |  |
|  | 116 | Provide Jojo Tanks                              | Ward 7/Mathafeni                 |  |  |  |  |
|  | 117 | JoJo Tanks at Home Affairs offices              | Ward 12/Mfimfitha                |  |  |  |  |
|  | 118 | Fix Water Engine at NPO                         | Ward 5/Mehlomnyama               |  |  |  |  |
|  | 119 | Complete water connection Project               | Ward 5/Gwala Gwala               |  |  |  |  |
|  | 120 | More taps and stand pipes                       | Ward 13/Baphumile                |  |  |  |  |
|  | 121 | Provide Static Tanks                            | Ward 6/ Qhamuka                  |  |  |  |  |
|  | 122 | Provide Static Tanks                            | Ward 7/Nyavini/ Sangu            |  |  |  |  |
|  | 123 | Fixing of Reservoir                             | Ward 17/Mfazazane                |  |  |  |  |
|  | 124 | Fixing of Water pipe                            | Ward 7/ Shali                    |  |  |  |  |
|  | 125 | Provide stand pipes                             | Ward 11/Oneli                    |  |  |  |  |
|  | 126 | Provide stand pipes                             | Ward 7                           |  |  |  |  |
|  | 127 | Access to clean water                           | Ward 1                           |  |  |  |  |
|  | 128 | extention of pipe at Genyaneni                  | Ward 9                           |  |  |  |  |
|  | 129 | Water connections                               | Ward 11/Kwamande                 |  |  |  |  |
|  | 130 | Provision of engine at Hyman deep tank          | Ward 9                           |  |  |  |  |
|  | 131 | Provision of stand Pipes                        | Ward 11                          |  |  |  |  |
|  | 132 | Provision of a water tanker                     | Ward 11                          |  |  |  |  |
|  | 133 | Connection of main pipe                         | Ward 20/Mbhobho, Squngeni        |  |  |  |  |
|  | 134 | Stand pipes                                     | Ward 12                          |  |  |  |  |
|  | 135 | Stand pipes                                     | Ward 9/ Esilengeni/ Thungindaba  |  |  |  |  |
|  | 136 | Provision of water                              | Ward 4/ Entabeni Area- Star Road |  |  |  |  |
|  | 137 | Provision of water at KwaNgcobo taps            | Ward 15/Qoloqolo                 |  |  |  |  |

| 6,2 |     | ELECTRIFICATION OF HOUSEHOLDS    |   |  |      |  |
|-----|-----|----------------------------------|---|--|------|--|
|     | 138 | Energy Master Plan               |   |  |      |  |
|     | 139 | Illegal connection solutions     | Ward 8/Mahlaya                          |  | N/A  |  |
|     | 140 | Curbing illegal connections      | Ward 19                                 |  | N/A  |  |
|     | 141 | Provide Electricity              | Ward 6                                  |  | INEP |  |
|     | 142 | Fast track electricity project   | Ward 4/Phungashe                        |  | INEP |  |
|     | 143 | Provide Electricity              | Ward 2/Bhumbeni                         |  | INEP |  |
|     | 144 | Provide Electricity              | Ward 11/Oneli                           |  | INEP |  |
|     | 145 | Electricity blackouts solutions  | Ward 3/Manyonga                         |  | INEP |  |
|     | 146 | Resume electricity Programme     | Ward 15/iFafa                           |  | INEP |  |
|     | 147 | Resume electricity Programme     | Ward 15/Nomakhanzana                    |  | INEP |  |
|     | 148 | Provide Electricity              | Ward 18                                 |  | INEP |  |
|     | 149 | Expansion of electricity         | Ward 15/Qoloqolo                        |  | INEP |  |
|     | 150 | Provide Electricity              | Ward 9                                  |  |      |  |
|     | 151 | Provide Electricity              | Ward 12/Thofeti                         |  | INEP |  |
|     | 152 | Complete Electricity Project     | Ward 5/Gwala Gwala, Thuntutha, Hlanzeni |  | INEP |  |
|     | 153 | Provide Electricity              | Ward 13/Baphumile                       |  | INEP |  |
|     | 154 | Provide Electricity              | Ward 16/Mabikili                        |  | INEP |  |
|     | 155 | Provide Electricity              | Ward 4                                  |  | INEP |  |
|     | 156 | Provide Electricity              | Ward 14                                 |  | INEP |  |
|     | 157 | Provide Electricity for a Crèche | Ward 12/Sbongujeke                      |  | INEP |  |
|     | 158 | Electricity Supply               | Ward 13/Hlongwa/ Nkalokazi              |  | INEP |  |
|     | 159 | Electricity Programme            | Ward 11/Magwaza                         |  | INEP |  |
|     | 160 | Provide Electricity              | Ward 11/Msikazi/ Magwaza                |  | INEP |  |
|     | 161 | Electricity supply               | Ward 16/Nkehlamandla                    |  | INEP |  |
|     | 162 | Provide Electricity              | Ward 16/ Malikhakhe                     |  | INEP |  |
|     | 163 | Provide Electricity              | Ward 16/ Mlamula                        |  |      |  |
|     | 164 | Provide Electricity              | Ward 16/Kwamadadane (velmemeze)         |  | INEP |  |
|     | 165 | Provide Electricity              | Ward 12/Fokseni                         |  | INEP |  |
|     | 166 | Provide Electricity              | Ward 9                                  |  | INEP |  |
|     | 167 | Provide Electricity              | Ward 17                                 |  | INEP |  |
|     | 168 | Electricity supply               | Ward 2                                  |  | INEP |  |
|     | 169 | Provide Electricity              | Rosetenville                            |  | INEP |  |
|     | 170 | Provide Electricity              | Ward 14                                 |  | INEP |  |



|            |     |   |                                    |                        |                       |  |   |
|------------|-----|---|------------------------------------|------------------------|-----------------------|--|---|
|            | 171 | Provide Electricity   | Ward 11                            |                        | INEP                  |  |   |
|            | 172 | Provide Electricity   | Ward 15/Msikezi                    |                        | INEP                  |  |   |
|            | 173 | Provide Electricity   | Ward 11/Nkungwini                  |                        | INEP                  |  |   |
|            | 174 | Provide Electricity   | Ward 7                             |                        | INEP                  |  |   |
|            | 175 | Provide Electricity   | Ward 5/ KwaHlongwa, Tsheni, Khathi |                        |                       |  |   |
|            | 176 | Street lighting   | Ward 17                            |                        | MIG                   |  |   |
|            | 177 | Installation of high mast lights                                | Ward 9                             |                        | MIG                   |  |   |
|            | 178 | Installation of electricity infills                             | Ward 20                            |                        | INEP                  |  |   |
|            | 179 | Installation of flood lights                                    | Ward 20                            |                        | ??                    |  |   |
| <b>6,3</b> |     | <b>FREE BASIC ELECTRICITY</b>                                   |                                    | <b>R 500 000,00</b>    | <b>R 500 000,00</b>   |  |   |
|            | 180 | Electricity Tokens  |                                    | <b>R 500 000,00</b>    | R 500 000,00          |  |   |
|            | 181 | Gel Provision   |                                    |                        |                       |  |   |
|            |     |   |                                    |                        |                       |  |   |
| <b>6,4</b> |     | <b>Construction and maintenance of access roads and bridges</b> |                                    | <b>R 30 020 839,12</b> | <b>R30 020 839,12</b> |  |   |
|            | 182 | Ntatshana Access Road   |                                    | R 14 724 406,73        | R14 724 406,73        |  |   |
|            | 183 | Ncapheni Access Road  |                                    |                        |                       |  |   |
|            | 184 | Shinga access road  | 18                                 |                        |                       |  |   |
|            | 185 | Ncazolo Access Road   |                                    | R 15 296 432,39        | R 15 296 432,39       |  |   |
|            | 186 | Mpelazwe Access Road  |                                    |                        |                       |  |   |
|            | 187 | Khanyile Access Road  |                                    |                        |                       |  |   |
|            | 188 | Mthini Owomile Access Road                                      |                                    |                        |                       |  |   |
|            | 189 | Siyakhula Access Road   |                                    |                        |                       |  |   |
|            | 190 | Gwalagwala Access Road (Disaster and Road Maintenance)          |                                    |                        |                       |  |   |
|            | 191 | Mtumaseli Access Road   |                                    |                        |                       |  |   |
|            | 192 | Nonoti road   | 18                                 |                        |                       |  | X |
|            | 193 | Mkhize Access Road  |                                    |                        |                       |  |   |
|            | 194 | Sgananda Access Road (Disaster)                                 |                                    |                        |                       |  |   |
|            | 195 | Construct Shuku access road                                     | 19                                 |                        |                       |  |   |
|            | 196 | Construct Zivandeni access road                                 | 19                                 |                        |                       |  |   |
|            | 197 | Construct luthuli sportfield access road                        | 19                                 |                        |                       |  |   |
|            | 198 | Construct Mqadi access road                                     | 19                                 |                        |                       |  |   |
|            | 199 | Construct Ireland access road                                   | 19                                 |                        |                       |  |   |
|            | 200 | Construct Phungula access road                                  | 19                                 |                        |                       |  |   |

