

Big 5 Hlabisa Municipality

Disaster Risk Management Plan



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Disaster Management is everybody's Business

DOCUMENT CONTROL PLAN

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Table of Contents

1. INTRODUCTION.....	5
1.1. Purpose of the Disaster Management Plan.....	5
1.2. Requirements in terms of Disaster Management Legislation and Policy.....	5
1.2.1. Guiding Policy framework and Approach of Developing this Plan.....	6
1.3. Paradigm Shift in Global and South African Approach to Disaster Management.....	7
1.4. Definition of Terms.....	8
1.4.1. Disaster.....	8
1.4.2. Disaster Risk Management.....	8
1.4.3. Disaster Risk Reduction.....	8
1.4.4. Mitigation.....	8
1.4.5. Response.....	8
1.4.6. Recovery.....	9
1.4.7. Relief.....	9
1.4.8. Disaster Risk.....	9
1.4.9. Disaster Risk Assessment.....	9
1.4.10. Human-Made Hazards.....	9
1.4.11. Natural Hazards.....	9
1.4.12. Vulnerability.....	9
1.4.13. Capacity.....	10
2. DESCRIPTION OF BIG 5 HLABISA MUNICIPALITY.....	Error! Bookmark not defined.
2.1. Geography, History and Economy.....	10
2.1.1. Topography.....	12
2.1.2. Settlement Patterns.....	12
2.1.3.....	12
2.1.4. Population Dynamics.....	13
2.1.5. Climate.....	13
3. INTEGRATED INSTITUTIONAL CAPACITY FOR DISASTER RISK MANAGEMENT.....	14
Objective.....	Error! Bookmark not defined.
3.1.1. Critical disaster management structures responsible for the implementation and monitoring of disaster management policy and legislation:.....	Error! Bookmark not defined.
3.1.2. Municipal Disaster Management Advisory Forum.....	15
3.1.3. Communication.....	18
3.1.4. Participation of Volunteers.....	18

4.	DISASTER RISK ASSESSMENT	19
4.1.	Disaster Risk Assessment Methodology	19
4.2.	Disaster Risk Assessment Model	Error! Bookmark not defined.
4.2.1.	Vulnerability Analysis.....	Error! Bookmark not defined.
4.2.2.	Capacity Assessment	Error! Bookmark not defined.
4.3.	Disaster Risk Data Sourcing and Manipulation.....	Error! Bookmark not defined.
4.4.	Disaster Risk Assessment Results	Error! Bookmark not defined.
5.	DISASTER RISK REDUCTION	23
5.1.	Core Disaster Risk Reduction Principles	23
5.2.	Integration of Disaster Reduction into Development Planning	Error! Bookmark not defined.
6.	RESPONSE AND RECOVERY	26
6.1.	Strategic Imperative for Response and Recovery	27
7.	Information Management and Communication	28
7.1.	Information management and communication system	28
7.2.	Integrated information management and communication model	28
7.3.	Data acquisition (Data collection and capturing)	28
8.	Education, Training, Public Awareness and Research	29
8.1.	Education and Training	29
8.1.1.	School programmes	29
8.1.2.	Disseminating and use of indigenous knowledge	30
8.1.3.	Training programmes for government officials and policy-makers	30
8.1.4.	Community training programmes	30
8.2.	Public awareness	30
8.2.1.	Public awareness strategy	30
8.2.2.	Communication through the media (communication unit)	30
8.3.	Research	31
9.	Funding Arrangement for Disaster Management	31
9.1.	Recommended funding arrangement	31
9.2.	Service Delivery and Budget Implementation Plan (SDBIP)	Error! Bookmark not defined.
10.	SUMMARY AND CONCLUSION	33
11.	Recommendations and Implementation Plan	33
12.	Bibliography	33
13.	Annexures	33

Executive Summary

In terms of disaster risk reduction principles, the local sphere of government is the first line of response and responsibility in the event of a disaster occurring or threatening to occur. In terms of the Disaster Management Act no. 57 of 2002, the Local Municipality is responsible for the co-ordination and management of the disaster incidents until such time that the responsibility escalates to a higher level of Governance (Local, District, Provincial and National). Thorough disaster risk management planning and effective co-ordination of all line function response agencies is, therefore, key to saving lives and limiting damage to property, infrastructure and the environment. The Disaster Risk Management Plan also facilitates the optimal utilization of resources.

Acronyms

CBO	Community based organizations
DRMF	Disaster Risk Management Framework
DMA	Disaster Management Act No 57 of 2002
DRA	Disaster Risk Assessment
DRMAF	Disaster Risk Management Advisory Forum
DRMP	Disaster Risk Management Plan
EIA	Environmental Impact Assessment
EMRS	Emergency Medical Services
FPA	Fire Protection Association
GIS	Geographical Information Systems
GM	General Manager
JOC	Joint Operations Centre
MDMC	Municipal Disaster Management Centre
MFMA	Municipal Financial Management Act No. 45 of 2003
NDMC	National Disaster Management Centre
NDMF	National Disaster Management Framework
NGO	Non –governmental organization
PDMC	Provincial Disaster Management Centre
PFMA	Public Financial Management Act No. 1 of 1999
PHOC	Provincial Health Operations Centre

SOP Standard Operating Procedure

ISRDP Integrated Sustainable Rural Development Programme

1. INTRODUCTION

1.1. Purpose of the Disaster Management Plan

The purpose of Big 5 Hlabisa Local Municipal Disaster Management Plan (DMP) is to facilitate an integrated and coordinated disaster management that focuses on prevention, preparedness mitigation, response & recovery and reduction of disaster risks.

1.2. Requirements in terms of Disaster Management Legislation and Policy

Section 53 (1) of the Disaster Management, Act No. 57 of 2002 stipulates that each municipality must, within the applicable municipal disaster management Framework:

- a. Prepare a disaster management plan for its area according to the circumstances prevailing in the area;
- b. Co-ordinate and align the implementation of its plan with those of other organs of state and institutional role-players;
- c. Regularly review and update its plan; and
- d. Through appropriate mechanisms, processes and procedures established in terms of Chapter 4 of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000), consult the local community on the preparation or amendment of its plan.

Section 53 (2) of the Disaster Management, Act No. 57 of 2002 states that A disaster management plan for a municipal area must:

- a. Form an integral part of the municipality's integrated development plan;
- b. Anticipate the types of disaster that are likely to occur in the municipal area and their possible effects;
- c. Place emphasis on measures that reduce the vulnerability of disaster-prone areas, communities and households;
- d. Seek to develop a system of incentives that will promote disaster management in the municipality;
- e. Identify the areas, communities or households at risk;
- f. Take into account indigenous knowledge relating to disaster management;
- g. Promote disaster management research;
- h. Identify and address weaknesses in capacity to deal with possible disasters;
- i. Provide for appropriate prevention and mitigation strategies:

- j. Facilitate maximum emergency preparedness; and
- k. Contain contingency plans and emergency procedures in the event of a disaster, providing for-
 - i. The allocation of responsibilities to the various role-players and co-ordination in the carrying out of these responsibilities;
 - ii. Prompt disaster response and relief;
 - iii. The procurement of essential goods and services;
 - iv. The establishment of strategic communication links;
 - v. The dissemination of information; and
 - vi. Other matters that may be prescribed

Section 53 (3) of the Disaster Management, Act No. 57 of 2002 states that a district municipality and the local municipalities within the area of the district municipality must prepare their disaster management plans after consulting each other.

Section 53 (4) of the Disaster Management, Act No. 57 of 2002 states that a municipality must submit a copy of its disaster management plan, and of any amendment to the plan, to the National Disaster Management Centre (NDMC), the Provincial Disaster Management Centre (PDMC), and, if it is a district municipality or a local municipality, to every municipal disaster management centre within the area of the district municipality concerned.

1.2.1. Guiding Policy framework and Approach of Developing this Plan

The Provincial and District Disaster Management Policy Framework formed a solid basis of developing this plan. The Key Performance Areas (KPA) and Enablers of the disaster management policy frameworks of all spheres of government are a fundamental pillars of South African approach to disaster management. Hence, the structure and content of this plan are greatly influenced or is in line with the disaster management policy framework KPA and Enablers (Figure 1).

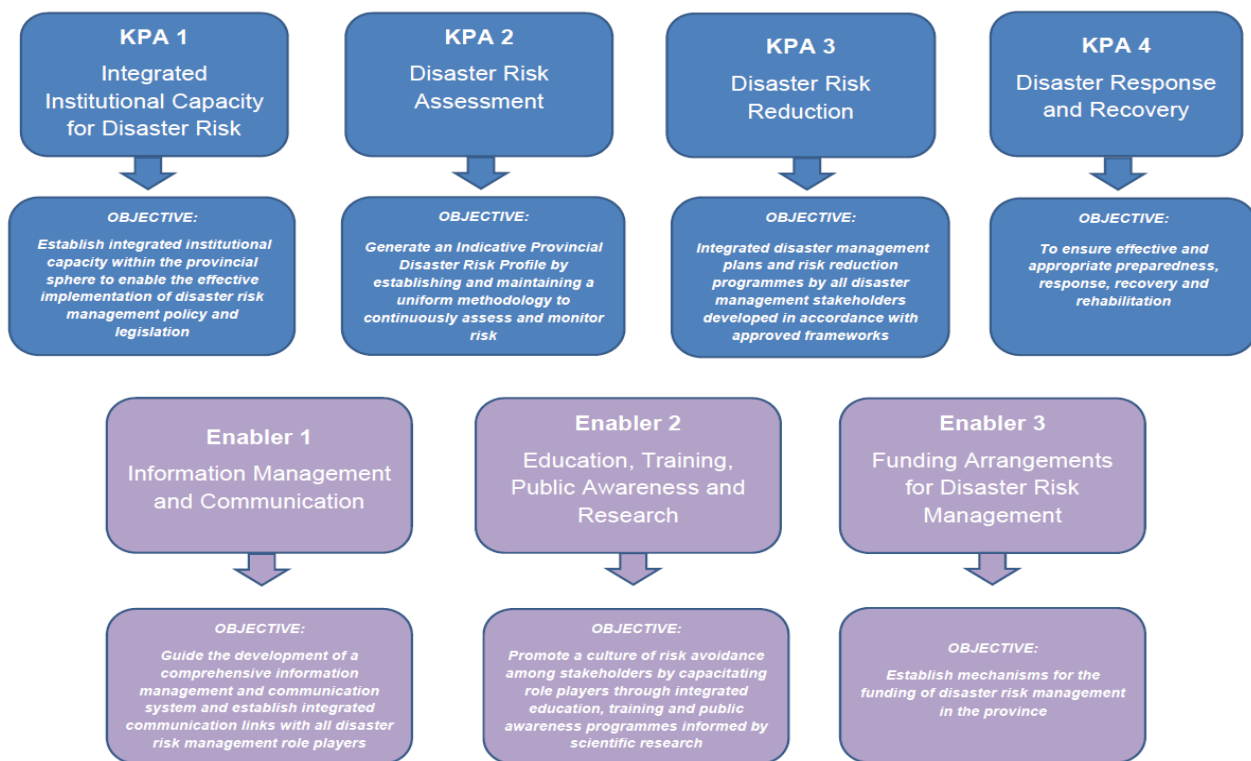


Figure 1: Disaster Management Policy Framework's Key Performance Areas and Enablers.

