



DISASTER MANAGEMENT FRAMEWORK FOR NDWEDWE LOCAL MUNICIPALITY Revised Municipal Framework

DRAFT MUNICIPAL FRAMEWORK 2023/2024

DISASTER MANAGEMENT

NDWEDWE LOCAL MUNICIPALITY | LOT 47-48 P100 ROAD , NDWEDWE COURTHOUSE,4342

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1 *Introduction to Disaster Risk Management*

1.1 *Glossary of Acronyms*

ABBREVIATION	MEANING
DMF	Disaster Management Framework
DMIS	Disaster Management Information System
DMP(s)	Disaster Risk Management Plan(s) which includes reference to contingency plans and arrangements
DRMC	Disaster Risk Management Centre
FOGs	Field Operation Guides as per the NDMF
IDP	Integrated Development Plan
JOC	Joint Operation Centre
KPA	Key Performance Area, as per the NDMF
KZNPD MF	KZN Provincial Disaster Management Framework
MDMC	Municipal Disaster Management Centre
MDMF	Municipal Disaster Management Forum
NDMAF	National Disaster Management Advisory Forum
NDMC	National Disaster Management Centre
NDMF	National Disaster Management Framework
PDMC	Provincial Disaster Management Centre
PDMF	Provincial Disaster Management Framework
SOPs	Standard / Standing Operating Procedures / Protocols as per the NDMF
The Act	The Disaster Management Act, 2002 (Act 57 of 2002)

- Any reference to the term disaster risk management incorporates the term disaster management as per the NDMF

1.2 Legislative Requirements

1.2.1 The Disaster Management Act (Act 57 of 2002)

- The Act was enacted to provide for an integrated and co-ordinated disaster management policy that focuses on preventing or reducing the risk of disasters, mitigating the severity of disasters, emergency preparedness, rapid and effective response to disasters, and post- disaster recovery. It furthermore aims to establish national, provincial and municipal disaster management centres and make provision for volunteers, as well as matters incidental to disaster management.
- In terms of Section 28 and 42 of the Disaster Management Act (Act 57 of 2002), provinces and municipalities must establish and implement a disaster management Framework that is aimed at ensuring an integrated and uniform approach to disaster management. Section 29 and 43 compels provinces and municipalities to establish disaster management centres and appoint heads of such centres. It is essential that this establishment is effected after consultation with local municipalities in the area. This requirement is further regulated in sections 44-50 of the Act, whereas sections 51-55 mandate the powers and duties of Municipalities and Municipal entities. It is also important to mention that part of the sections of the DM Act 57 of 2002 were amended, and this culminated into the new **Disaster Management Amendment Act No 16 of 2015**, which commenced on the **01st of May 2016**. The Disaster Management Act 57 of 2002, will now be referred to as the Principal Act. Most of the amended sections put emphasis on compliance to role-players such as local municipalities and Sector Departments.

1.2.2 The White Paper on Disaster Management

- The White Paper on Disaster Management outlines government's new approach in relation to disaster management. In line with international trends and the national objectives of efficient and effective management, priority is given to prevention. The fundamental purpose of the policy is to advocate an approach to disaster management that focuses on reducing risks - the risk of loss of life, economic loss, and damage to property, especially the most vulnerable population and avoiding environmental degradation. Greater attention is therefore directed to the introduction of preventative strategies aimed at saving lives and protecting assets. In line with government's priorities, this White Paper pays specific attention to the pressing needs of poor communities in relation to both natural and human disasters.
- Clarify terminology
- Clarify the representation of traditional leaders in the disaster management advisory forums
- Provide for the NDMAF serve as the National Platform for Disaster Risk Reduction thereby incorporating the obligations set out in global commitments (Hyogo Framework of Action, followed by Sendai Framework for DRR)
- Clarify the roles and responsibilities of organs of state to assist the disaster management structures
- Strengthening reporting on policy implementation, DRR, relief, recovery and rehabilitation efforts using IGR structures

- Expanding the contents of disaster management plans of organs of state, to include expected climate change impacts and risks
- Re-affirming the role of municipalities (both at district and local level) to establish disaster management centres and improve capacity for the development and coordination of disaster management plans
- Granting the Minister authority to make regulations on education, training, research and the classification and declaration of disasters.

1.2.3 The National and Provincial Disaster Management Framework (NDMF and PDMF)

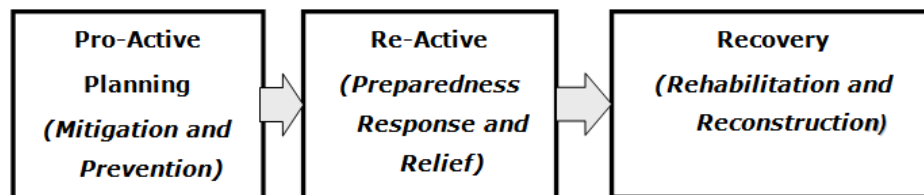
- Section 28 and 42 of the Act compels each district municipality to establish and implement a Disaster Management Framework. The Framework must be consistent with the National Disaster Management Framework (NDMF); the Act and the Provincial Disaster Management Framework (PDMF). It must be in consultation with municipal entities operating in the area.
- The KZN Provincial Disaster Management Framework was published in the KwaZulu-Natal Extraordinary Provincial Gazette No. 10 in February 2011, the salient and relevant provisions of which have been included in this framework, or else referred to. The Disaster Management Centre (DMC) has been established and a person appointed as head of the DMC.

1.2.4 Further Relevant Legislation

- The following Acts are also applicable to Disaster Management and should be taken cognizance of:
 - Constitution of the Republic of South Africa Act No. 108 of 1996
 - Intergovernmental Relations Framework Act No. 13 of 2005
 - Local Government: Municipal Systems Act No. 32 of 2000

1.3 Disaster Risk Management as a National Development Agenda

- Natural hazards and other disasters affect the country and impact the nation's development initiatives. The field of disaster risk management covers a broad spectrum and impacts all areas of development, affecting a range of role players. There are three main phases to disaster risk management.
- These main phases are illustrated below.



- Disaster risk reduction, through proper planning and management is the new key driving principle in disaster risk management. Disasters are inevitable although we do not always know when and where

they will occur but they are not always unpredictable. Floods are likely to occur in valleys and flood plains, droughts in areas with unstable and low rainfall, the evidence of oil spills has been seen in shipping lanes and many other relevant places etc. This predictability provides iLembe District Municipality with opportunities to plan for, prevent and to lessen the impact of disasters. The worst effects can be partially or completely prevented by preparation, early warning and swift decisive responses.