|     |   |                              |  |  |  |  |
|-----|---|------------------------------|--|--|--|--|
| 201 | Construct Maphumulo access road                   | 19                           |  |  |  |  |
| 202 | Construct Bhekuyise access road                   | 19                           |  |  |  |  |
| 203 | Construct Mvubu access road                       | 19                           |  |  |  |  |
| 204 | Construct Shezi access road                       | 19                           |  |  |  |  |
| 205 | Construct Dembese access road                     | 19                           |  |  |  |  |
| 206 | Storm water management                            | 19                           |  |  |  |  |
| 207 | Maintenance of road from Stalini to Sakhiweni     | Ward 6/ Vezankamba, Number 7 |  |  |  |  |
| 208 | Emashembeni Access Road Phase 2                   |                              |  |  |  |  |
| 209 | Mshizela Access Road                              |                              |  |  |  |  |
| 210 | Mhlunga Access Road                               |                              |  |  |  |  |
| 211 | Joyisa Access Road                                |                              |  |  |  |  |
| 212 | Umqanqgala Access Road                            |                              |  |  |  |  |
| 213 | Mevane Access Road                                |                              |  |  |  |  |
| 214 | Maintenance of access roads                       | 10/ Ndwalane                 |  |  |  |  |
| 215 | Mpisane access road                               | 19                           |  |  |  |  |
| 216 | Roads Maintenance                                 | 4                            |  |  |  |  |
| 217 | Grader to fix road again                          | 18                           |  |  |  |  |
| 218 | Maintenance of Nhlangwini and sosibo access roads | 4 /Nhlangwini                |  |  |  |  |
| 219 | Maintenance Access roads                          | 3/ Dumakude                  |  |  |  |  |
| 220 | Maintenance Nyaphesho                             | 3/Maria trost                |  |  |  |  |
| 221 | Maintenance Access Roads                          | 3/ Manyonga or Dumisa        |  |  |  |  |
| 222 | Maintenance access roads                          | 3/Thaleni                    |  |  |  |  |
| 223 | construct Access road from KwaFica to G-Spot      | 18                           |  |  |  |  |
| 224 | Regravel access Roads                             | 1/Dweshula                   |  |  |  |  |
| 225 | Regravel access Roads                             | 1/ Nyamane                   |  |  |  |  |
| 226 | Oneli access road maintenance                     | 11/Esiphakameni              |  |  |  |  |
| 227 | Maintenance Aceess roads                          | 19/Mathulini                 |  |  |  |  |
| 228 | Gongoleni access road maintenance                 | 11/Kwampande                 |  |  |  |  |
| 229 | Mkhize and Nkanini access roads maitenance        | 18/Nkanini                   |  |  |  |  |
| 230 | Access road Maintenance                           | 17Gobhela                    |  |  |  |  |

|     |   |                               |  |  |  |  |
|-----|---|-------------------------------|--|--|--|--|
| 231 | Access roads Maintenance                        | 17/Ntabamkhosi                |  |  |  |  |
| 232 | Access roads Maintenance                        | 11                            |  |  |  |  |
| 233 | Access roads Maintenance                        | 12                            |  |  |  |  |
| 234 | Maintenance of KwaSmith access road             | 15/Nomakhanzana               |  |  |  |  |
| 235 | Maintenance of Siyakhula access road            | 15/Qoloqolo                   |  |  |  |  |
| 236 | Maintenance and Regravelling Programme          | 15/Ndelu                      |  |  |  |  |
| 237 | Maintenance access roads                        | Ward 15/ Sakhile              |  |  |  |  |
| 238 | Maintenance access roads                        | Ward 7/<br>Maqhikizana        |  |  |  |  |
| 239 | Maintenance access roads (Stoney road, Sdulini) | Ward 12/ Diphini, Nqolobaneni |  |  |  |  |
| 240 | Maintenance access roads                        | 6/Number 7                    |  |  |  |  |
| 241 | Access roads Maintenance                        | 7/ Mgayi, Gobume, Mahlaya     |  |  |  |  |
| 242 | Access roads Maintenance                        | 7/Zisukumele                  |  |  |  |  |
| 243 | Construction of Access Roads                    | 12/Thofeti                    |  |  |  |  |
| 244 | Resume Manoka access road construction          | 5/Mehlomnyama                 |  |  |  |  |
| 245 | Msabula access road Maintenance                 | 16/Vusisizwe                  |  |  |  |  |
| 246 | Proper building for Sangoni road                | 8                             |  |  |  |  |
| 247 | Proper Construction of Roads                    | 12/Mfifitha                   |  |  |  |  |
| 248 | Complete Isivande access road                   | 4                             |  |  |  |  |
| 249 | Regravel Ndileni road                           | 2/Nguza                       |  |  |  |  |
| 250 | Regravel roads                                  | 2/Gumatani                    |  |  |  |  |
| 251 | Msontini Road Maintenance                       | 7/Ngwenda                     |  |  |  |  |
| 252 | Maintenance of access Roads                     | 12/Fokseni                    |  |  |  |  |
| 253 | Maintenance of access roads                     | 7/Ncikazi                     |  |  |  |  |
| 254 | Improve roads                                   | 7/Hlokozi                     |  |  |  |  |
| 255 | Complete Ncaphehi Road Construction             | Ward 7                        |  |  |  |  |
| 256 | Proper Construction of access roads             | 5/Qwabe                       |  |  |  |  |
| 257 | Fix Access Roads                                | 11/Magwaza/<br>Eringini       |  |  |  |  |
| 258 | Fix Jiba Road                                   | 11/Magwaza                    |  |  |  |  |
| 259 | Regravel Roads                                  | 11/Ifafa                      |  |  |  |  |
| 260 | Regravel Roads                                  | 14/Kwahlongwa                 |  |  |  |  |
| 261 | Maintenance of roads                            | 7/Bhanoyi                     |  |  |  |  |

|     |   |                |  |  |  |  |
|-----|---|----------------|--|--|--|--|
| 262 | Construction of Access Roads (inkoxo, Mzimukhwane and Thukela access roads) | 9              |  |  |  |  |
| 263 | Maintenance of roads (Mngadi, Mbiyane, Mantiyaneni)                         | 9              |  |  |  |  |
| 264 | Maintenance of roads  | 12/Fokseni     |  |  |  |  |
| 265 | Maintenance of roads  | 18/Eslengeni   |  |  |  |  |
| 266 | Maintenance of Mashazini and Mfazazane roads                                | 17             |  |  |  |  |
| 267 | Maintenance of Cemetery Road  | Ward 6/ Gidela |  |  |  |  |
| 268 | Upgrade of access roads   | 18             |  |  |  |  |
| 269 | Improve Golokode road   | 17             |  |  |  |  |
| 270 | Maintenance of access roads-hadebe, Malukhakhe                              | 16             |  |  |  |  |
| 271 | Construct Magugu P School access road                                       | 4              |  |  |  |  |
| 272 | Construct Zamukwe/Msunduzi access road                                      | 4              |  |  |  |  |
| 273 | Construct sandile Dlungwane/Luthuli access road                             | 4              |  |  |  |  |
| 274 | Construct Star road   | 4              |  |  |  |  |
| 275 | Construct Somali Mthembu  | 4              |  |  |  |  |
| 276 | Construct Thandanani P School access road                                   | 4              |  |  |  |  |
| 277 | Construct Bhekameva H.S access road   | 4              |  |  |  |  |
| 278 | Construct entabeni/Mokoena access road                                      | 4              |  |  |  |  |
| 279 | Construct Nduku Cele/Skhosana access road                                   | 4              |  |  |  |  |
| 280 | Construct Ndwalane/Buhle Dlungwana access road                              | 4              |  |  |  |  |
| 281 | Construct Msululwini/KwaJani access road                                    | 4              |  |  |  |  |
| 282 | Construct Bhaylo Nhlangulela access road                                    | 4              |  |  |  |  |
| 283 | Construct Isinamuva/ Vayi Nhlangulela access roads                          | 4              |  |  |  |  |
| 284 | Construct Nonkwayimbana/Echibini access road                                | 4              |  |  |  |  |
| 285 | Construct Wanda/Mjondo access road  | 4              |  |  |  |  |
| 286 | Construct Simo Dlungwana/Keke Mthembu access road                           | 4              |  |  |  |  |