1.3. Paradigm Shift in Global and South African Approach to Disaster Management

Disaster risk management in South Africa is established as a public sector function within each sphere of government. Disaster risk management, however, goes beyond pure line function responsibility. Disaster risk management as an activity of all spheres of government relates to an integrated, multi-sectoral, multi-disciplinary approach aimed at reducing the risk associated with hazards and vulnerability. Disaster risk management therefore needs to become an integral part of the development planning process in order to be successful. For this reason disaster risk management plans form an implicit part of the Integrated Development Plan (IDP) of each and every municipality.

In 2003 South Africa adopted legislation placing it at the forefront of a global paradigm shift from a purely response oriented approach to disaster management to a more proactive approach. The Disaster Management Act (DMA) of 2002 along with the National Disaster Management Framework (South Africa, 2005) meant to offer guidance on the interpretation of DMA. It offers various guidelines and recommendations aimed at helping achieve more effective disaster prevention, mitigation and preparedness.

1.4. Definition of Terms

This section defines the core key terms, concepts and variables that are technically used in this plan. The definitions of these concepts and variables are directly extracted from the South African National Disaster Management Policy Framework of 2005.

1.4.1. Disaster

Disaster is a *“natural or human-caused event, occurring with or without warning, causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope with its effects using only their own resources. A disaster is a function of the risk process. It results from the combination of hazards, conditions of vulnerability and insufficient capacity or measures to reduce the potential negative consequences of the disaster risk”* (NDMPF, 2005).

1.4.2. Disaster Risk Management

Disaster risk management *“is the systematic process of using administrative decisions, organisation, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to prevent or to limit (mitigation and preparedness) adverse effects of hazards”* (NDMPF, 2005).

1.4.3. Disaster Risk Reduction

Disaster Risk Reduction is the *“conceptual framework of elements considered with the possibilities to minimise vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development”* (NDMPF, 2005).

1.4.4. Mitigation

Mitigation refers to *“structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards on vulnerable areas, communities and households”* (NDMPF, 2005).

1.4.5. Response

Response refers to *“measures taken during or immediately after a disaster in order to provide assistance and meet the life preservation and basic subsistence needs of those people and communities affected by the disaster. These measures can be of immediate, short-term or protracted duration”* (NDMPF, 2005).

1.4.6. Recovery

Recovery refers to *“decisions and actions taken immediately after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk. Recovery (rehabilitation and reconstruction) affords an opportunity to develop and apply disaster risk reduction measures”* (NDMPF, 2005).

1.4.7. Relief

Relief refers to *“the provision of assistance or intervention during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can include the provision of shelter, food, medicine, clothing, water, etc.”* (NDMPF, 2005).

1.4.8. Disaster Risk

Disaster risk is a *“probability of harmful consequences or expected losses (deaths, injuries, property, livelihoods, disrupted economic activity or environmental damage) resulting from interactions between natural or human-induced hazards and vulnerable conditions. Conventionally risk is expressed as follows: Risk = Hazards x Vulnerability. Some disciplines also include the concept of exposure to refer particularly to the physical aspects of vulnerability”* (NDMPF, 2005).

1.4.9. Disaster Risk Assessment

Disaster Risk Assessment (DRA) *“is a process to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend as well as the evaluation of the effectiveness of prevailing and alternative coping capacities in respect to likely risk scenarios”* (NDMPF, 2005).

1.4.10. Human-Made Hazards

Human-Made Hazards are *“potentially damaging physical event or occurrences that are caused directly or indirectly by identifiable human actions, deliberate or otherwise”* (NDMPF, 2005).

1.4.11. Natural Hazards

Natural Hazards are *“natural processes or phenomena, such as extreme climatological, hydrological or geological processes, that may constitute a damaging event. Hazardous events can vary in magnitude or intensity, frequency, duration, area of extent, speed of onset, spatial dispersion and temporal spacing”* (NDMPF, 2005).

1.4.12. Vulnerability

Vulnerability is the *“degree to which an individual, a household, a school, a community, an area or a development may be adversely affected by the impact of a hazard. Conditions of vulnerability and*

susceptibility to the impact of hazards are determined by physical, social, economic and environmental factors or processes” (NDMPF, 2005).

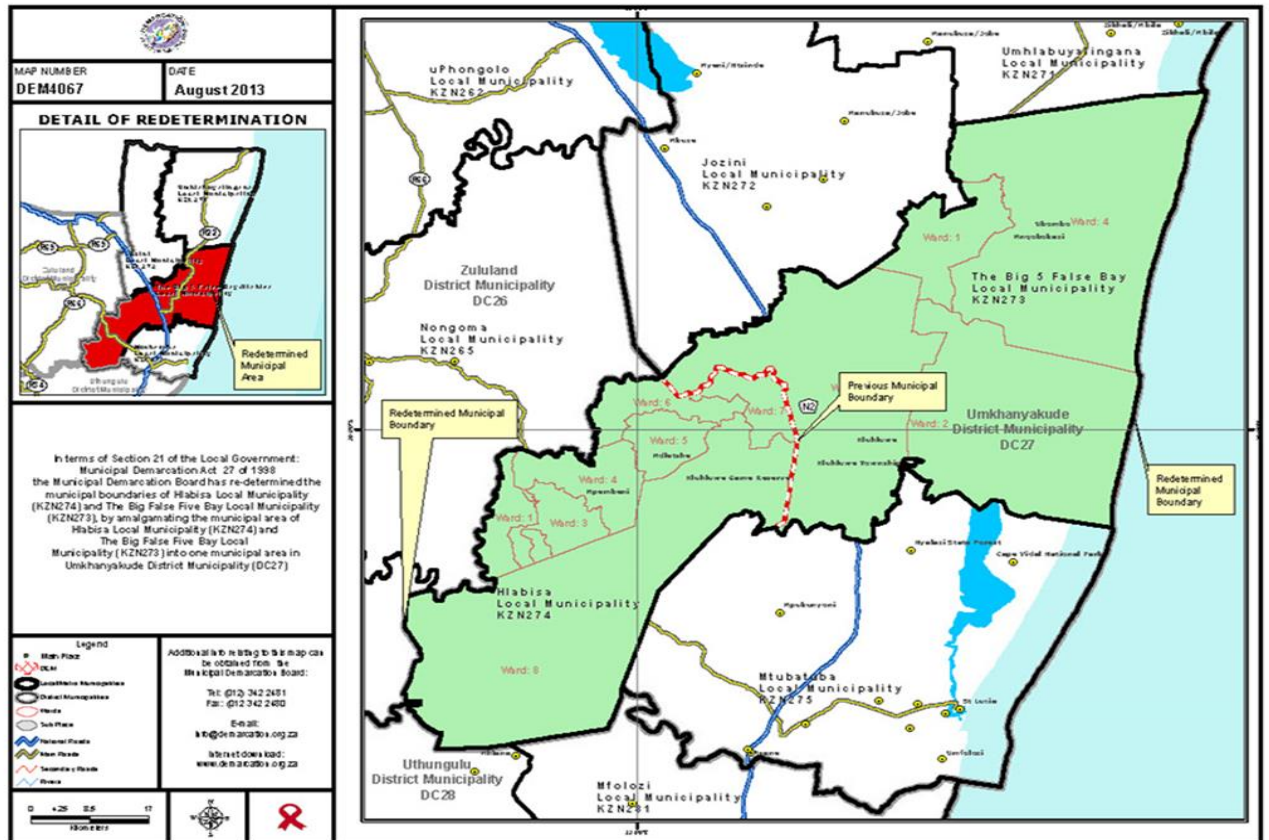
1.4.13. Capacity

Capacity is a “combination of all the strengths and resources available within a community, society or organization that can reduce the level of risk, or the effects of a disaster. Capacity may include physical, institutional, social or economic means as well as skilled personnel or collective attributes such as leadership and management” (NDMPF, 2005).

2. Geographic and Demographic Setting

2.1. Geographical Setting

The Big 5 Hlabisa Local Municipality is located in the Northern- western part of KwaZulu-Natal Province. It is one of four local municipalities that make up uMkhanyakude District family and is centrally located among all local municipalities of uMkhanyakude family. The municipality is a product of a type C amalgamation process between the former Big 5 False Bay and Hlabisa Local Municipality, initiated by the Demarcations Board in terms of the Municipal Structures Act. The name of the municipality is reflective of the historical context of the two former municipalities. The Municipality is predominantly rural with only one semi-urban area being Hluhluwe in ward 5. The municipality is demarcated into 13 wards. Hluhluwe and Hlabisa are the main towns and centre of employment opportunities, shopping and recreational facilities Easily accessible off the N2 national route, the municipality lies adjacent to the False Bay (western) side of the Isimangaliso Wetland Park (previously known as the Greater St Lucia Wetlands Park).