- Disaster Risk Reduction acts as an 'insurance policy' for sustainable development and the Millennium Development Goals. Disaster management aims to reduce the occurrence of disasters and to reduce the impact of those that cannot be prevented.
- Disaster risk reduction broadly incorporates the following, but is discussed in much further detail under KPA 3 of this document:
 - Disaster Planning and Mitigation: The disaster risk planning activities generally take the form of preventative or "fore-warning" actions and include inter alia:
 - ✓ Hazard identification
 - ✓ Risk assessment
 - ✓ Prioritisation
 - ✓ Contingency Planning
 - ✓ Integrated prevention and mitigation planning strategies and activities
 - ✓ Developing plans for effective communication, co-operation, response and recovery activities and the monitoring of disaster risk planning's KPIs
 - ✓ Reporting on the above as required by the Act.
 - ✓ Inclusion of risk reduction efforts into strategic integrating structures and processes
 - ✓ Implement and monitor disaster risk reduction programmes and initiatives
 - Disaster Response: This takes place during a disaster occurrence and include inter alia:
 - ✓ Monitoring and evaluation of hazardous and potential disastrous incidents
 - ✓ Identifying and implementing mechanisms for the dissemination of early warnings
 - ✓ Possibly declaring a state of disaster according to predefined guidelines
 - ✓ Activating and implementing contingency or response plans, developed as part of planning and mitigation
 - ✓ Informing other relevant disaster risk management role players and institutions, such as the PDMC, NDMC, neighbouring Municipalities and Provinces, etc.
 - ✓ Deploying response resources to the scene
 - ✓ Managing the resources deployed
 - ✓ Monitoring of disaster intervention activities
 - ✓ Developing and reviewing an incident management system
 - ✓ Reporting.

- Disaster Recovery: Disaster recovery activities take place after the disaster occurrence and include:
 - ✓ Disaster recovery activities
 - ✓ Monitoring of disaster recovery activities
 - ✓ Documentation of disaster occurrences and actions taken
 - ✓ "Post-mortem" analysis to improve systems, plans and methods
 - ✓ Mechanisms for the monitoring of rehabilitation and reconstruction are to have been developed and implemented
 - ✓ Reporting.
- The Act calls and/or makes provision for a range of actions to be taken by iLembe District Municipality. These actions include:
 - Formulating a DMF for the district;
 - Formulating detailed DMPs, for each identified hazard, at local municipal level and by the iLembe District Municipality's different departments and organs of state, eventually culminating in one municipal DMP;
 - Establishing a DMC working in collaboration with local Municipalities and municipal structures;
 - Establishing a Disaster Management Advisory Forum and Volunteer Unit in collaboration with local Municipalities and municipal structures.
 - Declare a local state of disaster
- Figure 1 below depicts the relevant context and the relationship between the disaster management framework, disaster risk management plans and the disaster management centre.

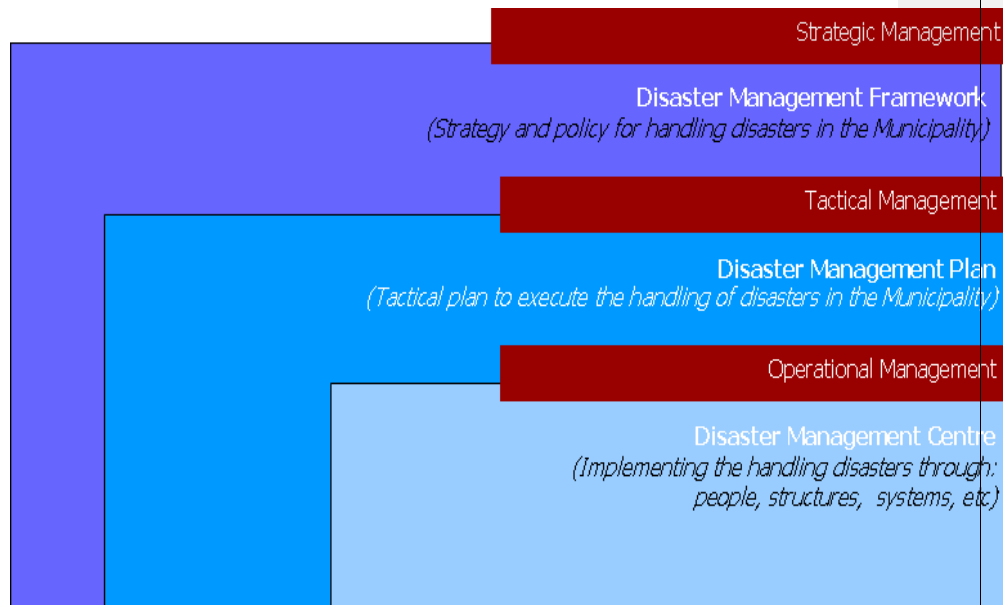


Figure 1-1 The relationship between the Disaster Management Framework, Disaster Risk Management Plans and the Disaster Management Centre

1.4 The Purpose of the Framework

- The provincial disaster management framework is the legal instrument specified by the Act to address needs for consistency across multiple interest groups, by providing 'a coherent, transparent and inclusive policy on disaster management appropriate for the province as a whole'.
- In this context, the KwaZulu – Natal provincial disaster management framework recognizes a diversity of risks and disasters that occur in the province, and gives priority to developmental measures that reduce the vulnerability of disaster-prone areas, communities and households.
- In keeping with international best practice, the provincial disaster management framework places explicit emphasis on the disaster risk reduction concepts of disaster prevention and mitigation as the core principles to guide disaster risk management in the province.
- The provincial disaster management framework also informs the subsequent development of municipal disaster management frameworks and plans, which are required to guide action in all spheres of government.
- According to section 42 of the Act, each district municipality must establish and implement a framework for disaster management in the municipality aimed at ensuring an integrated and uniform approach to disaster risk management in its area by iLembe District Municipality's local municipalities and their statutory functionaries. Municipal entities, non-governmental institutions involved in disaster risk

management in the area, as well as the private sector. iLembe District Municipality must establish its MDMF after consultation with the local municipalities in its area.

- This Framework is guided and consistent with the Act, the National and Provincial Disaster Management Frameworks (NDMF and PDMF).

1.5 Ndwedwe Disaster Management Strategic Objectives

- The formulation and implementation of a Disaster Management Framework forms part of the IDP review process of Ndwedwe Municipality. Ndwedwe Municipality has embarked on a Comprehensive Hazard and Risk Management (CHARM) Programme to develop a disaster management strategy with a focus on risk management. This process has been highlighted as the key development planning issue in the municipality. Ndwedwe Municipality's Integrated Development Plan (IDP 2011/2012) identifies the aims for the disaster management planning as follows:
 - To prevent or reduce the risk of disasters
 - To mitigate the severity or consequences of disasters
 - To prepare for emergencies
 - To respond rapidly and effectively to disasters
 - To implement post-disaster recovery and rehabilitation within the District by monitoring, integrating, coordinating and directing the disaster risk management activities of all role players and communities
 - For the MDMC to achieve compliance with the Act and NDMF
 - For the MDMC to effectively co-ordinate all disaster risk reduction, disaster response relief and rehabilitation efforts within the municipality.
- The 2012/2013 iLembe District Municipality's Integrated Development Plan contains an annexure regarding a disaster management status quo and gap analysis which sets out what was lacking in this sphere at the time, and is thus a useful indicator. The 2013/2014 and 2014/2015 iLembe District Municipality's Integrated Development Plans are under review currently, and provide a short summary of the status quo and SWOT Analysis of pertinent disaster risk management matters pertaining to the municipality.