|     |  |                    |  |  |  |  |
|-----|--|--------------------|--|--|--|--|
| 287 | Construct Dudu Hlangu/Malizole Mkhali access Road  | 4                  |  |  |  |  |
| 288 | Construct entabeni enkulu access road  | 4                  |  |  |  |  |
| 289 | Construct Sosibo access road   | 4                  |  |  |  |  |
| 290 | Construct Chule/Xaba access road   | 4                  |  |  |  |  |
| 291 | Construct Mzelemu access road  | 4                  |  |  |  |  |
| 292 | Construct Ecimeni access road  | 4                  |  |  |  |  |
| 293 | Construct Langa/Ndayini access road  | 4/Kwamagugu        |  |  |  |  |
| 294 | Construction of access roads (Nsunda Cele, Isigubho, Clinic/Dlamini)   | 4/Nhlalwane        |  |  |  |  |
| 295 | Construct Isigubho access road   | 4/Nhlalwane        |  |  |  |  |
| 296 | Construct Clinic/Dlamini access roads  | 4/Nhlalwane        |  |  |  |  |
| 297 | Soviyo Road Maintenance  | Ward 6/ Soviyo VD  |  |  |  |  |
| 298 | Bombo Road Maintenance   | Ward 12/ Thofethi  |  |  |  |  |
| 299 | construction of access roads (Bhekukwazi Sikhosana, Mapotwe Dlamini)   | 4/Mfomfo           |  |  |  |  |
| 300 | Bhobhweni to Gangala access road maintenance   | Ward 15/ Qoloqolo  |  |  |  |  |
| 301 | Access roads maintenance (Jeza and Ezintombini)  | Ward 15/ Qoloqolo  |  |  |  |  |
| 302 | Construct Mapotwe Dlamini access road  | Ward 4/Mfomfo      |  |  |  |  |
| 303 | Construction of access roads (Mahwaqa, Malobela, Bhekizizwe, Gumede, Mahlahleni road, Sabalala, emthini owomile, mpande, Hlongwane, Ndwalane, Mabaso, Msabala) | Ward 13            |  |  |  |  |
| 304 | Construction of new Access roads (Thumbu road, Mami Road- With bridge, Pitsini road)   | Ward 6/ Ezitendeni |  |  |  |  |
| 305 | Roads maintenance near water tank  | Ward 6/ Patrika    |  |  |  |  |
| 306 | Roads maintenance  | Ward 6/ Nkungwini  |  |  |  |  |
| 307 | construction of access roads (SP, Nala, Shembeni, Esihlabeni, Khulu, Mvuthuluka, Diphin)   | Ward 11            |  |  |  |  |
| 308 | Roads maintenance (Masondo and Nyathikazi)   | Ward 17            |  |  |  |  |
| 309 | Roads maintenance  | Rosetenville       |  |  |  |  |
| 310 | Road Maintenance   | Ward 19            |  |  |  |  |

|     |   |                                  |  |  |   |  |
|-----|---|----------------------------------|--|--|---|--|
| 311 | Fix Dembesi Road                              | Ward 18/Kwafica area             |  |  |   |  |
| 312 | Roads Maintenance                             | Ward 18/Ndwaleni Area            |  |  |   |  |
| 313 | Roads Maintenance                             | Ward 17                          |  |  |   |  |
| 314 | Dela access road                              | Ward 19                          |  |  |   |  |
| 315 | Magistrate access road                        | Ward 18                          |  |  |   |  |
| 316 | Construct access road from Madwene to Makheye | Ward 9                           |  |  |   |  |
| 317 | Maintenance of Dulini road                    | Ward 10/Ndwalane                 |  |  |   |  |
| 318 | New bridge in KwaMdiza                        | Ward 11                          |  |  |   |  |
| 319 | Completion of Zwelisha Access road            | Ward 9/Zwelisha                  |  |  | X |  |
| 320 | Pedestrian bridge for scholars                | Ward 11/Msikazi                  |  |  |   |  |
| 321 | Reconstruction of Mthwalume bridge            | Ward 15/ Qoloqolo                |  |  |   |  |
| 322 | Construction of speed humps                   | Ward 15/ KwaSmith                |  |  |   |  |
| 323 | Paving of Gumede Road                         | Ward 15/ Qoloqolo                |  |  |   |  |
| 324 | Tarring of Spar Road                          | Ward 15/ Dingimbiza VD, Ngongoma |  |  |   |  |
| 325 | Maintenance of Spofu Road                     | Ward 8                           |  |  |   |  |
| 326 | Pedestrian bridge over the river              | Ward 11/Msikazi/ Nomoyi          |  |  |   |  |
| 327 | Pedestrian Bridge at Gebhasi River            | Ward 7                           |  |  |   |  |
| 328 | Fix D951 and D952                             | Ward 17                          |  |  |   |  |
| 329 | Construct speed humps                         | Ward 1- No. 5 area               |  |  |   |  |
| 330 | Pedestrian Bridge to Mthumaseli               | Ward 14/Mhlabeni                 |  |  |   |  |
| 331 | Speed humps on P68                            | Ward 16/Ndunge                   |  |  |   |  |
| 332 | Fix the bridge                                | Ward 15/ Shabane                 |  |  |   |  |
| 333 | Fix D1056                                     | Ward 13/ Ntengo                  |  |  |   |  |
| 334 | Fix D1077                                     | Ward 15/ Shabane                 |  |  |   |  |
| 335 | Fix the bridge                                | Ward 12/Thofeti                  |  |  |   |  |
| 336 | Fixing (D2105) Santiva Road                   | Ward 18/Oneli                    |  |  |   |  |
| 337 | D959 towards Bongicele tarred                 | Ward 19/Mthwalume                |  |  |   |  |
| 338 | Construction of DOT roads                     | Ward 17/Mfazazane                |  |  |   |  |

|     |   |                                  |  |  |  |  |
|-----|---|----------------------------------|--|--|--|--|
| 339 | Pedestrian bridge to school   | Ward 17/Mfazazane                |  |  |  |  |
| 340 | Fix D932  | Ward 2/Bhumbeni                  |  |  |  |  |
| 341 | Maintenance of D951   | Ward 18/Nkanini                  |  |  |  |  |
| 342 | Speed humps construction  | Ward 10/kwampande                |  |  |  |  |
| 343 | Maintenance of D935   | Ward 6/Ntaca                     |  |  |  |  |
| 344 | New Pedestrian Bridge   | Ward 6/Kamswazi                  |  |  |  |  |
| 345 | D945 & Bridge Maintenance   | Ward 16/Vusisizwe                |  |  |  |  |
| 346 | Construction of Mzimayi Bridge  | Ward 16                          |  |  |  |  |
| 347 | Fixing of Thofethi Bridge   | Ward 12/Fokseni                  |  |  |  |  |
| 348 | Construction of road signs  | Ward 12/Sangu                    |  |  |  |  |
| 349 | upgrading district roads (D949, D1119)  | Ward 14                          |  |  |  |  |
| 350 | Maintenance of D105   | Ward 12/Thofeti                  |  |  |  |  |
| 351 | Fix D946 & D947   | Ward 13/Thembabantu              |  |  |  |  |
| 352 | Maintenance of D946 within Mgadi VD   | Ward 13/Baphumile                |  |  |  |  |
| 353 | Construction of shelters  | Ward 9                           |  |  |  |  |
| 354 | Upgrading of district roads (D941, D150, P198, P72)   | Ward 5                           |  |  |  |  |
| 355 | Bridges- Genyaneni, Thukela, Odadeni and Nomoyi   | Ward 9                           |  |  |  |  |
| 356 | Cnstruction of bridge crossing N2 freeway   | Ward 18/Mashanganeni             |  |  |  |  |
| 357 | Construction of brigdes from: Gumbi to Nkukhu school, Mthinomile to Bhengu, Mdlozini to Khawula, Mamlobela to Mfazazana, Manzendala Pedestrian Bridge | Ward 19                          |  |  |  |  |
| 358 | Maintenance and Tarring of D2118  | Ward 15/ Dingimbiza VD, Ngongoma |  |  |  |  |
| 359 | Thukela Bridge going to Zwelisha  | Ward 9/ Zwelisha                 |  |  |  |  |
| 360 | Construction of D953  |                                  |  |  |  |  |
| 361 | Construction of shelters along R102   | Ward 20                          |  |  |  |  |
| 362 | Speed humps on P68  | Ward 2                           |  |  |  |  |
| 363 | Improve P73   | Ward 7                           |  |  |  |  |
| 364 | Construction of Ntimbalala Bridge   | Ward 8                           |  |  |  |  |
| 365 | Construction of Feni Bridge   | Ward 7                           |  |  |  |  |