Map highlighting the location of the Big 5 Hlabisa Municipality

A large proportion of the land is used for agriculture and game lodge activities and is sparsely settled. The north-eastern parts of the municipality are occupied by fairly densely settled three rural traditional communities (Makhasa, Mnqobokazi and Nibela). The major draw card of Hlabisa is the tourism industry centred on the Hluhluwe-Umfolozi Game Reserve, located north of KwaZulu Natal, and is the oldest proclaimed park in Africa. It consists of 960 km² (96,000 ha) of hilly topography in central Zululand, KwaZulu-Natal, South Africa and is known for its rich wildlife and conservation efforts. The park is the only state-run park in KwaZulu-Natal where all the Big Five Game occurs. Due to conservation efforts, the park now has the largest population of white rhino in the world. The municipality has infrastructure development backlogs and therefore commits itself to reduce backlogs by 2030. The Big 5 Hlabisa Municipality was established in 2016 and is graded as grade two municipalities since its inception. The municipality has a low revenue base and depends on grant funding from the Government. However the municipality will employ sound revenue strategies to enhance revenue collection.

The Big 5 Hlabisa forms part of the Umkhanyakude District, which has been identified as ISRDP Node by the presidency. This programme has been put in place; assist the municipal with human, technical and financial to ensure development and alleviate poverty.

2.1.1. Topography

The Big 5 HLabisa Municipality is bordered by 4 Municipalities in the Umkhanyakude District, namely Mtubatuba (KZ275) in the South, Jozini (KZ272) to the North-West and Umhlabuyalingana Municipality to the North-East and Nongoma Local Municipality.

The main road linkages in the district are the N2 which is major route which links Hluhluwe with Richards Bay and Pongola and the R22, also known as the Lubombo Spatial Development (LSD) initiative, which links Hluhluwe to the Mozambique Border. These two roads have also been identified as Major Corridors within the Umkhanyakude District.

2.1.2. Settlement Patterns

The Big 5 False Bay Municipal area can be divided into four distinct portions, namely: Urban areas of Hluhluwe and Phumlani, private game farms and conservation areas, the three Traditional Authority areas and the commercial farm land. The population settlement density is generally below 150 people per km². A higher population density is found in Ward 1 (Makhasa Traditional Authority area). Higher densities are also found at the rural nodal areas of Mnqobokazi, Nibela and Makhasa.

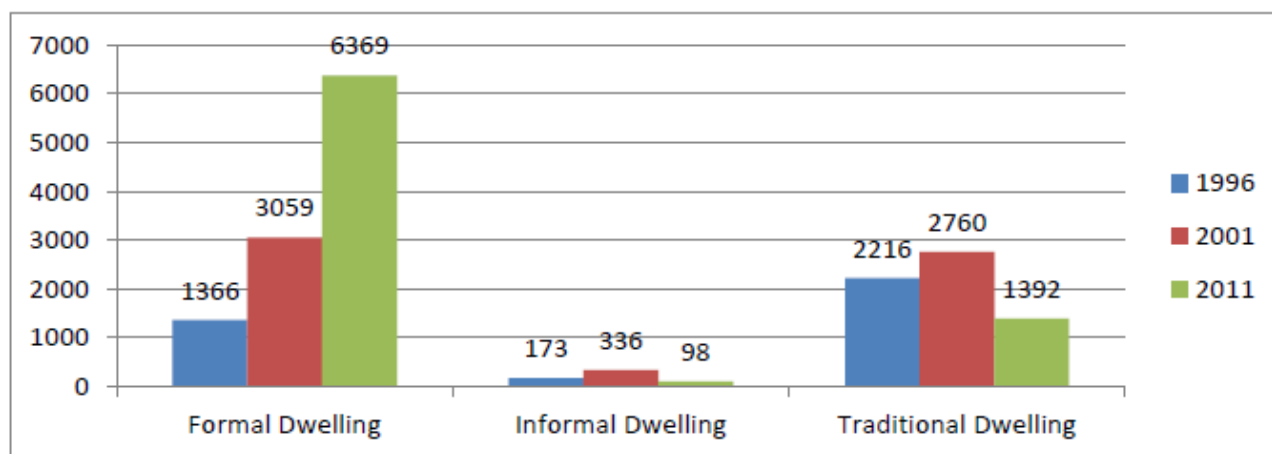


Table 1: Type of Dwelling, Stats SA census 2011

2.1.3. Population Dynamics

The Big 5 Hlabisa had a population of 28 857 in 1996, 31484 in 2001 and further increased to 35 258 in 2011. The percentage growth was 1, 7%. According to census 2011 the population increased from 31 482 in 2001 to 35 258. The percentage growth was 1,1%. It is therefore evident that the growth rate slightly decreased in period between 2001-2011 as compared to 1996 to 2001 and Big 5 is least populated within the district.

With regards to the population distribution within Big 5 Hlabisa, majority of the households are found in the informal dwelling as compared to formal and traditional dwelling. The dependency ratio within uMkhanyakude family has been increasing rapidly since 1996 and in particular Big 5. In 1996 the dependency ratio on population aged 65 years and older was 1 080 in 1996 and increased to 1 423 in 2001 the figures went up to 1535 in 2011. The increased can be attributed to a number of factors. The implication on this pattern indicates that people on ages above 65 are becoming more and more depended on economically active people. Population on the age 14 years and younger growth on dependency can be as a result of the increase in the birth rate and are dependent on the economically active group.

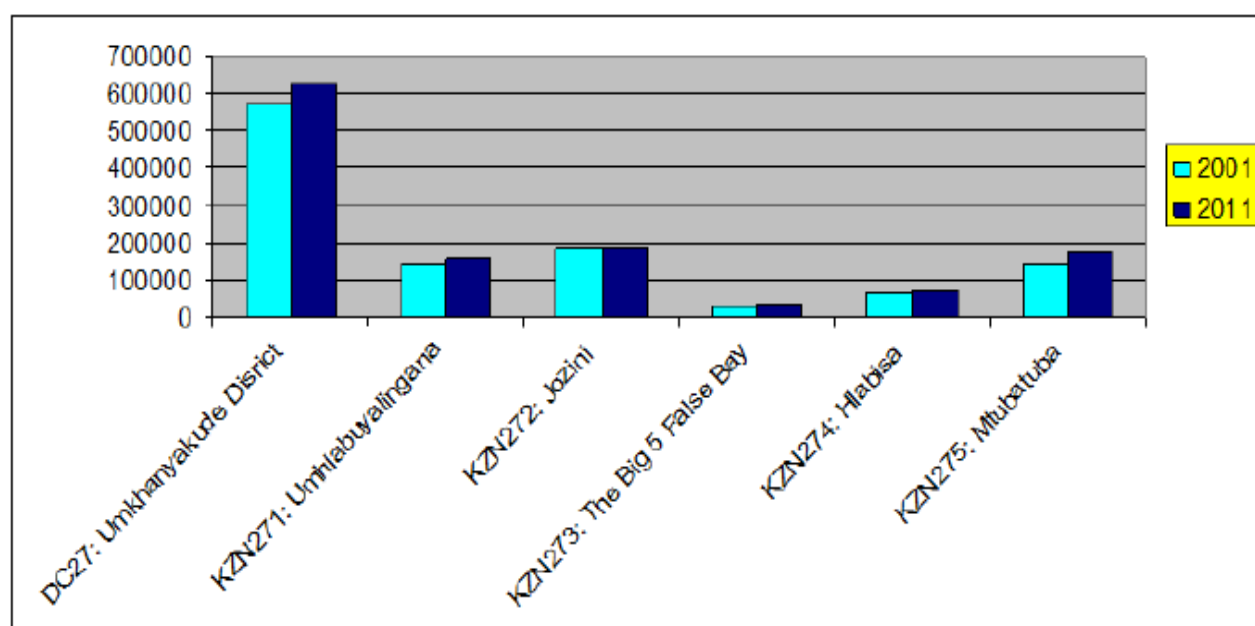


Table 2: Stats SA census 2011 Distribution of population by size in comparison with other uMkhanyakude Local Municipalities (Stats SA census 2011)

2.1.4. Climate

The entire district of uMkhanyakude district Municipality has the one of the best climatic conditions in Kwazulu Natal and south Africa which also benefits Big 5 Hlabisa, this includes the best sunshine

and windy conditions (which conducive for renewable energy generation); weather conditions for good agricultural activity, it is one of a few areas that you can grow crops round the year. It also provides leverage for tourism development, fish farming is one of the development interventions that need to be exploited.

2.1.5 Key issues and concerns

The Big 5 Hlabisa Local Municipality faces quite a number of services delivery challenges ranging from Infrastructural Degradation and Back-log, Social and Local Economic Development inequalities as well as inadequate energy and water supply some of these challenges are currently addressed and by 2016/2017 most of the issues will have improved as planned development interventions in section D of this document are much articulated. The municipality is no different to the current context in which most municipalities in South Africa. South Africa is a young democracy and thus continues to work tirelessly in overcoming challenges that arise. The triple challenges of poverty, unemployment and inequality persist to infiltrate the country's space economy.

3. INTEGRATED INSTITUTIONAL CAPACITY FOR DISASTER RISK MANAGEMENT

To establish integrated institutional capacity within the local sphere to enable the effective implementation of disaster risk management policy and legislation.

3.1 Status Quo of Disaster Management in Big 5 Hlabisa

The Big 5 Hlabisa Local Municipality does not have a disaster management plan, however its preparation is undertaken and the draft should be in place by March 30 2017. Big 5 Hlabisa Local Municipality currently has no municipal disaster management policy framework but the municipality uses the district disaster management policy framework for guidance and direction regarding Municipal disaster management function. The municipality is however in the process of developing its own disaster management policy framework.

3.1.1 Municipal Institutional Capacity

(a) Staffing

Big 5 Hlabisa Local Municipality has a Disaster management, Fire and Rescue Services Section under Municipal Protection Services Unit. The Unit has two (2) Disaster Management Officers, one station officer and (15) Firefighters.