2 Building Blocks of Comprehensive Disaster Risk Management

2.1 Introduction

- As indicated earlier on with reference to Section 28 and 42 of the Act, Provincial Governments, Metropolitan and District Municipalities must compile Disaster Management Frameworks, consistent with the relevant Provincial and National Disaster Management Frameworks and the Act. Section 42 (2) specifically regulates that a district municipality must establish its DMF after consultation with the local municipalities in its area.
- A Disaster Management Framework is a policy guideline and consists of the following:
 - It should guide and facilitate the development and implementation of disaster management as envisaged in the Act;
 - It should engender prevention and mitigation of disaster occurrences as core principles;
 - It should encapsulate qualitative and ongoing risk assessment
 - It should facilitate cross-functional and multi-disciplinary co-operation
 - ✓ between all disaster management role-players at iLembe District;
 - ✓ with disaster management entities in neighbouring areas;
 - ✓ with Provincial and National disaster management structures.
 - It should facilitate a joint code of practice;
 - It should:
 - ✓ Enumerate all role-players in disaster management, and;
 - ✓ Specify roles and responsibilities of all such role-players.
 - It should facilitate:
 - ✓ The involvement of government, semi-government and non-government bodies, traditional entities, technical experts and the private sector;
 - ✓ Community participation, education and awareness;
 - ✓ Public-private partnerships in disaster management effort.
 - Facilitate and engender disaster risk management capacity building within iLembe District;
 - Guide the development/procurement of a disaster management information system;
 - Take into account research and indigenous knowledge on disaster occurrences;
 - Provide a framework within which funding of all disaster management effort can take place;

➤ Provide key performance indicators in order for effective monitoring of disaster management effort, thus engendering a spirit of continuous improvement.

- The above should be assessed and made specifically applicable to an area's unique circumstances and requirements.
- It should be noted that a disaster management framework only acts as the policy guideline foundation for what needs to be addressed through the disaster risk management efforts at iLembe District and the disaster risk management plan specifies in more detail how these requirements and policies are implemented.
- The NDMF has been finalised and published in Government Gazette number 27534 of 29 April 2005. The NDMF guides the Provincial and Municipal Disaster Management Frameworks. The KZN Provincial Disaster Management Framework was published in the KwaZulu-Natal Extraordinary Provincial Gazette No. 10 in February 2011. The PDMF, as stipulated by the Act and the NDMF, forms the basis of this framework.
- The current and future aim of this document is not to unnecessarily duplicate the contents of the NDMF, the PDMF, or the Act. It should thus be read in conjunction with the NDMF, the PDMF and the Act. This document will therefore, unless required, not repeat all general or specific contents of the Act, NDMF or PDMF, but will strive to emphasise and apply the Act's, NDMF's and PDMF's contents to the specific requirements of iLembe District, where appropriate. For ease of reference as well as the sake of a more comprehensive overview of the domain of disaster management and the rights and duties connected therewith, the outline of the most relevant sections of the PDMF has been repeated herein. The Framework has been tested against the Municipal Disaster Management Evaluation Tool as prepared by the National Disaster Management Centre to ensure compliance.
- This document is the result of consultation with and inputs received by identified role players within iLembe District, including technical departments within iLembe District, local Municipalities, external role players, Municipal Councillors and the PDMC.
- In accordance with the PDMF all recommendations on issues relating to disaster risk management policy must be submitted to the KZN Disaster Management Centre (KZNDMC) for consideration. In order to allow recommendations to be properly considered, iLembe Disaster Management Centre must ensure that recommendations include details of all financial, constitutional, human resource and interdepartmental implications prior to the further processing of the recommendations.
- Based on the above, the NDMF sorted out four building blocks (Key Performance Areas / KPAs) of comprehensive disaster risk management framework interlinked with three supportive enablers. These enablers are required to achieve the objectives set out in each KPA. The PDMF is consistent herewith, and these principles thus also included in this framework.

Figure 2. below depict the building blocks of a balanced and comprehensive framework.

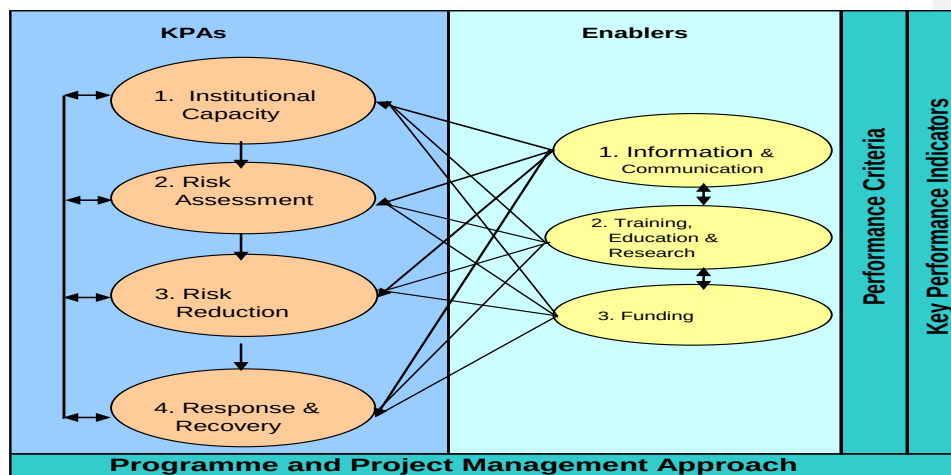


Figure 2.1 Building blocks of comprehensive disaster management framework

2.2 The structure of Ndwedwe Municipality Disaster Management Framework

- This framework, in line with the national and provincial frameworks, is comprised of the above four key performance areas (KPAs) and three supportive enablers required to achieve the objectives set out in the KPAs. The KPAs and enablers are both informed by specified objectives and, as required by the Act, include key performance indicators (KPI's) to guide and monitor progress. Each KPA and enabler will now be discussed as it pertains to what is required of Ndwedwe Municipality

2.3 The Disaster Management Framework and Implementation Strategy

- Ndwedwe municipality DMF is essential to ensure an efficient and effective disaster risk management effort in the Municipality. The DMF must also ensure that all role players at Ndwedwe municipality disaster risk management arena (including ILembe district, semi-government and non-government organisations, traditional entities and the private sector) work together in a coherent and co-ordinated manner to prevent and/or mitigate the occurrence of disasters.
- According to Section 19 of the Act, and the NDMF, reference should be made to the detailed set of guideline documents made available by the NDMC. These guidelines relate to most aspects relevant to disaster risk management planning and implementation for municipalities. Ndwedwe Disaster Management Centre should ensure that types of disasters and some possible causes of disasters within their jurisdiction are known to the communities and responsible officials and communities are well trained and equipped to respond, manage and mitigate such disasters. Awareness and mitigation can reduce disaster impacts. It is important to note that disasters are not only the result of natural events.
- Poverty is the single greatest contributor to disasters in urban and rural areas. For example, in rural areas the causes of disasters may be associated with poor land-use management, erosion,

deforestation, lack of employment and development, whilst in cities causes of disasters may include population density, inadequate planning, rapid growth etc. Therefore, Ndwedwe local Municipality should ensure that all role players in the municipality understand that disasters are a mix of both physical factors (such as intense rainfall resulting to floods) and other social and economic factors (such as poverty, population growth etc.). The causes of these disasters in a local setting, particularly their factors should be identified. This will allow communities to set up strategies, measures and programmes to respond and mitigate such disasters. The management of these disasters should include administrative decisions and operational activities that involve prevention, preparedness, response, recovery and rehabilitation at all levels. This includes non-governmental organisations (NGOs) and community-based organisations (CBOs).