|     |  |                              |                     |                    |                     |                    |
|-----|--|------------------------------|---------------------|--------------------|---------------------|--------------------|
| 366 | New Bridge crossing the river                      | Ward 14/ Ndelu Area          |                     |                    |                     |                    |
| 367 | Construction of Mtumasi bridge                     | Ward 14/ Rosterville         |                     |                    |                     |                    |
| 368 | Roads maintenance (D494, D946, D895)               | Ward 13                      |                     |                    |                     |                    |
| 369 | Construct D929                                     | Ward 4/ Nhlalwane            |                     |                    |                     |                    |
| 370 | Pedestrian Bridge to Sekusile Crèche               | Ward 19                      |                     |                    |                     |                    |
| 371 | Pedestrian bridge crossing the river               | Ward 7                       |                     |                    |                     |                    |
| 372 | Pedestrian bridge crossing the river               | Ward 7/ Vezankamba, Number 7 |                     |                    |                     |                    |
| 373 | New Bridge   | Ward 2/Ndlovuzulu            |                     |                    |                     |                    |
| 374 | New bridge in KwaMdiza                             | Ward 9/Zwelisha              |                     |                    |                     |                    |
| 375 | Roads and bridge maintenance                       | Ward 9/Zwelisha              |                     |                    |                     |                    |
| 376 | New Bridge   | Ward 15/Odadeni              |                     |                    |                     |                    |
| 377 | Maintenance of Bridge and roads at Kwamgiza        | Ward 9                       |                     |                    |                     |                    |
| 378 | Pedestrian Bridge Maintenance                      | Ward 15/Qoloqolo             |                     |                    |                     |                    |
| 379 | Maintenance of bridge towards gebhasi              | Ward 6/Ntaca                 |                     |                    |                     |                    |
| 380 | Pedestrian Bridge from ward 5 to 13                | Ward 5                       |                     |                    |                     |                    |
| 381 | New Pedestrian Bridge                              | Ward 7/Hlokozi               |                     |                    |                     |                    |
| 382 | New Pedestrian Bridge                              | Ward 7/Chwaka                |                     |                    |                     |                    |
| 383 | New Pedestrian Bridge towards Gebhasi              | Ward 7/Ngwenda               |                     |                    |                     |                    |
| 384 | Pedestrian Bridge from Mawaqa to Bongizwane School | Ward 18                      |                     |                    |                     |                    |
| 385 | New bridge towards Gqanyanga Clinic                | Ward 14/Hlongwa              |                     |                    |                     |                    |
| 386 | New bridge over Umzumbe River                      | Ward 12/Mfimfitha            |                     |                    |                     |                    |
| 387 | Fix bridge towards Mhlabatshane                    | Ward 13/Thembabantu          |                     |                    |                     |                    |
| 388 | Construct D928                                     | Ward 4/ Nomageje             |                     |                    |                     |                    |
| 389 | Turton Offramp (N2)                                | Ward 19/20                   |                     |                    |                     |                    |
| 390 | Guard rains and Bridge                             | Ward 15/Qoloqolo, Guquka     |                     |                    |                     |                    |
| 6,5 | <b>Roads Maintenance Plan</b>                      |                              |                     |                    |                     |                    |
| 391 | Roads Maintenance Plan                             | Entire municipality          |                     |                    |                     |                    |
| 6,6 | <b>SCHOOL INFRASTRUCTURE</b>                       |                              | <b>R 219 996,57</b> | <b>R 22 251,93</b> | <b>R 150 212,62</b> | <b>R 40 226,17</b> |

|  |     |  |                          |             |            |              |            |
|--|-----|--|--------------------------|-------------|------------|--------------|------------|
|  | 392 | Upgrades and editions                        | Bongucele JS             | R 22 251,93 |            | R 126 612,00 |            |
|  | 393 | New School                                   | Ward 17/Mgangeni         |             |            |              |            |
|  | 394 | New Primary School                           | Ward 18 Mgangeni         |             |            |              |            |
|  | 395 | New School                                   | Ward 14                  |             |            |              |            |
|  | 396 | New school                                   | Ward 18/Mgangeni         |             |            |              |            |
|  | 397 | New Primary School                           | Ward 18/Mgwaba           |             |            |              |            |
|  | 398 | Provide a skills center                      | Ward 15                  |             |            |              |            |
|  | 399 | Classroom for the disabled in Mahlaya School | Ward 8/Mahlaya           |             |            |              |            |
|  | 400 | New School for the Disabled                  | Ward 8                   |             |            |              |            |
|  | 401 | Skills centre in Nyavini                     | Ward 8/Shange            |             |            |              |            |
|  | 402 | New school                                   | Ward 17/Mawaqha          |             |            |              |            |
|  | 403 | provide computers in high schools            | Ward 6                   |             |            |              |            |
|  | 404 | New Schools                                  | Ward 6/Number 7          |             |            |              |            |
|  | 405 | Grade R facility and children programme      | Ward 8/Nyavini           |             |            |              |            |
|  | 406 | Re-open Mfimfitha School                     | Ward 12/Mfimfitha        |             |            |              |            |
|  | 407 | New creche                                   | Ward 6                   |             |            |              |            |
|  | 408 | New creche                                   | Nkulu                    |             |            |              |            |
|  | 409 | New creche                                   | Nkulu                    |             |            |              |            |
|  | 410 | New creche                                   | Ward 18/Mashanganeni     |             |            |              |            |
|  | 411 | ABET, Masifundisane Programme                | Wards 10, 14, 15, 16     |             |            |              |            |
|  | 412 | Provision of School Bus                      | Ward 9                   |             |            |              |            |
|  | 413 | construction of TVET College                 | Ward 9                   |             |            |              |            |
|  | 414 | Construction of Special school               | Ward 9                   |             |            |              |            |
|  | 415 | New School                                   | Ward 6/ Number 7         |             |            |              |            |
|  | 416 | New Primary School                           | Ward 19                  |             |            |              |            |
|  | 417 | Security at schools                          | Ward 19                  |             |            |              |            |
|  | 418 | Provision of computers in Schools            | Ward 2                   |             |            |              |            |
|  | 419 | FET/ TVET Collage                            | Ward 2                   |             |            |              |            |
|  | 420 | Maintenance and Repair                       | Nobamba Secondary School | R 11 000,00 |            |              | R 283,25   |
|  | 421 | Upgrades and Additions                       | Nobamba Secondary School | R 11 000,00 |            |              | R 3 970,10 |
|  | 422 | Maintenance and Repair                       | Nobuzwe Primary School   | R 3 784,00  | R 3 776,00 |              | R 1 359,54 |



|  |     |                        |                                |             |            |            |            |
|--|-----|------------------------|--------------------------------|-------------|------------|------------|------------|
|  | 423 | Maintenance and Repair | Nomageje Primary School        | R 2 000,00  |            |            | R 52,50    |
|  | 424 | Upgrades and Additions | Nomageje Primary School        | R 500,00    | R 100,00   |            |            |
|  | 425 | Upgrades and Additions | Nombuso Secondary School       | R 500,00    | R 100,00   |            |            |
|  | 426 | Upgrades and Additions | Nontshuntsha Primary School    | R 500,00    | R 100,00   |            |            |
|  | 427 | Upgrades and Additions | Nositha Primary School         | R 500,00    | R 100,00   |            |            |
|  | 428 | Upgrades and Additions | Phindavele Secondary School    | R 500,00    | R 100,00   |            |            |
|  | 429 | Upgrades and Additions | Phumza Primary School          | R 2 943,35  | R 588,67   |            | R 73,58    |
|  | 430 | Upgrades and Additions | Salem Primary School           | R 500,00    | R 100,00   |            |            |
|  | 431 | Upgrades and Additions | Shonkweni Primary School       | R 11 095,00 |            | R 285,70   | R 7 856,65 |
|  | 432 | Maintenance and Repair | Sibongimfundo Secondary School | R 10 620,00 | R 3 302,34 | R 1 030,33 |            |
|  | 433 | Maintenance and Repair | Sibongumfeka Secondary School  | R 2 000,00  |            |            | R 1 358,86 |
|  | 434 | Upgrades and Additions | Sibuyile Secondary School      | R 2 419,13  | R 483,83   |            | R 60,48    |
|  | 435 | Maintenance and Repair | Sidumile Primary School        | R 9 333,00  | R 2 230,09 | R 2 022,63 |            |
|  | 436 | Upgrades and Additions | Sihle Secondary School         | R 500,00    | R 100,00   |            |            |
|  | 437 | Upgrades and Additions | Sikanisweni Secondary School   | R 500,00    | R 100,00   |            |            |
|  | 438 | Upgrades and Additions | Siphapheme Secondary School    | R 872,76    | R 174,55   |            |            |
|  | 439 | Upgrades and Additions | Sister Joans Secondary School  | R 500,00    | R 100,00   |            |            |
|  | 440 | Upgrades and Additions | Siyephu Primary School         | R 726,02    | R 145,20   |            |            |