- Ten Fire Fighters
- Four Team Leaders
- One Station Officer

(b) Resources

Big 5 Hlabisa Local Municipality has 2x bakkie sakkie, 2x Fire engines which are not in a good condition. The two disaster officers have car allowance for the coordination of disaster related issue

3.1.1. Municipal Disaster Management Advisory Forum

In terms of disaster risk reduction, the local spheres of government is the first line of defence and, in the event of disaster occurring or threatening to occur, the community is in reality the first responder. The Act leaves it to the discretion of the metropolitan or District Municipality to constitute formal structure, such as municipal disaster management advisory forum, for the purpose of external stakeholder participation. A local municipality is not obliged to establish specific internal structure for disaster risk management. However for the purpose of dealing with the disaster risk management planning and coordination, a Municipal Disaster risk Management Advisory Forum need to be established.

Purpose:

Section 44(1)(b) of the Disaster Management Act No.57 of 2002(DM Act), calls for an integrated and coordinated approach to disaster risk management activities and to give effect to the principles of co-operative governance in the Big 5 Hlabisa Municipality, the municipal council may establish a Disaster Risk Management Advisory Forum. Section 51 of DM Act makes provision for the establishment of such a forum.

Management and Administration

- The advisory forum must be established by the portfolio committee responsible for the disaster risk management function in BIG 5 Hlabisa Municipality.
- The advisory forum must be shared by the head of the disaster risk management centre of the Big 5 Hlabisa Municipality.
- The disaster risk management centre must provide the secretariat for the advisory forum and must ensure that accurate records of the activities of the forum are maintained.

Composition of the Municipal Disaster Risk Management Advisory-Sub Committee

The advisory forum comprise all the relevant stakeholders and role players in disaster risk management in the municipality, including non-governmental and community based organisations, individuals or groups with special technical expertise. The forum must comprise but need not to be confined to the members listed below.

- Designated focal points in municipal departments and entities who are involved in the management of disaster risk or the administration of any other national legislation aimed at dealing with an occurrence defined as a disaster in terms of section 1 of the DM Act.
- Disaster risk management functionaries in the disaster risk management centre.
- The district/ local representative of the disaster risk management centre of the KwaZulu Natal province.
- Experts in disaster risk management designated by the executive mayor.
- A representative of the relevant district management area (DMA)
- The designated representative of the disaster risk management volunteer unit of the Big 5 Hlabisa Municipality.

Local representatives of national and provincial organs of state and local emergency and essential services, as follows:

Health and medical Services:

- Emergency medical services
- states and private Hospital
- states and private clinics

Safety and security:

- South African police services
- south African national Defence Force

Regional/local representatives of other relevant national organs of state:

- Department of agriculture
- Department of education
- Department of health
- Department of Home affairs
- Department of social development
- Department of water affairs and forestry
- Regional Tourism Board.

Parastatals providing essential services:

- Eskom
- South African forestry company Ltd (SAFCOL)
- South African national Parks (SANParks)
- South African national road Agency (SANRA)

- South African weather service (SAWS)
- Telkom
- Representatives of organised business.
- Representatives of organised labour.

Non-governmental and community-based organisations and other relevant role players such as:

- Council of traditional leaders
- Life serving association
- South African council of Churches (SACC)
- Agricultural and farm workers associations
- South African Red Cross Society.
- Representatives of institutions of higher learning, including universities, colleges and scientific and research centres.

Representatives of the media such as:

- Local community radio stations
- Print media, including relevant main daily newspapers and community newspapers.

In addition to the representatives listed above, the advisory forum may at any time co-opt additional members and individuals required for a specific task or for a specific period of time. The advisory forum may also appoint technical and other relevant and hoc task teams with appropriate expertise to perform task teams will meet as required for the purpose of executing the task/s allocated.

Scope of Responsibilities

The Municipal Disaster Risk Management Advisory Forum must:

- Make recommendations to the municipal council concerning the disaster risk management plan for The BIG 5 Hlabisa Municipality;
- Ensure the application of the principles of co-operatives governance for the purpose of disaster risk management in the municipality ;
- Introduce actions to ensure inter-agency coordination and the application of joint standards of practice ;
- Establish integrated technical task teams for the development and implementation of policies ,plans, programmes and projects to reduce disaster risk and build resilience ;
- Contribute to the generation of a disaster risk profile for the municipality ;
- Contribute to development and application of a minimum criteria for conducting disaster risk assessments and for the ongoing monitoring of disaster of disaster;

- Assist, by means of focused , integrated and holistic risk reduction strategies within the broader context of sustainable development, with the creation of resilient individuals, households and communities who are alert and self-reliant;
- Contribute to the establishment of an early warning system and promote the importance of heeding early warnings;
- Help to ensure community awareness of disaster risk management arrangements;
- Participate in the development and maintenance of disaster risk management information management and communication systems;
- Establish integrated technical task teams for the development and maintenance of disaster contingency plans;
- Support and contribute to knowledge management programmes in the field of disaster risk management in the municipality; and
- Advise any organ of state, statutory functionary, non-governmental organisation, community or the private sector on any matter relating to disaster risk management.

3.1.2. Communication

Disaster risk reduction is a community driven process. It is the community where the operational activities related to disaster risk management take place. Ward councillors, Traditional leadership and sector department were fully involved in the compilation of this plan.

3.1.3. Participation of Volunteers

Effort should be made to establish units of volunteers trained in special skills in communities at risk. The Disaster Management Act, 57 of 2002, specifically Chapter 7 makes provision for the recruitment and engagement of volunteers at provincial district and local level when and if it is necessary to assist in different disaster responses. Volunteers to be recruited will require training in order to be able to assist during the following scenarios which often manifest themselves in our communities. These areas include, but not entirely limited to the following:

- Structural and runaway fires;
- Floods
- Outbreaks
- Community evacuation
- Community awareness and educational programs
- First Aid to assist victims injured during the occurrences
- Emergency family / household support interventions (accommodation, feeding and utilities)
- Damage assessment, quantification and packaging of needs,
- Marshalling for crowd control and management,

- Traffic control and regulating,
- Research and profiling risks in particular areas / wards.

4. DISASTER RISK ASSESSMENT

Disaster risk specifically refers to the likelihood of harm or loss due to the action of natural and man-made hazards or other external threats on vulnerable structures, services, areas communities and households. Disaster risk assessment is the first step in planning an effective disaster risk reduction programme. It provides an objective and transparent information for making decisions on countermeasures to reduce disaster risk.

It examines the likelihood and outcomes of expected disaster events, and includes investigation of related hazards and conditions of vulnerability that increases the chances of loss and also the capacity or resources to deal with such hazards and vulnerabilities. The PDMC provided risk assessment tools for sourcing data from municipal wards, using community-based structures. The assessment tool was explained to all practitioners prior to the commencement of the data collection process. Data collection was designed to sample on multi-hazard assessment, vulnerability assessment, and quantifying capacity within Organs of State and, within the 13 wards.

4.1. Disaster Risk Assessment Methodology

The stages of disaster risk assessment, as suggested in National and Provincial Disaster Risk Management Policy Frameworks are the following (in the order in which they are normally conducted):

- Hazard identification to identify the nature, location, intensity and likelihood (probability/frequency) of a threat.
- Vulnerability analysis to determine the existence and degree of vulnerabilities and exposure to a threat(s);
- Capacity analysis to identify the capacities and resources available to reduce the level of risk, or the effects of a disaster;
- Risk evaluation to make decisions about which risks need countermeasures and priorities.

The Community-Based Risk Assessment adopted numerous complex models to analyse the data. The following models were employed to determine the total risk profile. The assessment used the basic NOAA model process with selected of the SMUG model, the logic of the HIRV model and principles and participatory methodology of the CVCA model. The assessment deduces that the disaster risk is dependent on the capacity to deal with the prevailing hazards, the datasets were consolidated (Please refer below):

These datasets were subsequently captured into GIS and analysed. The analysed data was then used to produce hazard, vulnerability, capacity and overall risk maps. The assessment analysis deduced that the disaster risk is dependent on the vulnerability and capacity to deal with the prevailing hazards, as depicted on figure A below