- It is essential for Ndwedwe municipality to note that disaster management occurs in sequential stages (see Figure 2.2 below), meaning mitigation and preparedness precede a disaster. However, it also occurs simultaneously

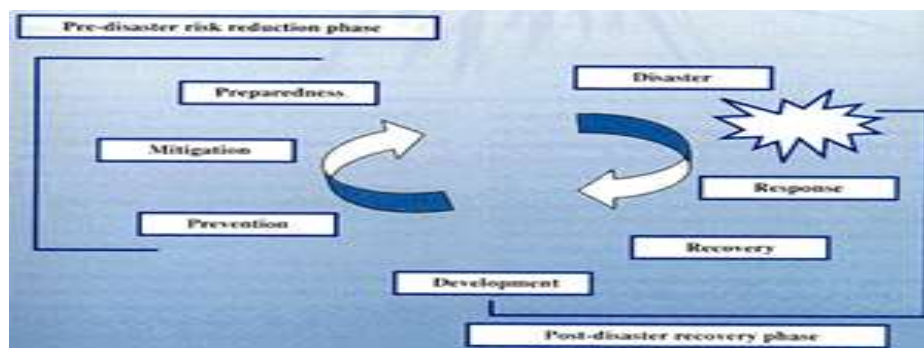


Figure 2-2 Disaster Management Phased Sequences of Action

- The disaster management guidelines for municipalities provide the expand-contract model (see Figure 2.3 below) illustrating how disaster management can be seen as a continuous process where disasters are managed in all parallel series of activities rather than in a sequence of actions. This approach stipulates clearly that disaster management includes a number of interventions and actions that may occur simultaneously and not always in phased succession.



Figure 2-3 Disaster Management Expand-Contract model

- The Framework is a living document that needs to be updated regularly as circumstances, policies and legislation change / are amended. The KPIs provided in this document must therefore be regarded as KPIs set to be met in accordance to the timeframes specified at iLembe District Disaster Risk Management Implementation Strategy, which need to be consultatively and collaboratively (with all relevant departments, institutions and role players) drafted as a matter of urgency, following approval of this DMF. The KPIs identified must be incorporated into the Municipal Integrated Development Plan (IDP) and budgetary priority needs to be provided for the required KPIs to be met.
- Ndwedwe municipality must ensure that disasters are not an add-on, chaotic set of activities during a disaster but rather involves:
 - Ensuring that development is well-planned and that poorly constructed houses are not built in flood-prone areas;
 - Conducting risk assessment of vulnerable areas;
 - Establishing a clear plan or strategy to deal with disasters;
 - Ensure that local government is constantly trained in disaster management;
 - Ensure that all role players understand their roles and responsibilities in disaster management;
 - Checks on fire-prevention equipment in buildings,
 - Volunteers are activated for each ward etc.
- This document is essentially part of the main policies of Ndwedwe Municipality and can be utilised, with the Disaster Risk Management Implementation Strategy as a mechanism by which Municipal Score Cards and the Council can be measured.

3 Key Performance Area 1: Integrated Institutional Capacity for Disaster Risk Management

Objective

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

Introduction

- KPA 1 establishes the requirements which will ensure the establishment of effective institutional arrangements at iLembe district for the integrated and coordinated implementation of disaster (risk) management policy and legislation; and which will give explicit priority to the application of principles of cooperative governance and place appropriate emphasis on the involvement of all stakeholders in disaster (risk) management in strengthening the capabilities of municipal organs of state; and which provide for cooperation with provinces and countries in the region and the international community for the purposes of disaster (risk) management..
- The Disaster Management Act, No. 57 of 2002, (hereafter referred to as 'the Act'), requires the establishment of a municipal management centre (MDMC) responsible for promoting integrated and co-ordinated municipal disaster risk management policy. In this instance, iLembe District Municipality is tasked with spearheading this function in its district, with the aim of doing so in close consultation with the local municipalities within its borders. The Act gives explicit priority to the application of the principle of co-operative governance for the purposes of disaster risk management and emphasizes the involvement of all stakeholders in strengthening the capabilities of national, provincial and municipal organs of state to reduce the likelihood and severity of disasters. This KPA focuses on the mechanisms that need to be established to give effect to these requirements.
- The Municipal Disaster Management Centre (MDMC) is the primary functional unit for disaster risk management in the district municipality. The focal point of all efforts in disaster risk management lies in the DMC. It must provide direction for implementation of disaster risk management policy and legislation and the integration and coordination of municipal disaster risk management activities and priorities. This is to ensure that national and provincial objectives are achieved. The centre is required to fulfil numerous important disaster risk management functions, namely planning, resource management, reporting, etc.
- The DMC must ensure that the necessary expertise in the field of disaster risk management, as envisaged by the Act, is gained or utilised throughout the disaster risk management implementation process.

Outline

- Section 3.1 discusses the establishment of effective arrangements for the development and adoption of integrated disaster risk management policy Ndwedwe local Municipality.

- Section 3.2 addresses the arrangements for the integrated direction and execution of disaster risk management policy at Ndwedwe local Municipality.
- Section 3.3 sets out the arrangements required for stakeholder participation and the engagement of technical advice in disaster risk management planning and operations Ndwedwe local Municipality.

3.1 Arrangements for the development and adoption of Integrated Disaster Risk Management Policy

3.1.1 Interdepartmental Committee on Disaster Risk Management

- Ndwedwe MDMC is responsible for establishing effective institutional arrangements for the development and approval of integrated disaster risk management policy. One way of achieving this is through interdepartmental structures the establishment of a municipal Committee on Disaster Management.
- According to s 44 of the Act, the MDMC must promote an integrated and co-ordinated approach to disaster management in the municipal area, with special emphasis on prevention and mitigation by departments and other internal units within the administration of the district municipality, and in the case of iLembe District Municipality, also by departments and other internal units within the administration of the local municipalities in its area. Such a district committee would provide a useful vehicle in assisting to achieve the above-mentioned.

3.1.2 Policy-making Process

- Mechanisms for processing policy making pertaining to municipality matters is to be established and applied.

3.1.3 Key Performance Indicators

- ✓ Mechanisms for processing policy making have been established and applied
- ✓

3.2 Arrangements for Integrated Direction and Implementation of Disaster Risk Management Policy

- The Act calls for the establishment of a local disaster management centre to achieve the objective of promoting an integrated and co-ordinated system of disaster risk management. This local DMC has to establish in consultation with the local municipalities within its district, and may operate in partnership with those local municipalities.

3.2.1 Location of the Disaster Risk Management Function and Planning

- Ndwedwe municipal disaster management centre must at all times maintain an unbiased overview and must have the authority, backed by political will, to fulfil its objectives and responsibilities with regard to the improvement of disaster risk management planning, preparedness, and response and recovery

across the various organs of state and sectoral role players with individual responsibilities for disaster risk management.

- The efficiency with which a disaster management centre will be able to perform these functions will depend on its ability to fast-track decision-making and minimize red tape.
- The Act gives the local municipality disaster management centre the necessary legislative authority to compel organs of state and other role players to make relevant information available. However, exercising such authority could prove extremely problematic from within a municipal line function department, which has a sectoral bias. It is therefore imperative that all municipal departments and role-players have mandated authority to participate at advisory forum level and that the framework makes provision for the successful integration of their respective plans and contingencies.
- If the local municipal disaster management centre is to achieve its objectives, they must be granted the necessary stature and must be able to operate in environments that are robust and seamless.
- The location of the disaster risk management function in the municipal sphere must be given careful consideration. Contrary to popular thinking in the past, disaster risk management is neither a line function nor an emergency service. Rather, it must be seen as a management function within the municipal area. If municipal disaster management centres (MDMCs) are to fulfil their responsibilities, they need to be located closest to the highest level of decision-making and should be able to cut across departments involved with disaster risk management.
- Currently, Ndwedwe disaster risk management function resides as a unit reporting to the Director: Community Services, and has been established on P100 Road, Ndwedwe Courthouse, 4342.
- The Disaster Management Amendment Act puts emphasis on the location of the Disaster Management Centre.
- To fulfil its coordination and strategic role for effective reduction of risk of disaster within that particular sphere of government.