|  |     |                                  |                                     |             |            |             |             |
|--|-----|----------------------------------|-------------------------------------|-------------|------------|-------------|-------------|
|  | 441 | Upgrades and Additions           | Sizophumelela Secondary School      | R 500,00    | R 100,00   |             |             |
|  | 442 | Upgrades and Additions           | Sosukwana Primary School            | R 3 841,00  |            | R 98,83     | R 3 323,11  |
|  | 443 | Maintenance and Repair           | St Martin De Porres Special School  | R 2 000,00  |            |             | R 51,27     |
|  | 444 | Upgrades and Additions           | St Odilo Primary School             | R 2 014,00  | R 503,50   | R 736,47    |             |
|  | 445 | Upgrades and Additions           | St Theresa Primary School (Harding) | R 500,00    | R 100,00   |             |             |
|  | 446 | Refurbishment and Rehabilitation | St Thomas Primary School            | R 3 851,00  | R 1 176,17 |             |             |
|  | 447 | Upgrades and Additions           | Sutton Primary School               | R 27 278,00 | R 683,97   | R 12 311,49 | R 14 363,40 |
|  | 448 | Upgrades and Additions           | Thembuzulu Secondary School         | R 500,00    | R 100,00   |             |             |
|  | 449 | Upgrades and Additions           | Tholimfundo Secondary School        | R 500,00    | R 100,00   |             |             |
|  | 450 | Upgrades and Additions           | Umswilili Primary School (Retender) | R 2 916,00  | R 729,00   | R 967,26    |             |
|  | 451 | Upgrades and Additions           | Umvolozi Primary School             | R 1 598,36  | R 319,67   |             |             |
|  | 452 | Upgrades and Additions           | Zibonele Junior Secondary School    | R 500,00    | R 100,00   |             |             |
|  | 453 | Refurbishment and Rehabilitation | Qwembe Primary School               | R 4 689,00  | R 2 133,54 |             |             |
|  | 454 | Upgrades and Additions           | Khuphuka Primary School             | R 3 315,00  | R 828,75   | R 334,88    |             |
|  | 455 | Upgrades and Additions           | Albert Secondary School             | R 500,00    | R 100,00   | R 231,25    |             |
|  | 456 | Upgrades and Additions           | Bhanoyi Secondary School            | R 500,00    | R 100,00   | R 231,25    |             |
|  | 457 | Upgrades and Additions           | Mthimude Secondary School           | R 2 492,13  | R 498,43   |             | R 59,75     |

|            |     |   |  |                       |                      |            |            |
|------------|-----|---|--|-----------------------|----------------------|------------|------------|
|            | 458 | Upgrades and Additions                                  | Siyathokoza Primary School             | R 500,00              | R 100,00             |            |            |
|            | 459 | Upgrades and Additions                                  | Mhlabuhlangene Junior Secondary School | R 500,00              | R 100,00             |            |            |
|            | 460 | Upgrades and Additions                                  | Thomas Mbhele Junior Secondary School  | R 1 230,89            | R 246,18             |            |            |
|            | 461 | Upgrades and Additions                                  | Impumelelo High School                 | R 14 703,00           | R 2 262,18           |            |            |
|            | 462 | New Infrastructure Assets                               | Malusi Secondary School                | R 42 270,00           | R 369,86             | R 4 503,25 |            |
|            | 463 | Upgrades and Additions                                  | Duduzile Secondary School              | R 8 753,00            |                      | R 847,28   | R 7 413,68 |
|            |     |   |  |                       |                      |            |            |
| <b>6,7</b> |     | <b>SPORTS FACILITIES</b>                                |  | <b>R 7 394 560,88</b> | <b>R7 394 560,88</b> |            |            |
|            | 464 | Renovating and fencing of training centre               |  | R 4 808 160,88        | R 4 808 160,88       | X          |            |
|            | 465 | Constuction of Inkaneni Indoor Sport Centre (Cluster A) | Ward 18                                | R 100 000,00          | R 100 000,00         | X          |            |
|            | 466 | Construction of Indoor Sport Centre (Cluster B)         |  |                       |                      |            |            |
|            | 467 | Construction of Indoor Sport Centre (Cluster C)         |  |                       |                      |            |            |
|            | 468 | Construction of Indoor Sport Centre (Cluster D)         |  |                       |                      |            |            |
|            | 469 | Construction of Indoor Sport Centre (Cluster E)         |  |                       |                      |            |            |
|            | 470 | Mnafu Sportfield steel palisade fence                   | Ward 19                                | R 500 000,00          | R 500 000,00         |            |            |
|            | 471 | Nomakhanza Sportfield concrete palisade fence           | Ward 15                                | R 800 000,00          | R 800 000,00         |            |            |
|            | 472 | Nomakhamzana grassing                                   | Ward 15                                | R 200 000,00          | R 200 000,00         |            |            |
|            | 473 | Isibanini Sport field palisade                          | Ward 10                                | R 300 000,00          | R 300 000,00         |            |            |
|            | 474 | Isibanini retaining wall                                | Ward 10                                | R 100 000,00          | R 100 000,00         |            |            |
|            | 475 | Isibanini concrete lined drain                          | Ward 10                                | R 466 400,00          | R 466 400,00         |            |            |
|            | 476 | Grass cutting and maintenance                           | Ward 18                                |                       | X                    |            |            |
|            | 477 | New old age centre                                      | Ward 14/ Zijubezulu                    |                       |                      |            |            |
|            | 478 | Sportfield upgrade                                      | Ward 7                                 |                       |                      |            |            |
|            | 479 | Sportfield upgrade                                      | Ward 14                                |                       |                      |            |            |
|            | 480 | Sportfield for Wilder & Inguquko schools                | Ward 8/Shange                          |                       |                      |            |            |

|            |     |  |                            |              |              |  |  |
|------------|-----|--|----------------------------|--------------|--------------|--|--|
|            | 481 | Maintenance of sports field                  | Ward 4/Nhlangwini          |              |              |  |  |
|            | 482 | Upgrade sport facilities                     | Ward 10                    |              |              |  |  |
|            | 483 | Sport ground                                 | Ward 3/Dumakude            |              |              |  |  |
|            | 484 | Sport ground                                 | Ward 20                    |              |              |  |  |
|            | 485 | Sport ground                                 | Ward 12                    |              |              |  |  |
|            | 486 | Sport ground                                 | Ward 2/Ngangala (st faiths |              |              |  |  |
|            | 487 | Sport ground                                 | Ward 1/Nyamane             |              |              |  |  |
|            | 488 | Upgrade sport facilities                     | Ward 11/Esiphakameni       |              |              |  |  |
|            | 489 | Sport ground maintenance                     | Ward 11                    |              |              |  |  |
|            | 490 | Upgrade sport facilities                     | Ward 8/Mgai                |              |              |  |  |
|            | 491 | Noguduka Sportfield Upgrade                  | Ward 6/Ntaca               |              |              |  |  |
|            | 492 | Maintenance of Ntaca sport ground            | Ward 7/Maqhkiza            |              |              |  |  |
|            | 493 | Sport field upgrade                          | Mgai/Gobuma                |              |              |  |  |
|            | 494 | Sport field upgrade Programme                | Ward 12/Thofeti            |              |              |  |  |
|            | 495 | Sport field upgrade Programme                | Ward 14/Hlongwa(eTsheni)   |              |              |  |  |
|            | 496 | Sport field upgrade Programme in eTsheni VD) | Ward 15/Qoloqolo           |              |              |  |  |
|            | 497 | Construct Sport Complexes                    | Ward 2/Gumatani            |              |              |  |  |
|            | 498 | Upgrade sport facilities                     | Ward 16/Ndunge             |              |              |  |  |
|            | 499 | Sport field Upgrade                          | Ward 17                    |              |              |  |  |
|            | 500 | Sport field Upgrade                          | Ward 18                    |              |              |  |  |
|            | 501 | Construct indoor sport center                | Ward 19                    |              |              |  |  |
|            | 502 | Netball poles in Mpisane sport ground        | Ward 1                     |              |              |  |  |
|            | 503 | Improvement of sportfield                    | Ward 8                     |              |              |  |  |
|            | 504 | Sport field Upgrade                          | Ward 11                    |              |              |  |  |
|            | 505 | Sportfield Upgrade                           | Ward 5                     |              |              |  |  |
|            | 506 | Grassing of Nomakhanzana sports ground       | Ward 15/Nomakhanzana       |              |              |  |  |
|            | 507 | Recreation Centre                            | Ward 9                     |              |              |  |  |
|            | 508 | Appointment of Caretakers                    |                            | R 120 000,00 | R 120 000,00 |  |  |
|            | 509 | Morrison Comba Court                         | Ward 13                    |              |              |  |  |
| <b>6,8</b> |     | <b>SAFETY AND SECURITY</b>                   |                            |              |              |  |  |
|            | 510 | Development of Ndelu Police Station          | Ward 16                    |              |              |  |  |
|            | 511 | Provide proposed Police Station              | Ward 11/Magwaza            |              |              |  |  |