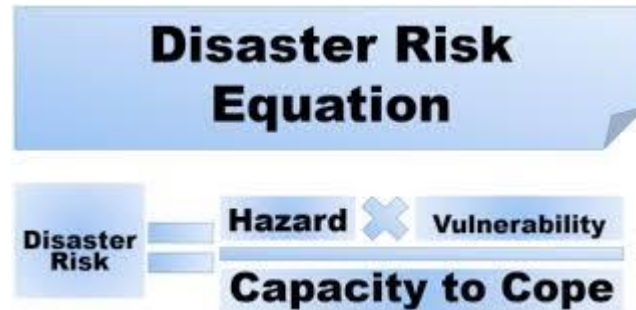


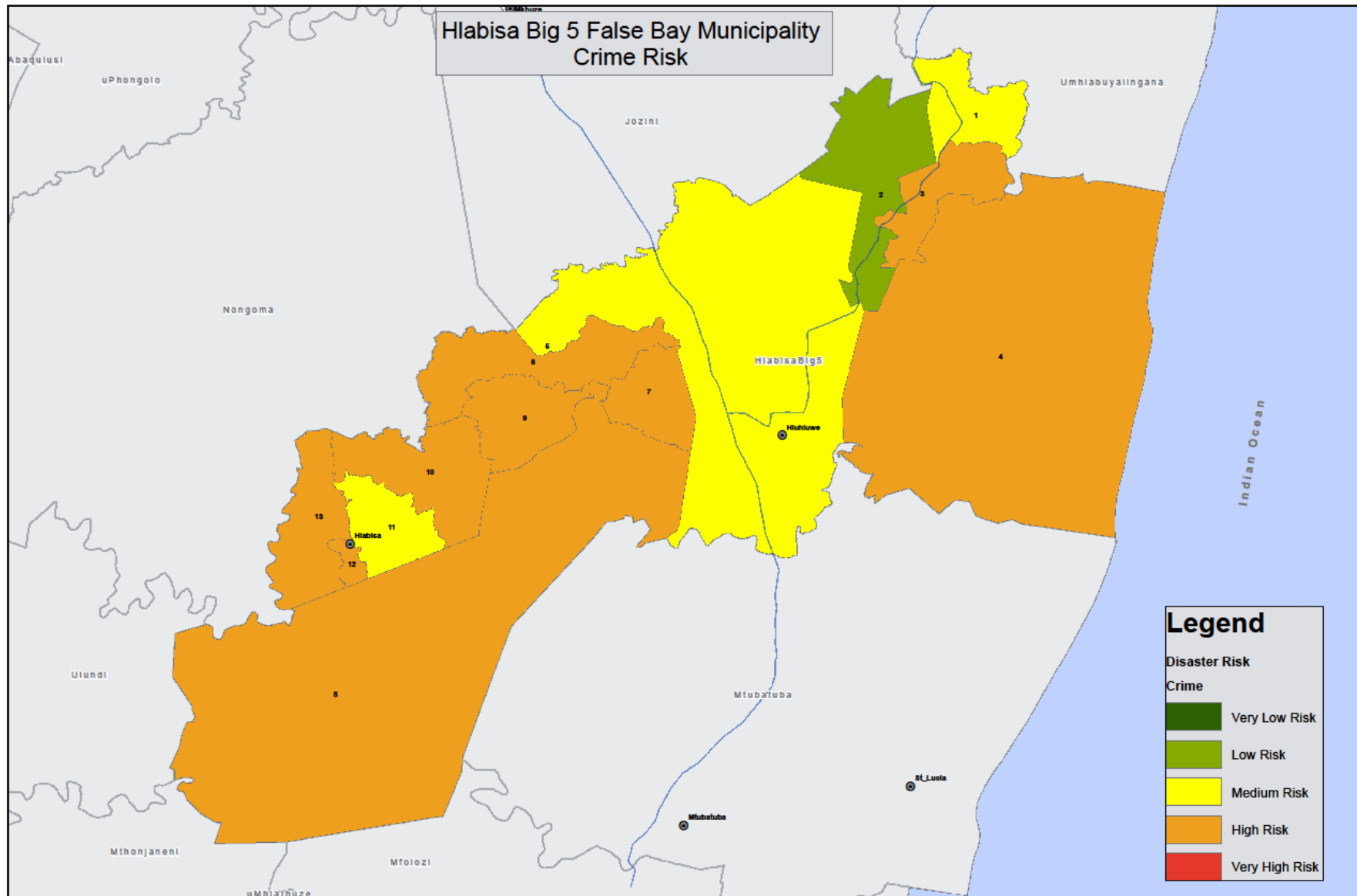
Figure: A picture illustrating a formulation of a disaster risk equation.

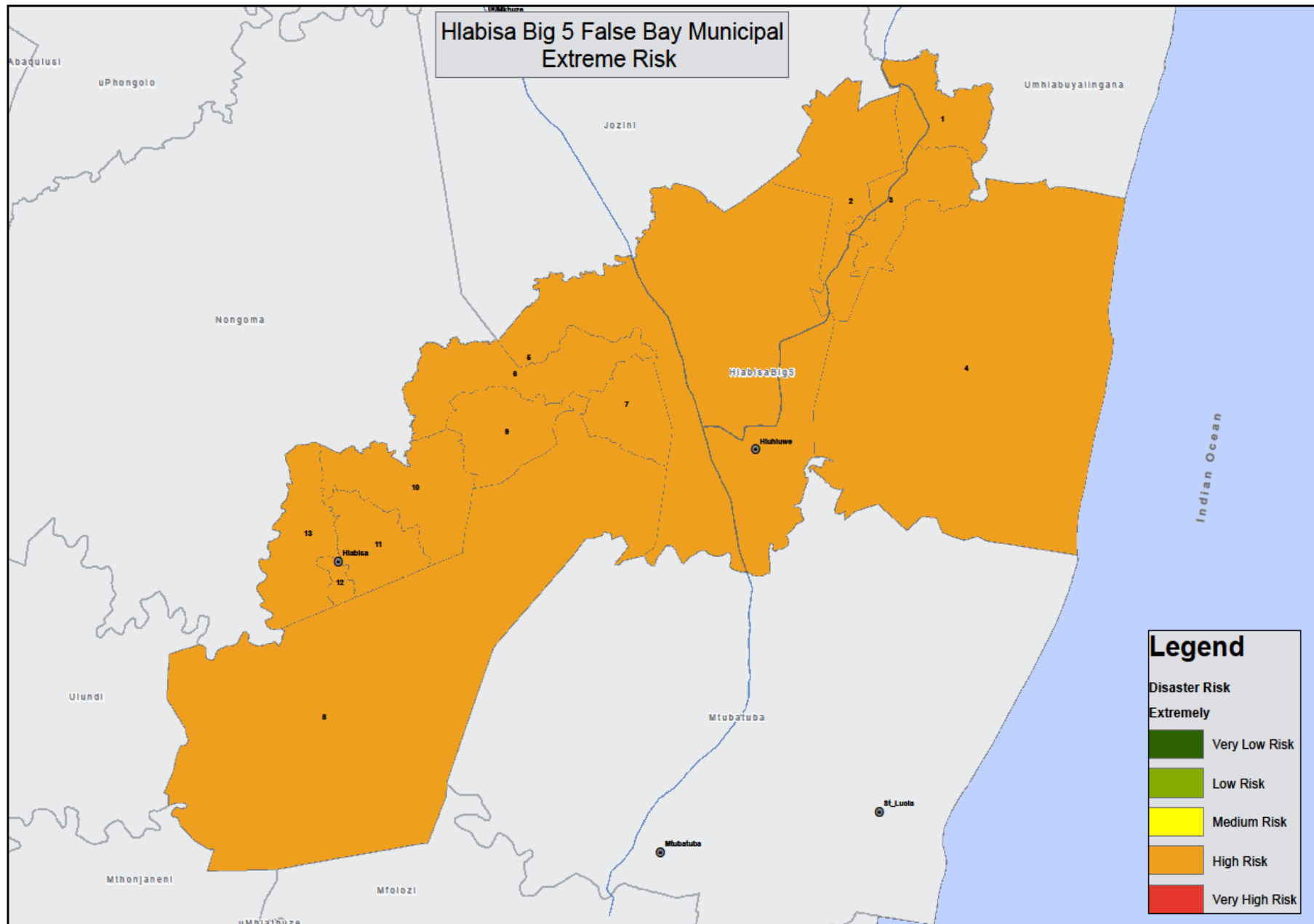
4.1. Disaster Risk Assessment Results

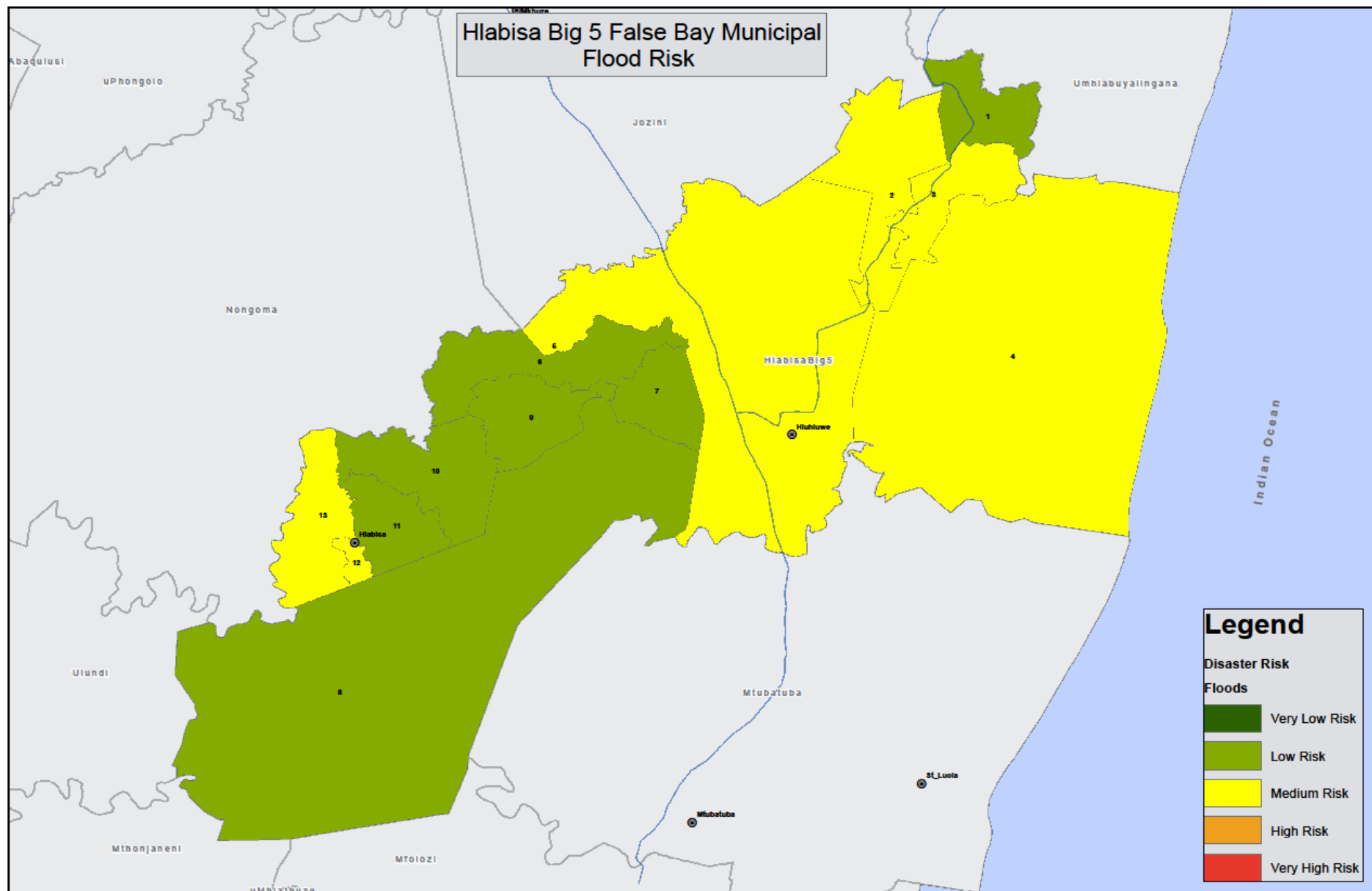
The disaster risk assessment template was compiled by PDMC and administered to municipalities. Assessment forms on previous and current incidents were used to collect data. All tribal councils and areas (izigodi) were visited to collect data. Incidents occurring on daily basis were also used in the collection of data. Big 5 Hlabisa Municipality has 13 wards and were all profiled and analysed and results were as follows:

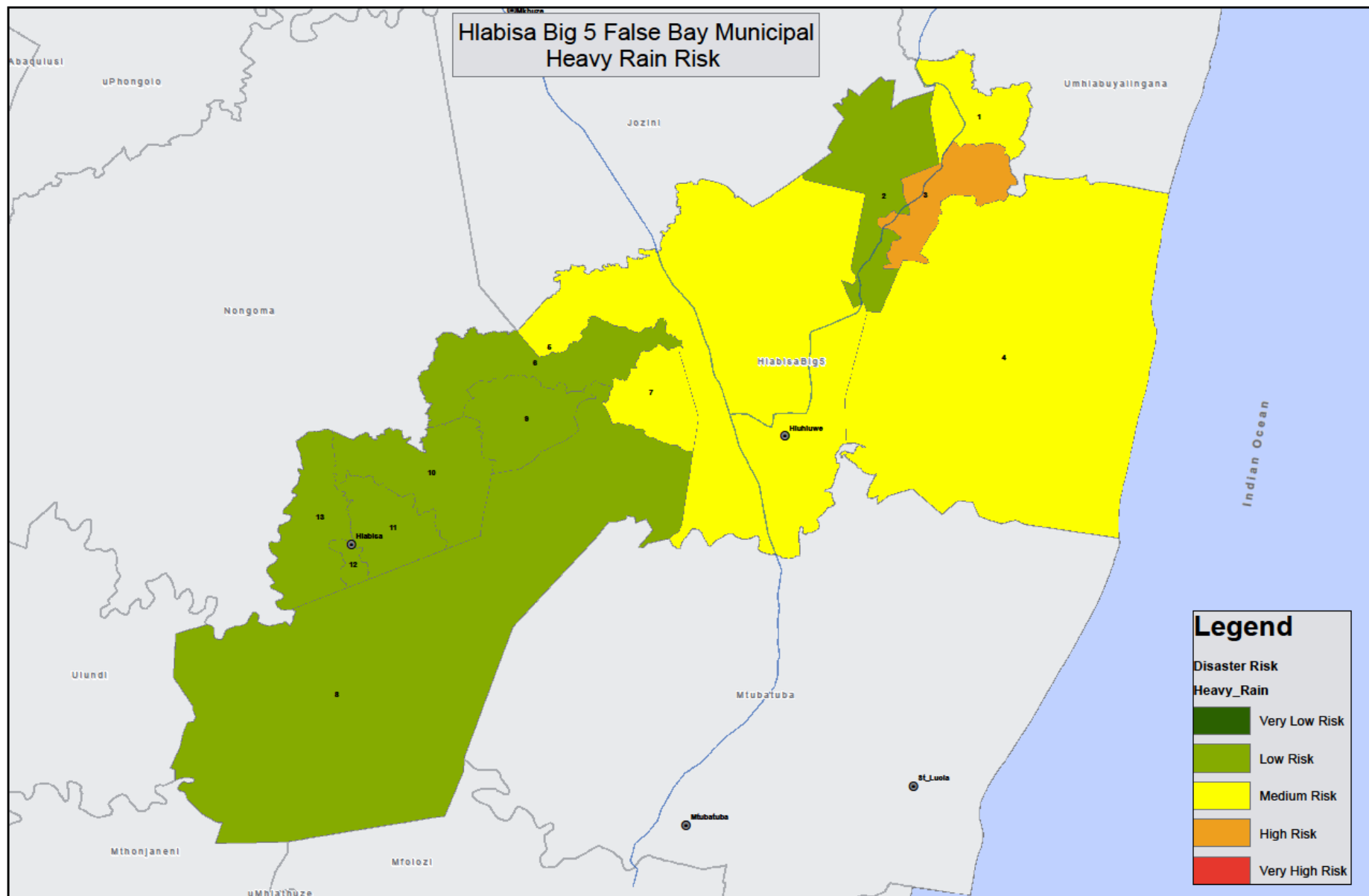
No	Prevalent Hazards and Threats	Probability
1	Structural Fires	Very High
2	Lightning	Very High
3	Drought	Very High
4	Strong Winds	High
5	Heavy rain	High
6	Civil Unrest	High
7	Epidemics	High
8	Illegal electricity connection	High
9	Motor Vehicle Accident	High
10	Veld Fires	Medium
11	Floods	Medium
12	Extremely High Temperatures	Low
13	Hazmat Incidents	Low
14	Water Contamination/Pollution	Low
15	Rail Incident	Low