3.2.2 KwaZulu-Natal Provincial Disaster Management Centre

- The PDMC is the primary functional unit for disaster risk management in the province. A key responsibility of the PDMC is to provide support to the NDMC and the metropolitan and district disaster management centres in the province. It must provide the link between national objectives and provincial and municipal disaster risk management activities and priorities. The PDMC is to serve as repository for all Disaster Risk Management issues within the province and will ensure the standardization of the function including reporting, training and data basing of incidents.
- In the event of a significant event or disaster occurring or threatening to occur, the PDMC must provide support and guidance to the relevant Municipal Disaster Management Centres and Provincial departments. In addition, it must mobilize and co-ordinate all provincial infrastructure and resources to support municipal disaster risk management resources.

3.2.2.1 Key Responsibilities of the PDMC

- The PDMC must maintain a strategic overview of disaster risk management projects and programmes in the province.

- Key responsibilities are listed here below as applicable in the province, and are further expanded on in the KZN PDMF:

- Disaster risk reduction
- Integrated development planning
- Capacity building, education, training and research
- Information management and communication

3.2.2.2 Monitoring and Evaluation

- The PDMC must establish mechanisms to monitor, measure and evaluate all disaster risk management plans and activities by provincial and municipal organs of state. Copies of review and evaluation reports must be submitted to the NDMC.

3.2.3 Ndwedwe Municipal Disaster Management Centre

- The council of each municipality must establish institutional capacity for disaster risk management in its area. Such arrangements must be consistent with District and provincial arrangements and must provide the appropriate mechanisms to allow for the application of co-operative governance to facilitate Interdepartmental and municipal interdepartmental relations as well as community participation for the purposes of disaster risk management.
- Ndwedwe MDMC is the primary functional unit for disaster risk management. It must provide direction for the implementation of disaster risk management policy and legislation and the integration and co-ordination of municipal disaster risk management activities and priorities in order to ensure that District and provincial objectives are achieved. In addition, a key function of the MDMC is to provide support to the NDMC and the relevant PDMC.
- In the event of a disaster occurring or threatening to occur, iLembe MDMC must provide support and guidance to the relevant local municipalities. Furthermore, satellite structures, if and as required, must be further established, sufficiently equipped as a matter of urgency.
- Furthermore, it must mobilise municipal infrastructure and all other available resources to support local disaster risk management resources. Institutional arrangements for disaster risk management in the district municipality must be consistent with the national disaster management framework and the applicable provincial disaster management framework.
- All proposed disaster risk assessments planned by local municipalities must be reviewed by the MDMC. It is essential to note that the National Disaster Management Centre (NDMC) has provided an evaluation tool for use by municipal organs in order to determine the status of their respective Disaster Management Programmes in terms of the requirements of the Act and the KPIs as reflected in the NDMF. The Disaster Management programmes should be tested against this tool to ensure compliance at all levels.
- The main disaster risk management business processes of the Municipal DMC are summarised in the table below, with reference to the specific requirements of the Act.

• ELEMENTS	• SECTIONS IN THE ACT
• Communication with all disaster risk management role-players	• 46(1)(a)
• A DMIS	• The detailed requirements of which are not specified in the Act but addressed in the NDMF
• Information gathering, contributions to the central repository	• 46(1)(b)
• Disaster risk management plans and strategies	• 46(1)(c)
• Prevention and mitigation	• 47
• Monitoring and Quality Assessment on DM Plans	• 48
• Actions in the case of a disaster	• 49
• Advice and guidance	• -
• Recording of disasters	• -
• Annual reporting	• 50

Table 3-1 DRM Business Processes of the Municipal DMC

3.2.3.1 Key Responsibilities of the MDMC

- Ndwedwe DMC must:
 - Establish and maintain institutional arrangements that will enable the implementation of the Act
 - Implement measures to develop progressive risk profiles to inform the IDP processes of municipalities for the purposes of disaster risk reduction and to determine the effectiveness of specific disaster risk reduction programmes and projects undertaken
 - Facilitate the development, implementation and maintenance of disaster risk reduction strategies that will result in resilient areas, communities, households and individuals
 - Monitor the integration of disaster risk reduction initiatives with development plans
 - Develop and implement a comprehensive information management and communication system that is consistent with arrangements established by the NDMC, PDMCs and DMC
 - Facilitate the development of response and recovery plans to ensure rapid and effective response to disasters that are occurring or are threatening to occur and to mitigate the effects of those disasters that could not have been prevented or predicted
 - Submit copies of its disaster risk management plans to the District DMC, the PDMC, neighbouring disaster management centres and, where applicable, disaster risk management entities in neighbouring countries

- Develop and implement mechanisms for creating public awareness to inculcate a culture of risk avoidance in the municipality.
- Facilitate and promote disaster risk management education, training and research in the municipality.
- Implement and maintain dynamic disaster risk management monitoring, evaluation and improvement programmes in the municipality.
- Measure performance to evaluate effectiveness of disaster risk management and risk reduction initiatives and submit copies of evaluation reports to district.
- Monitor compliance in the local municipal area with the key performance indicators outlined in the disaster management framework.

3.2.3.2 Integrated Development Planning

- In view of the inextricable relationship between disaster and development, it is imperative that the heads of MDMCs and those individuals assigned responsibility for disaster risk management in local municipalities serve on the relevant IDP structures.
- The Municipal System Act No. 32 of 2000 and Disaster Management Act No. 57 of 2002 require that disaster management be an integral part of the municipal Integrated Development Plan (IDP). In terms of Section 26 of the MSA, a municipality is required to prepare a Disaster Management Plan (DMP) as part of their IDP.
- Section 34 of Disaster Management Act No. 57 of 2002 requires the Provincial Disaster Management Centre (PDMC) to monitor the progress with the preparation and regular updating of municipal disaster management plans and strategies. The National and Provincial Disaster Risk Management Frameworks oblige the PDMC to ensure the inclusion of Disaster Management Plans in the municipal Integrated Development Plan (IDP) processes and also to ensure that IDP budgets make provision for disaster risk management.

3.2.3.3 Operational Capacity of the MDMC

- Arrangements must be made for establishing the operational capacity of Ndwedwe disaster management centre to enable the implementation of the Act in the municipal sphere. These arrangements must be consistent with those of the NDMC and PDMCs.
- It is recommended that all municipal departments within the district municipality and all local municipalities identify appropriately qualified staff in their employ to serve as their disaster risk management focal or nodal points.
- Disaster risk management responsibilities must be included in the job descriptions of all key personnel identified in municipal disaster management frameworks.

3.2.3.4 Infrastructural Requirements

- The infrastructural arrangements of MDMCs must be conducted in accordance with national guidelines for the minimum infrastructural requirements for disaster management centres developed by the NDMC.

3.2.3.5 The Head of the MDMC

Due to the importance of the functions of the Head of the DMC (HDMC), with particular reference to this position's requirements in the Act, this position must be incorporated Ndwedwe local Municipal organogram and the position must be located at senior managerial level, with direct access to the Municipal Manager, Head of the Portfolio Committee and Mayor. The implication of this is that the disaster risk management function (DMC) at Ndwedwe Local Municipality (and its organogram) must be separately specified and ideally located in the office of the Mayor or at least the Municipal Manager.