|            |     |  |                                     |  |  |  |
|------------|-----|--|-------------------------------------|--|--|--|
|            | 512 | Establishment of CPF                   | Wards 6, 14, 15, 19,2,7             |  |  |  |
|            | 513 | Satellite police station               | Wards 05, 1, 10, 08, 14, 15, 19,2,7 |  |  |  |
|            | 514 | Increase patrolling and rapid response | Wards 10,1                          |  |  |  |
|            | 515 | Renovating and fencing of Tribal Court | Wards 9                             |  |  |  |
| <b>6,9</b> |     | <b>COMMUNITY FACILITIES</b>            |                                     |  |  |  |
|            | 516 | Refurbishment of Taxi Rank             | Ward 9                              |  |  |  |
|            | 517 | Construction of taxi rank              | Ward 15                             |  |  |  |
|            | 518 | Furnish the hall                       | Ward 12/Sbongujeke                  |  |  |  |
|            | 519 | Fencing of Crèche                      | Ward 5/Qwabe                        |  |  |  |
|            | 520 | Fencing of cemetery                    | Ward 17/Mfazazane                   |  |  |  |
|            | 521 | Fix Community Hall                     | Ward 7/Nyavini/<br>Sangu            |  |  |  |
|            | 522 | Zwelisha thokomala Creche maintenance  | Ward 7/Nyavini/<br>Sangu            |  |  |  |
|            | 523 | Fencing of Creche                      | Ward 3/Dumakude                     |  |  |  |
|            | 524 | Community Halls                        | Ward 10/Ndwalane                    |  |  |  |
|            | 525 | New community hall                     | Ward 3/Manyonga                     |  |  |  |
|            | 526 | Energize community hall                | Ward 3/Thaleni                      |  |  |  |
|            | 527 | Community halls                        | Ward 2/Bhumbeni                     |  |  |  |
|            | 528 | New Community hall                     | Ward 2/Ngangala (st faiths)         |  |  |  |
|            | 529 | New Community hall                     | Ward 15/ Shabane, KwaJeza           |  |  |  |
|            | 530 | New Community hall                     | Ward 20                             |  |  |  |
|            | 531 | New Community hall/MPCC                | Ward 1/Nyamane                      |  |  |  |
|            | 532 | New Community hall                     | Ward<br>11/Esiphakameni             |  |  |  |
|            | 533 | New Community hall                     | Ward 18/Nkanini                     |  |  |  |
|            | 534 | New Community hall                     | Ward 8/Mgai                         |  |  |  |
|            | 535 | New Community hall in Mgai and Mkhuhle | Ward 7/Maphikiza                    |  |  |  |
|            | 536 | New Community hall                     | Ward<br>7/Mgai/Gobuma               |  |  |  |
|            | 537 | Maintenance of Mahlaya Hall            | Ward<br>7/Mgai/Gobuma               |  |  |  |
|            | 538 | Maintenance of Halls                   | Ward 7/Zisukumele                   |  |  |  |
|            | 539 | Community Hall maintenance and Fencing | Ward 12/Thofeti                     |  |  |  |
|            | 540 | New community hall                     | Ward 8/ Nogoduka                    |  |  |  |



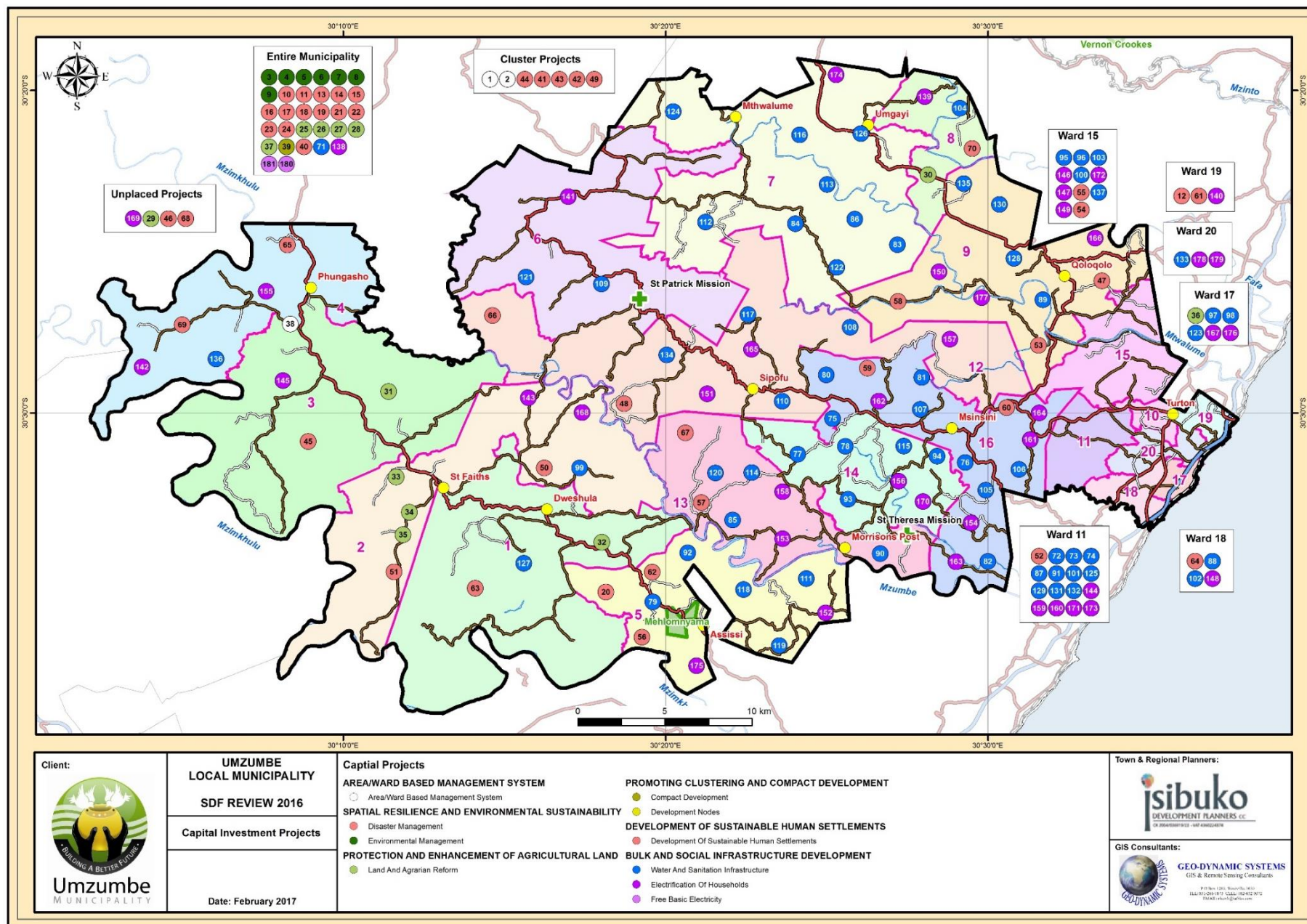
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|------------|-----|----------------------------------|--|--|--|--|--|
|            | 541 | New community hall               | Ward 13/ Mtumaseli   |  |  |  |  |
|            | 542 | New community hall               | Ward 14/Hlongwa  |  |  |  |  |
|            | 543 | Rebuild the Community Hall       | Ward 12/Sangu  |  |  |  |  |
|            | 544 | New Community Hall               | Ward 11/Magwaza/ Eringini  |  |  |  |  |
|            | 545 | New Community Hall               | Ward 7/Bhanoyi   |  |  |  |  |
|            | 546 | New Community Hall               | Ward 7/Shali   |  |  |  |  |
|            | 547 | New Community Hall               |  |  |  |  |  |
|            | 548 | Furnish the hall                 | Ward 16  |  |  |  |  |
|            | 549 | New community hall               | Ward 5   |  |  |  |  |
|            | 550 | New community hall               | Ward 11  |  |  |  |  |
|            | 551 | New Old age home                 | Ward 20  |  |  |  |  |
|            | 552 | New Old age home                 | Ward 15/Nomakhanzana   |  |  |  |  |
|            | 553 | Extend community hall            | Ward 15/Nomakhanzana   |  |  |  |  |
|            | 554 | Extend community hall            | Ward 19, 17, 05-mehlomnyama, Hlanzeni,Gwalagwala, Mkhomazana, Ntanyeni, Enkulu |  |  |  |  |
|            | 555 | Extend community hall            | Ward 5   |  |  |  |  |
|            | 556 | New Library                      | Ward 7/Hlokozi   |  |  |  |  |
|            | 557 | New Library                      | Ward 6   |  |  |  |  |
|            | 558 | New Library                      | Ward 10  |  |  |  |  |
|            | 559 | New Library                      | Ward 11  |  |  |  |  |
|            | 560 | New Library                      | Ward 20  |  |  |  |  |
|            | 561 | New Library                      | Ward 2   |  |  |  |  |
|            | 562 | Construction of Library          | Ward 7   |  |  |  |  |
|            | 563 | Construction of Creches          | Ward 9/ Khula kahle, Mlamula, Nkoxo creche                                     |  |  |  |  |
|            | 564 | Construction of Creches          | Ward 11  |  |  |  |  |
|            | 565 | More creches                     | Ward 19  |  |  |  |  |
|            | 566 | Provision of services in creches | Ward 19  |  |  |  |  |
|            | 567 | New old age Home                 | Ward 11  |  |  |  |  |
|            | 568 | New Orphanage                    | Ward 20  |  |  |  |  |
|            |     |                                  |  |  |  |  |  |
| <b>6,1</b> |     | <b>HEALTH FACILITIES</b>         |  |  |  |  |  |
|            | 569 | Provide health Facilities        | Ward 7/Nyavini   |  |  |  |  |