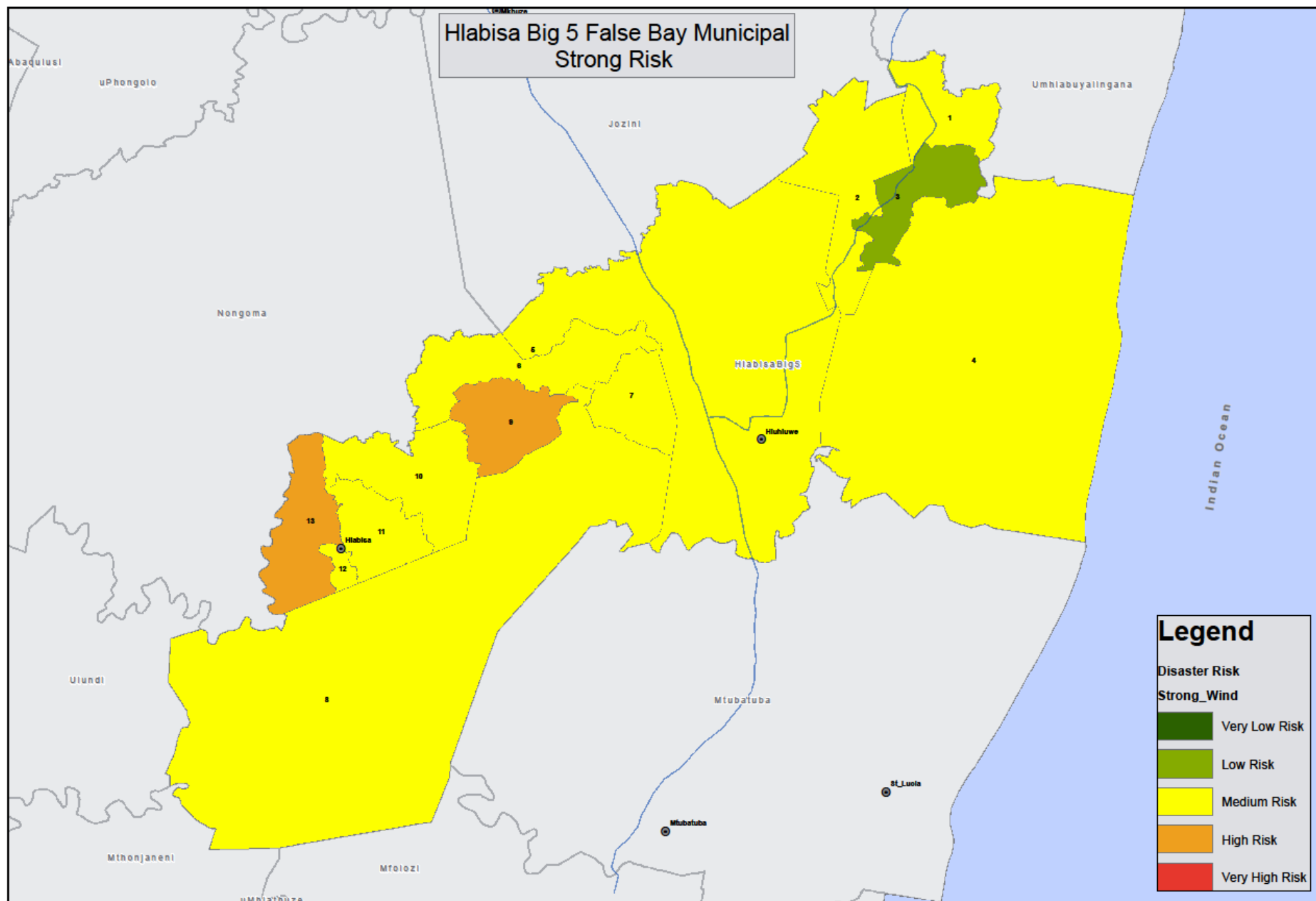
4.3 Disaster Risk Profile

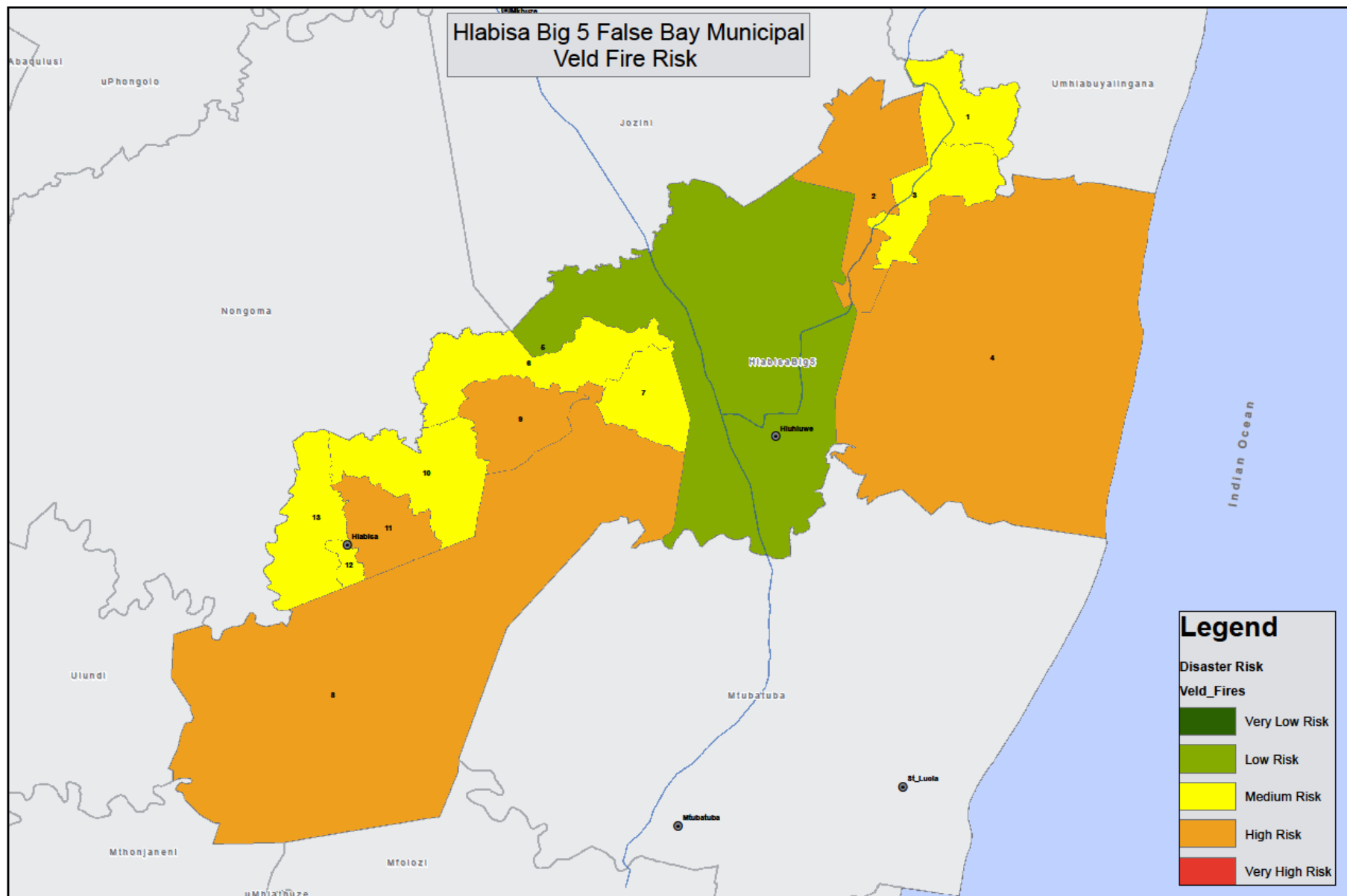












5. DISASTER RISK REDUCTION

To ensure that all disaster risk management stakeholders develop and implement integrated disaster risk management plans and risk reduction programmes in accordance with approved frameworks.

5.1. Core Disaster Risk Reduction Principles

In this section the focus is on disaster risk reduction strategies required for the identified common risks and hazards in KPA 2. Prevention and mitigation strategies are looked at. Structural and non-structural measures need to be undertaken to limit the severity of the adverse impact of natural and technological hazards on vulnerable areas, communities and households. Prevention where possible is undertaken to provide outright avoidance of the adverse impact of hazards and related environmental technological and biological disasters. The importance of Risk Reduction and Prevention cannot be underestimated; currently the municipality is involved in awareness campaigns at local schools and in the community on disaster management

The table below indicates hazards which normally turn into disaster risks due to the vulnerability of the community and environment because of the lack of capacity and alertness. Disaster Risk Reduction (DRR) programmes have been developed to deal with identified disaster risks. These are some of the DRR strategies for example, integrated development & service delivery, awareness campaigns, capacity building, dissemination of early warning, land use management and other methods.

Hazard	Mitigation Strategies /Risk Reduction Programmes
Structural Fires	<ul style="list-style-type: none">• Awareness Campaigns
Lightning	<ul style="list-style-type: none">• Awareness Campaigns• Installation of lightning conductors
Drought	<ul style="list-style-type: none">• Awareness Campaigns• Water Harvesting• Drilling of boreholes
Strong Winds	<ul style="list-style-type: none">• Awareness Campaigns• Plantation of trees• Early Warning Systems
Heavy rain	<ul style="list-style-type: none">• Early Warning Systems• Awareness Campaigns
Civil Unrest	<ul style="list-style-type: none">• Law Enforcement• Quality Basic Service Delivery• Public Participation/Consultation

Epidemics	<ul style="list-style-type: none"> • Consistency in Awareness Campaigns • Vaccinations
Illegal electricity connection	<ul style="list-style-type: none"> • Law Enforcement • Awareness Campaigns • Basic Service Delivery (provide Electricity) • Public Participation/Consultation
Motor Vehicle Accident	<ul style="list-style-type: none"> • Upgrading and road maintenance • Visibility of Road Traffic Officers • Awareness Campaigns
Veld Fires	<ul style="list-style-type: none"> • Procurement of fire beaters • Conduction of awareness's • Burning of fire brakes • Improving firefighting equipment
Floods	<ul style="list-style-type: none"> • Construction of dams • Construction according to building standards • Awareness Campaigns • Consistency in Early Warning Systems • Building Bridges • Proper maintenance of drainage system
Extremely High Temperatures	<ul style="list-style-type: none"> • Early Warning Systems • Awareness Campaigns
Hazmat Incidents	<ul style="list-style-type: none"> • Implementation of Municipal By Laws • Upgrading and road maintenance • Visibility of Road Traffic Officers • Awareness Campaigns
Water Contamination/Pollution	<ul style="list-style-type: none"> • Implementation of Municipal By Laws • Awareness Campaigns

5.2. Integration of Disaster Reduction into Development Planning

Mechanisms should be established in association with spatial planners to ensure that relevant spatial information is captured to inform disaster risk reduction planning on regular basis. Disaster risk reduction efforts are medium to long-term multi-sectoral efforts focussed on vulnerability reduction and must be

incorporated into ongoing IDP projects, processes, programmes and structures. Disaster management plan must be reviewed annually and informed by updated risks and hazard assessment.

In terms of Section 26(g) of the Municipal Systems Act, 200, Act 32 of 2000, a Municipality's IDP must contain a disaster management plan. Development projects in the Municipality, as contained in the Municipality's IDP, is thus interlinked with disaster management planning and activities. Risk reduction projects identified as part of disaster risk management planning, such as those identified in this plan and the contingency plans developed and risk assessments should be included into the and Big 5 Hlabisa Municipal IDP.

There are eight key planning points or requirements that must be applied by all municipal organs of state and municipalities when planning for disaster risk reduction initiatives. These must form part of the annual reporting of the municipalities and municipal organs of state to the DMC.

1. Use disaster risk assessment findings to focus planning efforts.
2. Establish an informed multidisciplinary team with capacity to address the disaster risk and identify a primary entity to facilitate the initiative.
3. Actively involve the communities or groups at risk.
4. Address the multiple vulnerabilities wherever possible
5. Plan for changing risk conditions and uncertainty, including effects of climate variability.
6. Apply the precautionary principle to avoid inadvertently increasing disaster risk.
7. Avoid unintended consequences that undermine risk avoidance behaviour and ownership of disaster risk.
8. Establish clear goals and targets for disaster risk reduction initiatives, and link monitoring and evaluation criteria to initial disaster risk assessment findings.

NAME OF THE PROJECT	BUDGET	TARGET AREAS	Date
Installation of Lightning conductors.	R200,000.00	Vulnerable areas around the municipality	2016/2017
Disaster Management relief material	R50,000.00	All wards	2016/2017
Disaster Management awareness campaign	R50,000.00	Community, schools Towns, and informal settlement	2016/2017
Capacity building	R150,000.00	Training of CDWs ,Disaster Volunteers , Traditional leaders ,Councillors and rural communities	2016/2017
Advisory forum	–	–	Held quarterly 2016/2017
Climate change Strategies	R150,000.00	All wards	2016/2017
Vehicles and Equipment (Rescue Vehicle, Disaster Management Vehicles)	R2 000 000.00	–	2016/2017
Total			

6. RESPONSE AND RECOVERY

- To ensure effective and appropriate disaster response and recovery by;
- Implementing a uniform approach to the dissemination of early warnings;
- Averting or reducing the potential impact in respect of injury ,health ,loss of life, property infrastructure, environment and government services;
- Implementing immediate integrated and appropriate response and relief measures when significant events or disasters occur or are threatening to occur;

- Implementing all rehabilitation and reconstruction strategies following a disaster in an integrated and developmental manner.

6.1. Strategic Imperative for Response and Recovery

Response and Recovery consist of a series of interconnected steps in a continuum. These steps provide a simplistic sequence for emergency preparedness, are generic and can be adjusted to suite any operational needs.

Early warnings	<p>Early warning are designed to alert areas, communities, households and individuals to an impending or imminent significant event or disaster so that they can take the necessary steps to avoid or reduce risk and prepare for effective response. Major role players in integrated early warning are:</p> <ul style="list-style-type: none"> • South African weather service- weather forecasts, satellite information • Department of water affairs- flood warnings, dam and river levels, water supplies • Department of agriculture- crop forecast, staple food quality, forage availability, water irrigation, livestock. • Department of health- epidemics and diseases
Disaster assessment	<p>On-site assessments includes establishing what resources are necessary to ensure the delivery of immediate, effective and appropriate response and relief measures to affected areas and communities and to facilitate business continuity.</p>
Response and recovery	<p>The operational plans and guidelines of the various response agencies that contribute to field operations must be considered when allocating responsibilities for response and recovery. Primary and secondary responsibilities must be allocated for each of the operational activities associated with disaster response e.g. evacuation, shelter, search and rescue, emergency medical services and firefighting.</p>
Relief measures	<p>Relief operations following significant and/or events classified as disasters must be coordinated.</p> <p>Relief assistance and donations must be equitably distributed.</p>

7. INFORMATION MANAGEMENT AND COMMUNICATION

To guide the development of comprehensive information management and communication system and establish integrated communication links with all disaster risk management role players.