- Key Responsibilities of a Local Municipal Emergency Centre
- Local government has first-hand knowledge of its community's social, economic, infrastructure, and environmental needs, helping them to provide support when disaster strikes. Section 43 of the Amendment Act was hereby amended to put emphasis on the following roles of local municipalities.
- A local municipality must establish capacity for the development and co-ordination of a disaster management plan and the implementation of a disaster management function for the municipality which forms part of the disaster management plan as approved by the relevant municipal disaster management centre.
- A local municipality may establish a disaster management centre in consultation with the relevant district municipality in accordance with the terms set out in a service level agreement between the two parties, in alignment with national norms and standards.
- Municipalities must identify of local municipal champions within each municipality and organise regional training of local municipal champions.
- conduct a disaster risk assessment for its municipal area;
- identify and map risks, areas, ecosystems, communities and households that are exposed or vulnerable to physical and human-induced threats.

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The following are the typical roles and responsibilities of the HDMC:

- Overall management of the centre in terms of human resources, facilities, planning, operational and financial matters;
- Ensure operation of the centre is aligned to Disaster Management Framework and Plan stipulations;
- Ensure disaster management Plans are fully implemented;
- Oversee and promote liaison and coordination with National/Provincial/neighbouring municipal disaster management structures;
- Oversee liaison and coordination with all role players in the municipal environment;
- Making recommendations to Council regarding the declaration of a local state of disaster;
- Lead Joint Operation Centre (JOC) in the event of escalated events/disasters;
- Overseeing the promotion of community awareness in line with the disaster management Framework awareness strategy;
- Attend provincial and municipal disaster management forums and manage iLembe District DMAF;
- Ensure the updating of all relevant information repositories;

- Ensure that performance conforms to key performance indices (KPI);
- Oversee, guide and promote the activities of the Operations and Planning arm, namely:
 - Development of operational capability and of satellite Centres;
 - Support to local Municipalities and other role-players;
 - Assessment of ensuing or threatening disasters;
 - Declaration of disaster status;
 - Appeals to National, Provincial and neighbouring municipal disaster management entities in terms of assistance if and when required;
 - Development and maintenance of risk reduction strategies;
 - Development and maintenance of disaster plans;
 - Management of Control Centre Operations
 - Establishment and maintaining of information repositories;
 - Storage of information concerning disasters, impending disasters and disaster management in general;
 - Advisory and consultative activities on issues concerning disasters and disaster management in the area.
- Oversee, guide and promote the activities relating to capacity building, communication, training and awareness, namely:
 - Determining training and awareness requirements;
 - Identifying target groups for training, capacity-building and awareness;
 - Planning and implementation of training and awareness plans;
 - Forging and sustaining partnerships with multi-sectoral role-players;
 - Ensure all education, awareness, training and communications efforts are in line with disaster management legislation and frameworks (national, provincial and municipal);
 - Ensure all operational and planning efforts are in line with disaster management legislation and frameworks (national, provincial and municipal);
 - Report to the Senior Manager: Community Services on all issues surrounding Operations and Planning
 - Monitor and evaluate performance in terms of Key Performance Indicators
- ✓ Pre-requisites for the position
 - Proven experience at managerial level;
 - Sound knowledge of disaster management, human resources management, project management, etc.;
 - Disaster management training;
 - Excellent communication, administrative and interpersonal skills;
 - Ability to work effectively under pressure and meet deadlines;

- Knowledge and application of the Act and other relevant legislation.

3.2.3.6 Key Responsibilities of Organs of State

- Disaster risk management responsibilities must be integrated into the routine activities of the various sectors and disciplines within the relevant organs of state and their substructures, (Section 7 of the Act).
- In terms of section 25 of the Act, each organ of state must determine its role and responsibilities in relation to disaster risk management and assess its capacity to adhere to the requirements of the Act, particularly with reference to setting priorities for disaster risk reduction initiatives and for response and recovery. Such capacity must be supplemented, where necessary, by collateral support and the sharing of resources among organs of state, and by harnessing the capacity of the private sector and non-governmental organizations (NGOs). The parameters of such assistance must be clearly defined in memoranda of understanding.
- Each organ of state must appoint an individual who will act as its focal or nodal point for disaster risk management and who will also be its representative on the DMAF. This individual will be responsible for:
 - ❖ • Facilitating and coordinating the relevant department's disaster risk management arrangements and planning for disaster risk reduction, response and recovery;
 - ❖ • Ensuring that such arrangements and plans are consistent with the national disaster management framework;
 - ❖ • Facilitating the alignment of the arrangements and plans with those of other organs of state and other institutional role players;
 - ❖ • Integrating disaster risk management planning processes with national and provincial initiatives and Integrated Development Plans (IDPs)
 - ❖ • Regularly reviewing and updating disaster risk management plans;
 - ❖ • Ensuring that requests for information from the DMC are responded to in terms of section 18 of the Act; and
 - ❖ • Ensuring that cost of repairing or replacing public sector infrastructure is borne by the organ of state as per responsibility for the maintenance during the post-disaster recovery and rehabilitation.

3.2.3.7 Key Responsibilities of traditional leaders

- The National House of Traditional leaders is a statutory body established in terms of the National House of Traditional Leaders Act, 2009 (Act no. 22 of 2009). The Constitution of the Republic of South Africa also recognizes the Institution of Traditional leadership according to custom and customary law. After studying the Disaster Management Amendment Act, the National House of Traditional leaders has deliberated upon it and agreed that there is a need for the Disaster Management Act to be reviewed in order to introduce the clear role of traditional leaders to reduce the vulnerability of rural communities to disasters. The traditional leaders must play the following role in disaster management -:

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- Make sure that there are representation of traditional leaders in national, provincial and municipal disaster management advisory forums and coordinate their actions on disaster management matters which will be implemented locally;
- Traditional Councils should be one of the Institutional role players that should be involved in disaster management, especially for local traditional communities which are vulnerable to disasters;
- They must participate in matters relating to disaster management in the province especially in rural areas where there are high risk associated with climate change;
- Traditional leaders must be involved in the processes of assisting in the reporting on information regarding occurrences that may lead to disasters in rural areas that they are residing;
- They must make sure that local municipalities have a proper land use planning and socio-economic development in rural areas to reduce the vulnerability of poor people to disasters;
- Traditional leaders must be involved in the development which will create conditions in which the vulnerability of communities or infrastructure is reduced when disaster strikes;
- Traditional leaders should work together with local municipalities in order to reduce impoverishment which will assist in reducing disaster victims; and
- The traditional leaders must ensure that disaster management centres are established in the rural areas and work with the local municipalities to improve capacity for the development and coordination of disaster management plans.

3.2.3.8 Establishment of Fire and Rescue Services

- Fires have inflicted a heavy cost in human, infrastructure, and damage to the environment in a manner capable of undermining socio-economic development. The risk of fires in the country is influenced by a variety of socio-economic factors notably the rising levels of urbanisation which often results in informal settlements comprised of shacks built by highly combustible materials (frequently wood and plastic) and in close proximity to each other which heighten the risk of fires in these areas. The use of open fires for cooking and lighting in most areas without electricity, lack of access by fire services for fire-fighting during emergencies and the increasing rural-urban interface all contribute in increased fire risk and losses as a result of fires. The use of thatch for roofing in traditional dwellings and the close proximity of these structures to fire-prone vegetation especially in rural areas also increase the risk of fires.
- Municipalities are required to ensure effective provision of fire and rescue services to communities in line with the provisions of the Fire Brigade Services Act, 1987(Act No. 99 of 1987). While this function is a municipal function in terms of the Constitution,1996, the National and the Provincial government has a support and oversight role.