|   |  |  |                     |                        |                       |   |   |
|---|--|--|---------------------|------------------------|-----------------------|---|---|
|   | 570  | Improve Health Facilities                                  | Ward 2/Bhumbeni     |                        |                       |   |   |
|   | 571  | New Clinic kandengani                                      | Ward 6/Ntaca        |                        |                       |   |   |
|   | 572  | New Clinic   | Ward 7              |                        |                       |   |   |
|   | 573  | New clinic   | 9/Mathateni         |                        |                       |   |   |
|   | 574  | Additional Care Givers                                     | Wards 7,14, 15      |                        |                       |   |   |
|   | 575  | New Clinic   | Ward 2/Bhumbeni     |                        |                       |   |   |
|   | 576  | New clinic in Mathafeni                                    | Ward 8/Mgai         |                        |                       |   |   |
|   | 577  | New Clinic   | Ward 14             |                        |                       |   |   |
|   | 578  | New Clinic   | Ward 7/Hlokozi      |                        |                       |   |   |
|   | 579  | Ambulance facilities                                       | Ward 7/Hlokozi      |                        |                       |   |   |
|   | 580  | New clinic   | Ward 9              |                        |                       |   |   |
|   | 581  | New clinic   | Ward 5              |                        |                       |   |   |
|   | 582  | New clinic   | Ward 1              |                        |                       |   |   |
|   | 583  | New Clinic   | Ward 11             |                        |                       |   |   |
|   |  |  |                     |                        |                       |   |   |
| <b>UNLOCKING ECONOMIC DEVELOPMENT POTENTIAL</b> |  |  |                     | <b>R 11 835 000,00</b> | <b>R11 835 000,00</b> |   |   |
| <b>7,1</b>                                      | <b>DEVELOPMENT AND REVIEW OF LED POLICIES</b>      |  |                     |                        |                       |   |   |
|   | 584  | Review LED Strategy  | Entire Municipality |                        |                       |   |   |
|   | 585  | Review and Adoption of Informal Trading Policy             | Entire Municipality |                        |                       |   |   |
|   | 586  | Review Tourism Strategy                                    | Entire Municipality |                        |                       |   |   |
| <b>7,2</b>                                      | <b>DEVELOPMENT AND SUPPORT OF ARTS &amp; CRAFT</b> |  |                     | <b>R 2 950 000,00</b>  | <b>R 2 950 000,00</b> |   |   |
|   | 587  | Arts Development   |                     | R 600 000,00           | R 600 000,00          |   |   |
|   | 588  | Isicathamiya/Ingoma Music Festival (Fashion Show/ Oswenka) |                     | R 900 000,00           | R 900 000,00          |   |   |
|   | 589  | UGU Film Festival  |                     | R 200 000,00           | R 200 000,00          |   |   |
|   | 590  | Visual Art Training  |                     | R 250 000,00           | R 250 000,00          |   |   |
|   | 591  | Folklore Cultural Exchange Festival                        |                     | R 300 000,00           | R 300 000,00          |   |   |
|   | 592  | CRAFT: Marketing   |                     | R 300 000,00           | R 300 000,00          |   |   |
|   | 593  | Festival of Beads  |                     | R 400 000,00           | R 400 000,00          |   |   |
|   | 594  | Art Development  | Ward 7/Hlokozi      |                        |                       |   |   |
| <b>7,3</b>                                      | <b>DEVELOPMENT AND SUPPORT OF SMMES</b>            |  |                     | <b>R 1 400 000,00</b>  | <b>R 1 400 000,00</b> |   |   |
|   | 595  | Business Licensing   |                     |                        | X                     | X | X |
|   | 596  | SMME Incubation Project                                    |                     | R 900 000,00           | R 900 000,00          |   |   |
|   | 597  | Umzumbe Business Fair                                      |                     | R 500 000,00           | R 500 000,00          |   |   |
|   | 598  | SMME training for local Co-operatives                      | 5/Qwabe             |                        |                       |   |   |

|            |     |  |                |                       |                       |   |  |
|------------|-----|--|----------------|-----------------------|-----------------------|---|--|
|            | 599 | Fund local businesses                                    | 17             |                       |                       |   |  |
| <b>7,4</b> |     | <b>DEVELOPMENT AND SUPPORT OF COOPERATIVES</b>           |                | <b>R 2 400 000,00</b> | <b>R2 400 000,00</b>  |   |  |
|            | 600 | Revival of Poultry Projects                              |                | R 500 000,00          | R500 000,00           |   |  |
|            | 601 | Support Sakhisizwe and MkhaliPhi                         |                | R 400 000,00          | R 400 000,00          |   |  |
|            | 602 | Rehabilitation of Sakhisizwe                             |                | R 500 000,00          | R 500 000,00          |   |  |
|            | 603 | Support of 5 Co-ops                                      |                | R 500 000,00          | R 500 000,00          |   |  |
|            | 604 | Gumatane Irrigation                                      |                | R 500 000,00          | R 500 000,00          |   |  |
|            |     | Registration of Co-operatives                            | 16/Ndunge      |                       |                       |   |  |
| <b>7,5</b> |     | <b>SUPPORT AND REGULATION OF INFORMAL TRADERS</b>        |                | <b>R 1 000 000,00</b> | <b>R1 000 000,00</b>  |   |  |
|            | 605 | Established Informal Traders Forum/ Committee            |                |                       | x                     | x |  |
|            | 606 | Construction of Shelter for Kwa-Smith Informal Traders   |                | R 700 000,00          | R 700 000,00          |   |  |
|            | 607 | Renovations of Market Stalls                             |                | R 300 000,00          | R 300 000,00          |   |  |
| <b>7,6</b> |     | <b>NGO / NPO INCUBATION &amp; SUPPORT</b>                |                | <b>R 720 000,00</b>   | <b>R 720 000,00</b>   |   |  |
|            | 608 | NGO Support  |                | R 500 000,00          | R 500 000,00          | x |  |
|            | 609 | NPOs Support   |                | R 220 000,00          | R220 000,00           | x |  |
| <b>7,7</b> |     | <b>SUPPORT OCEAN ECONOMY / OPERATION PHAKISA</b>         |                | <b>R 1 500 000,00</b> | <b>R 1 500 000,00</b> |   |  |
|            | 610 | Construction of Parking and Toilets at Turton Beach      |                | R 1 500 000,00        | R1 500 000,00         |   |  |
| <b>7,8</b> |     | <b>FACILITATION AND DEVELOPMENT OF RETAIL FACILITIES</b> |                |                       |                       |   |  |
|            | 611 | Mathulini Retail Shopping Mall                           | Ward 10        |                       | x                     | x |  |
|            | 612 | Phungashe Retail Shopping Mall                           | Ward 4         |                       |                       |   |  |
| <b>7,9</b> |     | <b>SUPPORT LOCAL MINING</b>                              |                |                       |                       |   |  |
|            | 613 | Sand Mining  | 2/Nguza        |                       |                       |   |  |
| <b>7,1</b> |     | <b>SUPPORT AGRICULTURAL INITIATIVES</b>                  |                | <b>R 1 865 000,00</b> | <b>R1 865 000,00</b>  |   |  |
|            | 614 | One home one garden                                      |                | R 165 000,00          | R 165 000,00          |   |  |
|            | 615 | Seed Distribution  |                | R 800 000,00          | R 800 000,00          |   |  |
|            | 616 | Assistance of 5 community Gardens                        |                | R 300 000,00          | R 300 000,00          |   |  |
|            | 617 | Shinga Community Garden                                  |                | R 600 000,00          | R 600 000,00          |   |  |
|            | 618 | Jojo Tank for Agriculture Project                        | Ward 8/Nyavini |                       |                       |   |  |
|            | 619 | Ploughing of community gardens (Tractors)                | Ward 3         |                       |                       |   |  |
|            | 620 | Community Gardens  | Ward 1/Nyamane |                       |                       |   |  |
|            | 621 | Seeds for Farming  | Ward 2/Pongolo |                       |                       |   |  |
|            | 622 | Identify areas for cattle farming                        | 2Ward /Pongolo |                       |                       |   |  |
|            | 623 | Ploughing community gardens                              | Ward 17        |                       |                       |   |  |
|            | 624 | Agro-Processing/Fish Farming                             |                |                       |                       |   |  |