7.1. Information management and communication system

The information management and communication system required to execute this plan must include the establishment of communication links that must enable the receipt, transmission and dissemination of information between disaster management centres and those likely to be affected by disaster risks as well as other role players and stakeholders involved in disaster risk management. The design of the system must take into account the lack of technological infrastructure in areas and communities most at risk, as well as telephonic system failures during disasters. This must require the use of a dedicated two-way provincial emergency radio communication network.

7.2. Integrated information management and communication model

An integrated information management and communication system must be established to achieve the objectives of the KPAs and enablers outline in the national disaster management framework.

7.3. Data acquisition (Data collection and capturing)

The process must identify both the inputs and data sources (data custodians) that must be required to ensure effective support for the implementation of the plan.

The following types of data, among others must be required:

- Base data (e.g. topographical, census, land cover, infrastructure, deeds, environmental)
- Dynamic data (e.g. contact and other relevant details of all role players)
- Field data (e.g. features of buildings, infrastructure)
- Situational reporting system (e.g. incident, local condition)
- Hazard tracking (e.g. weather conditions, flood fire hazard conditions ,droughts)
- Early warnings

The following stakeholders will assume and coordinate their role in an integrated manner to respond effectively within the required local and international standards towards any incident that occurs within Big 5 Hlabisa Area of Jurisdiction

Stakeholders	Contact Person	Contact Details
SAPS	MR Maxase (Hluhluwe) Mrs. Xulu Captain (Ezibayeni) Mr. Dindi Captain (Hlabisa)	0355620244
Department of social Development	Mrs. NP Mtshali	035571014/0724054213
Department of Public Works	MR Linda Manqele	0355737001
Department of Agriculture	Ms. IG Tshetlhanyane	0782246202
Department of Human Settlement	Mr. M. Nzama	0716064660
EMRS	MR Bongani Nkala	0355739200
UMkhanyakude Disaster Manager	MR ES Mngoma	0355738600
Big 5 Hlabisa (Hluhluwe Fire Station officer)	MR Mkhabela	0825357758
Big 5 Hlabisa (Disaster M officer)	Mr. S. Mvelase Mr. MDM Zungu	0609638354
Sifisulwazi Dev.Pro.(NGO)	Ms. JP Mkhabela	0835622476
E Zimpondweni clinic	MR ZH Shabangu	0769671017
Department of education	MR BV Myeni	0824256823
Mduku clinic	Mrs. PM Gumede	0732733764
MnQobokazi clinic	MR MJ Tembe	0799900153
UMkhanyakude District Disaster Management Officer	Ms. N Zwane	035 562 4049

8. Education, Training, Public Awareness and Research

To promote a culture of risk avoidance among stakeholders by capacitating role players through integrated education, training and public awareness programmes informed by scientific research.

8.1. Education and Training

8.1.1. School programmes

The PDMC must seek to establish links with existing awareness creation programmes in schools for the purpose of disseminating of information on disaster risk management and risk avoidance. The district municipality must play an active part in engaging schools to ensure a practical approach to awareness programmes.

8.1.2. Disseminating and use of indigenous knowledge

It is imperative that traditional leaders, as custodian of indigenous knowledge, play an active role at local, district and provincial level. The indigenous knowledge is an integral part of disaster risk management.

8.1.3. Training programmes for government officials and policy-makers

Training programmes for government officials and policy-makers must embrace the multidisciplinary and interdisciplinary dimension of disaster risk reduction, which must include the following:

- Development planning
- Hazard identification assessment
- Communicable diseases
- Dry land agriculture
- Participatory rural appraisal
- Applied climate science and GIS

8.1.4. Community training programmes

Training programmes for communities must focus on disaster risk awareness, disaster risk reduction, volunteerism and preparedness. Communities must be given the opportunity to modify and enhance training programmes through the inclusion of indigenous knowledge, practices and values, and the in cooperation of local experience of disasters and disaster risk management.

8.2. Public awareness

8.2.1. Public awareness strategy

To include risk avoidance behaviour by all stakeholders, public awareness campaigns aimed at raising consciousness about disaster risks must provide information on how to reduce vulnerability and exposure to hazards. These campaigns must include:

- Organized and planned awareness programmes
- Public gatherings such as izimbizo
- Annual recognition and celebration of world Disaster Risk Reduction Day
- Rewards, incentives, competitions and recognition schemes to enhance awareness of and participation in risk reduction activities
- Dissemination of information to all role players

8.2.2. Communication through the media (communication unit)

The role of the media in disaster risk management must be defined and managed through consultative process involving the media, role players involved in response and recovery efforts, and communities routinely affected by disasters or impending disasters. The MDMC must establish and manage ongoing relations with relevant local and national media.

8.3. Research

The MDMC, through a process of consultation, must develop strategic disaster risk reduction research agenda to effectively inform disaster risk management planning and the implementation in province. Research initiatives must also be linked to the IDP processes of municipalities.

The MDMC must facilitate:

- Consultation and engagement between the communities of disaster risk scientists and professional in province.
- A process for auditing existing research initiatives and programmes.
- Consultation with appropriate national and international agencies and foundation that support research.
- The development of an integrated disaster risk reduction research agenda and programme.

9. Funding Arrangement for Disaster Management

Establish funding mechanisms for disaster risk management in the BIG 5 Hlabisa Municipality.

9.1. Recommended funding arrangement

All Government Funding's are controlled by the **Public Finance Management Act of 1999 (Act No. 1 of 1999)**. Insofar as Disaster Management is concerned there are two specific areas where funding is an issue:

- **Pre-Disaster Risk Reduction**
- **Post-Disaster Response, Recovery and Rehabilitation.**

Pre-Disaster Risk Reduction – *In terms of Section 53(2) (a)* of the Disaster Management Act of 2002 (Act No. 57 of 2002), the Disaster Management Plan for a Municipal area must ***“form an integral part of the municipality’s integrated development plan (I.D.P.)”***. ***This would then imply that the Municipal I.D.P. would be the source of funding for Pre-Disaster Risk Reduction programs and projects.***

It is the responsibility of the appointed Big 5 Hlabisa Municipal Disaster Management Officers to ensure that Disaster Risk Reduction Plans are aligned with the I.D.P.'s of the Municipality.

Post-Disaster Response, Recovery and Rehabilitation – Sections 16 and 25 of the Public Finance Management Act of 1999 provides for the use of public funds in emergency situations.

The table below provides an overview of the recommended funding mechanisms for each of the five disaster risk management activities.

Start-up activities (KPA1,enabler2	Provincial government	Conditional grant for local government-district and metropolitan municipalities, where necessary
		Conditional grant for provinces with counter-funding component 1
		Budget for national department
Disaster risk management ongoing operations(KPAs 3 and ENABLER 3)	National and provincial government	Own department budgets
	New assignment to local government	Increase in the (institutional) component of the equitable share of local government
Disaster risk education (KPAs 2 and Enabler 3)	National department	Own budgets
	Provincial departments	Own budgets but can be augmented by application for funding to the NDMC for special national priority risk reduction projects
	District municipalities	Own budgets but can be augmented by application for funding to the NDMC for special national priority risk reduction projects
	In case of low-capacity, resource-poor municipalities	Additional funding released from the NDMC targeted at these categories of municipalities
Response, recovery and rehabilitation	National government	Own budgets for those departments frequently affected by disasters
		Access to central contingency funds
Reconstruction efforts (KPA 4)		Reprioritize within capital budgets for infrastructure reconstruction
	Provincial government	Own budget. Particularly for those department frequently affected by disasters
		Conditional infrastructure grants
		Access to central frequency fund once threshold is exceeded on a matching basis
		Reprioritize within capital budget for infrastructure reconstruction.
Education, training and capacity- building programmes (ENABLER 2)	All spheres of government	Own budgets and reimbursement through SETAs
		Public awareness programmes and research activities can also be funded through the private sector, research foundation, NGOs and donor funding

10. SUMMARY AND CONCLUSION

- The Big 5 Hlabisa Disaster Management plan must be reviewed annually and any amendments thereto must be submitted to the DDMC and PDMC.
- A final document will be circulated to the District Disaster Management Centre and Provincial Disaster Management Centre and relevant stakeholders.

11. Recommendations and Implementation Plan

Section 53 of Disaster Management Act (Act No. 57 of 2002) stipulates that a Local disaster management centre must:

- Monitor progress with the preparation and regular updating of disaster management plans and strategies by Local and municipal organs of state involved in disaster management in the Local.
- Monitor formal and informal prevention, mitigation and response initiatives by Local and municipal organs of state, the private sector, non-governmental organizations and communities, including the integration of these initiatives with development plans.
- Monitor the compliance in the province with key performance indicators in respect of the various aspects of disaster management.
- Measure the performance and evaluate such progress and initiatives from time to time.

12. Bibliography

Constitution of the Republic of South Africa 108 of 1996

Disaster Management Act 57 of 2002

Municipal Systems Act 32 of 2000

Kwazulu-Natal Provincial Disaster Management Policy Framework

Kwazulu-Natal Provincial Disaster Management Plan

Big 5 Hlabisa Municipality Reviewed IDP 2016/17

13. Annexures

- A. Disaster Management Advisory Forum (DMAF) Terms of Reference (TOR)
- B. Disaster Management Advisory and Practitioners Forum Reporting Template
- C. Disaster Management Monthly Reporting Template
- D. Disaster/Incidents Assessment Form
- E. Beneficiary List Template
- F. Standard Operating Procedures (SOP): Incident/Disaster Management
- G. Disaster Management Quarterly and Annual Report Template