3.2.4 Key Performance Indicators

- ✓ The job description and key performance indicators for the position of the Head of the Municipal Disaster (Risk) Management Centre has been developed;
- ✓ The Head of the Centre has yet not been appointed;
- ✓ The MDM unit has been established and its operate;

- ✓ Disaster (Risk) Management focal/nodal points have been identified by each provincial organ of state and responsibilities have been assigned;
- ✓ Roles and responsibilities of district and local organs of state for disaster (risk) management have been identified, assigned, are included in the job descriptions of key personnel and are being applied effectively.

3.3 Capacity Building

- Ndwedwe Municipality currently consists of a limited capacity in its local Municipalities to fulfil all functions, specifically referring to more specialised functions such as detailed risk assessments as required by the Act. Capacity, in the form of skills and knowledge transfer, must be built in the district.
- In terms of section 1.4.3 of the NDMF provincial organs of state and municipalities must establish whether they have the capacity to identify, plan and meet their responsibilities for risk reduction and disaster response and recovery in their functional area. Where necessary, they must enter into mutual assistance agreements and memoranda of understanding with neighbouring authorities, authorities in other spheres, other organs of state, the private sector, NGOs and communities. Such mutual assistance agreements and memoranda of understanding are legal documents which must be in accordance with the national guidelines on mutual assistance agreements developed by the NDMC. These processes must be facilitated by the DMC.

3.3.1 Key Performance Indicators

- Capacity of all relevant organs of state in the municipality to fulfil its functions in terms of the Act assessed by the DMC.
- Capacity built in the municipality and skills transferred to all relevant role players, through an integrated communication and awareness strategy.

3.3.2 Integrated reporting, monitoring and evaluation

- Section 48 of the Act requires that the DMC must monitor progress, prevention, mitigation and response and compliance with the Act and measure performance in this regard.
- Taking into consideration the requirements of the NDMF, the following approach must be followed in this regard:
 - Taking cognisance of the KPIs defined through this document, investigating requirements and creating a formal disaster risk management performance management process for Ndwedwe local municipality. This will include development of a series of checklists to assist with future monitoring and evaluation processes and a procedures guideline document to be used by future DMC personnel.
 - Reviewing the results of disasters and major incidents in areas where these have occurred and developing contingency arrangements in the interim from lessons learned.
 - Conducting rehearsal and simulation exercises.
 - Constant progress reporting to the district, as may be required and monthly reports to the Council.

3.3.2.1 Key Performance Indicators

- A formal disaster risk management performance management process created.
- Reports submitted as specified to the district and Council.

3.4 Arrangements for Stakeholder Participation and the Engagement of Technical Advice in Disaster Risk Management Planning and Operations

3.4.1 Disaster Management Advisory Forums

- ❖ The Act calls for the active participation of all stakeholders, including the private sector, NGOs, technical experts, communities'/ward committees, traditional leaders and volunteers, in disaster risk management planning and operations. Specific arrangements must be implemented to ensure the integration of stakeholder participation, to harness technical advice and to adopt a holistic and organized approach to the implementation of policy and legislation.

3.4.2 Provincial Disaster Management Advisory Forum

- ✓ Although the establishment of provincial Interdepartmental committees and advisory forums for the purposes of disaster risk management is not a legal obligation, it is difficult to envisage how the province would be able to effect the implementation of the Act and remain consistent with the requirements of the national disaster management framework in the absence of such structures. Accordingly, it is strongly recommended that the province establish these mechanisms.
- ✓ Further information on the provincial disaster management advisory forum may be consulted in the KZN DMF.

3.4.3 Municipal Disaster Management Advisory Forums

- ✓ In terms of disaster risk reduction, the local sphere of government is the first line of defence and, in the event of a disaster occurring or threatening to occur, the community is in reality the first responder. The primary responsibility for the co-ordination and management of local disasters rests with the local sphere. Thorough disaster risk management planning and effective co-ordination in the district are key to saving lives and limiting damage to property, infrastructure and the environment. They are also necessary for the optimal utilization of resources.
- ✓ However, the Act leaves it to the discretion of a district municipality to constitute formal structures, such as a municipal disaster management advisory forum, for the purposes of external stakeholder participation. A municipality is also not obliged to establish specific internal structures for disaster risk management.
- ✓ In this regard, it is difficult to envisage how a municipality would apply the principles of co-operative governance, integrated and co-ordinated disaster risk management and stakeholder participation at the local level in the absence of appropriate structures and without the participation of key personnel from various departments within a municipality. It is equally difficult to envisage how disaster risk

management planning and co-ordination would be affected without the appropriate institutional arrangements.

- ✓ Apart from internal arrangements to allow for interdepartmental co-operation within the municipal sphere, the ideal mechanism for dealing with disaster risk management planning and co-ordination would be the district municipal disaster management advisory forum.
- ✓ The following are the key functions of this forum:
 - i) Give advice and make recommendations on disaster-related issues and disaster risk management in the local municipalities;
 - ii) Contribute to disaster risk management planning and co-ordination in the district;
 - iii) Establish joint standards of practice for the district;
 - iv) Implement response management systems
 - v) Gather critical information about the local municipality's capacity to assist in disasters and to access resources;
 - vi) Assist with public awareness, training and capacity building within municipality
- ✓ Ndwedwe Disaster Management Centre has a functional Local Disaster Management Forum which meets quarterly or as and when there is a need.
- ✓ Disaster risk management committees:
 - ❖ Ndwedwe has a functional Portfolio Committee where issues pertaining to Disaster Management are discussed on a monthly basis. In addition, all four local municipalities at iLembe District have since established their Disaster Management Advisory Forums. One of the key challenges in local municipalities is to ensure that such forum sit on a quarterly basis.
- ✓ Alternative structures:
 - ❖ In the event that the municipality elects not to establish the aforementioned arrangements, appropriate alternative existing structures must be identified for the purposes of ensuring that the principles of co-operative governance and community participation are applied within the context of the Act and in accordance with the national disaster management framework.

3.4.4 The Disaster Management Advisory Forum

- The purpose of the forum is to consult and co-ordinate actions pertaining to matters relating to disaster risk management in the Municipality.
- The DMAF will be guided by the Act and the National Framework with regard to its functionality, but its operational functioning, including its business mechanisms, templates, sub-functioning, allocation of responsibilities and co-ordination must be jointly discussed and established by its members, under the guidance of the DMC.
- The DMAF must facilitate integrated and coordinated planning by providing a forum for collaboration on joint cross-departmental plans and programmes aimed at disaster risk reduction and other relevant activities associated with disaster risk management as required by section 38 of the Disaster Management Act No 57 of 2002. It must support the DMC and assist with supervising the preparation, coordination, monitoring and review of disaster plans and their integration into IDP processes.