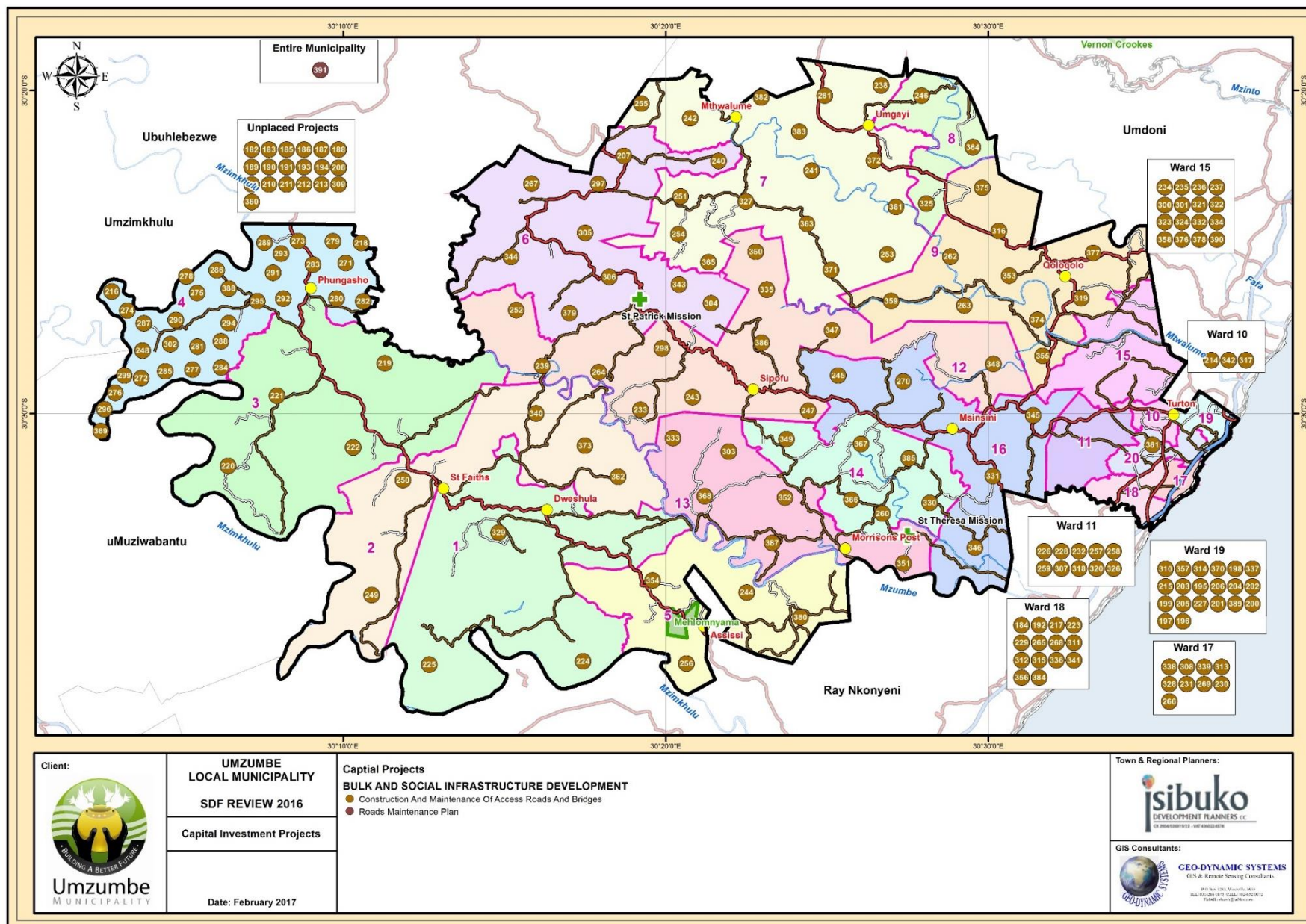
|   |     |   |                     |                       |                       |                       |                       |
|---|-----|---|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|   | 625 | Livestock Farming                           |                     |                       |                       |                       |                       |
| <b>7,11</b>   |     | <b>EMPLOYMENT CREATION</b>                  |                     |                       |                       |                       |                       |
|   | 626 | Employment Opportunities                    | 4,14                |                       |                       |                       |                       |
|   | 627 | Employment opportunities                    | 3/Thaleni           |                       |                       |                       |                       |
|   | 628 | Employment opportunities                    | 11/Nqolobeni        |                       |                       |                       |                       |
|   | 629 | Resuscitate Market stalls                   | 4                   |                       |                       |                       |                       |
|   | 630 | Community hall Security                     | 3/Maria-Trost       |                       |                       |                       |                       |
|   | 631 | CWP   | 3/Thaleni           |                       |                       |                       |                       |
|   | 632 | CWP at schools                              | 3/Manyonga          |                       |                       |                       |                       |
|   | 633 | CWP at Jojuba school                        | Ward 13             |                       |                       |                       |                       |
|   | 634 | CWP at Sosukwana school                     | Ward 5              |                       |                       |                       |                       |
|   | 635 | CWP at Msinsini school                      | Ward 5              |                       |                       |                       |                       |
|   | 636 | Employment Opportunities                    | Dumisa              |                       |                       |                       |                       |
|   | 637 | Employment Opportunities                    | 17/Gobhela          |                       |                       |                       |                       |
|   | 638 | CWP   | Ward 3              |                       |                       |                       |                       |
|   | 639 | River Trail Project community opportunities | 16/Vusisizwe        |                       |                       |                       |                       |
|   | 640 | Assistance in video production              | 16/Nkehlamandla     |                       |                       |                       |                       |
|   | 641 | CWP   | 11/Ngoyeleni        |                       |                       |                       |                       |
| <b>SUSTAINABLE INTEGRATED SPATIAL PLANNING SYSTEM</b> |     |   |                     | <b>R 8 745 000,00</b> | <b>R 3 855 000,00</b> | <b>R 3 195 000,00</b> | <b>R 1 695 000,00</b> |
| <b>8,1</b>  | 642 | Preparation of local area plans             | To be determined    | <b>R 700 000,00</b>   |                       | R 350 000,00          | R 350 000,00          |
|   | 643 | Preparation of precinct plans               | To be determined    | <b>R 600 000,00</b>   |                       | R 300 000,00          | R 300 000,00          |
|   | 644 | Preparation of settlement plans             | Entire municipality | <b>R 3 135 000,00</b> | R 1 045 000,00        | R1 045 000,00         | R1 045 000,00         |
|   | 645 | Mapping of izigodi boundaries               | Entire municipality | <b>R 420 000,00</b>   | R 420 000,00          |                       |                       |
|   | 646 | Mapping of settlements                      | Entire municipality | <b>R 650 000,00</b>   | R 650 000,00          |                       |                       |
|   | 647 | Guidelines for land allocation              | Entire municipality | <b>R 280 000,00</b>   | R 280 000,00          |                       |                       |
|   | 648 | New aerial photographs                      | Entire municipality | <b>R 1 780 000,00</b> | R 280 000,00          | R1 500 000,00         |                       |
|   | 649 | Umzumbe IDP                                 | Entire municipality |                       |                       |                       |                       |
|   | 650 | IDP Rep Forums                              | Entire municipality | <b>R 200 000,00</b>   | R 200 000,00          | <b>X</b>              | <b>X</b>              |
|   | 651 | SDF Review                                  | Entire municipality | <b>R -</b>            |                       |                       |                       |
|   | 652 | Turton Beach Framework Implementation       | Ward 19             | <b>R 100 000,00</b>   | R 100 000,00          |                       |                       |
|   | 653 | Umzumbe Scheme review                       | Entire municipality |                       |                       | <b>X</b>              |                       |
|   | 654 | MPT Reports                                 | Entire municipality |                       |                       |                       |                       |
|   | 655 | SPLUMA Awareness Campaigns                  | Entire municipality | <b>R 80 000,00</b>    | R 80 000,00           |                       |                       |
|   | 656 | Land Audit                                  | Entire municipality | <b>R 800 000,00</b>   | R 800 000,00          |                       |                       |

MAP 55: CAPITAL INVESTMENT PROJECTS





MAP 56: CAPITAL INVESTMENT PROJECTS



## MAP 57: CAPITAL INVESTMENT PROJECTS