- In the context of emergency preparedness, project teams must be convened to address contingency plans for priority natural and human-induced risks, triggered by hazards including floods, drought, fires, epidemics, transportation accidents, oil spills, hazardous material spills and crowd-related events. These contingency plans must include strategies and procedures to ensure the implementation of an incident management system that must include the establishment of joint standards of practice and interdisciplinary cooperation for rapid and effective disaster response capabilities. Such plans must also be subject to consultation with the DMAF.
- The chairperson of the DMAF (Head of the DMC) may appoint special task teams comprising members of the forum with the relevant expertise for specific projects for the purposes of risk reduction, emergency preparedness and response and recovery planning and operations. The DMAF may convene project teams to address specific joint risk management priorities, including post-disaster projects.
- Teams so convened will act as subcommittees of the DMAF for the duration of their task and will determine their terms of reference and outcomes in consultation with the Head of the DMC and the DMAF. Where required, they will also plan and manage multidisciplinary projects. Project teams must report back to the DMAF.
- The forum must meet as and when required, but at least quarterly.

3.4.4.1 Key Performance indicators

a) The following organisations specifically invited / co-opted as members of the forum:

- The Head and other required officials in the DMC;
- Organised business in the municipality;
- Organised labour in the municipality;
- Organised agriculture in the municipality;
- Traditional leaders' representative(s);
- The insurance industry;
- Religious and welfare organisations in the municipality,
- Institutions of higher education in the municipality;
- Private sector partners.

b) The Mayor specifically designated each line/functional department's representative;

c) The Mayor specifically designated the non-governmental and organised institutions' representatives as members of the forum;

e) The forum ensured that planning for the forum's functions and actions are documented and KPIs, in line with this document's KPIs, are set and monitored;

e) Specific roles and responsibilities and possible portfolios agreed upon and awarded to members of the forum.

3.4.5 Disaster Risk Management Planning

- The Head of the MDMC is primarily responsible for ensuring that disaster risk management plans are developed and implemented in a uniform and integrated manner. However, the Act places explicit responsibility on organs of state (including municipalities in the area) and other institutional role players involved in disaster risk management for the development and implementation of disaster risk management plans.
- Planning for disasters and disaster risk management is a participative process involving a multitude of role players and stakeholders from across government sectors, disciplines and spheres, the private sector, NGOs, CBOs and communities. It would therefore be necessary to cluster stakeholders into planning groups relevant to the various activities associated with disasters and disaster risk management, for example, development of disaster risk reduction strategies, hazard-specific contingency plans and operational plans, and guidelines for disaster response and recovery activities.
- At the start of the planning process, primary responsibility must be allocated to an entity (primary entity) for each of the activities mentioned above. Responsibilities must also be allocated to those entities (support entities) that play a supportive role in the various activities identified in the planning process.
- The primary entity is the custodian of the relevant disaster risk management plans and is responsible for co-coordinating the development of such plans and submitting them to the MDMC. This entity is also responsible for ensuring that plans remain relevant and are aligned with changes and new developments.

3.4.6 Community Participation

- The community is at the coalface of disaster risk management. It is from the conditions of risk that exist in communities that all other disaster risk management activities evolve.
- It is in the community where all the operational activities related to disaster risk management take place. All disaster risk reduction planning, the development of projects and programmes and the allocation of responsibilities must be founded on the needs and priorities of communities. Disaster risk reduction is a community-driven process.
- Municipalities must involve local communities in the development of disaster risk profiles; facilitate understanding of the concepts and values of disaster risk reduction in communities; prioritize projects aimed at risk reduction in their IDPs; and facilitate community participation in training, preparedness planning and awareness programmes.
- In the case of specific disaster risk reduction projects, project teams must include community representation. Indigenous knowledge and input from traditional leaders must be included in all of the activities associated with ensuring informed, alert and self-reliant communities. Capacity building, education, training and research are therefore fundamental to this end.
- When disasters occur or are threatening to occur, the initial response to the event comes from those directly affected by it. It is only thereafter that their actions are supported by the various response and resource agencies responsible for dealing with the disaster. In this regard, broad community participation in disaster risk management, as well as the enrolment of individuals as volunteers, must be actively promoted and encouraged, particularly in communities at risk.

- The establishment of ward disaster risk management committees or forums is critical too. These forums must provide leadership, ensure community ownership of and participation in disaster risk management and awareness programmes, and facilitate preparedness in the local sphere. Should a municipality elect not to establish such ward structures, then appropriate existing structures must be identified and tasked with disaster risk management responsibilities for the ward.
- Every effort should be made to establish units of volunteers trained in special skills in communities at risk, in accordance with the national regulations for the establishment of such units.

3.4.7 Mainstreaming of Disaster Management to Community Structures

- In terms of Municipal Structures Act 117 of 1998, each municipal ward must have a Ward Councillors, who then becomes a development champion of that particular ward. These Ward Councillors must work with the ward committee to deal with the development and community needs. Disaster Management must be mainstreamed to various community structures that exist at local level to create awareness and empower communities at risk to prevent and mitigate disaster impact in their local areas, such as:
 - ✓ Ward Councillors;
 - ✓ Ward Committees;
 - ✓ Community Development Workers (CDWs);
 - ✓ Traditional Leadership (Amakhosi, Izinduna);
 - ✓ Youth Ambassadors;
 - ✓ Community Care Givers (CCGs);
 - ✓ Social Crime Prevention Volunteers (SAPS, Community Policing Forums); and
 - ✓ Operation Sukuma Sakhe (OSS)/ (War Rooms).
- The stakeholders must be empowered and encouraged to take part in disaster risk management activities that involve their specific wards through their local disaster management system in the municipality.
- The establishment of ward disaster risk management committees or forums is critical too. These forums must provide leadership, ensure community ownership of and participation in disaster risk management and awareness programs, and facilitate preparedness in the local sphere. Should a municipality elect not to establish such ward structures, then appropriate existing structures must be identified and tasked with disaster risk management responsibilities for the ward.

3.5 Participation of volunteers in Disaster Risk Management

- In terms of section 58 of the Act, Local Municipalities are not excluded from establishing a unit of volunteers. Ndwedwe must formally establish such a unit to participate in disaster management and ensure that it can function effectively throughout the municipality. Subject to Regulation 2 of the Disaster Management Regulations as published in the Government Gazette No. 27991, Vol. 483, Ndwedwe Local Municipality must ensure that the following has been considered when establishing a volunteer unit:

- A needs analysis has been undertaken, involving all role players.
- The size of the unit must be determined and different categories of volunteer units established.
- The purpose of the volunteer unit must be clearly defined.
- The needs analysis must be re-assessed annually,
- The requirements and processes relating to volunteers must be in accordance with the Act, its regulations and the NDMF. The head of the DMC must appoint members of the volunteer unit. The National Regulations pertaining volunteers must be utilised as the basis for management of the unit.
- In order to maintain an inclusive approach to the participation of volunteers in disaster risk management, volunteers are classified into the three categories discussed below.

3.5.1 Units of Volunteers

- In addition to the general provisions in the Act for the recruitment, training and participation of volunteers in disaster risk management in all three spheres of government, Chapter 7 of the Act provides a metropolitan and district municipality with the option of establishing a unit of volunteers to participate in disaster risk management in the municipality.
- This category provides for the participation and registration of individuals (or groups who wish to become more actively involved in an organized structure for disaster risk management volunteers in the municipality. It includes individuals, groups or organizations that already have specialized skills, as well as those who undertake to be trained in specific skills in order to participate in this category.

3.5.2 General Volunteers

- In addition to the provisions relating to the option in Chapter 7 of the Act for municipalities to establish a unit of volunteers, sections 15(1)(g), 30(1)(g) and 44(1)(g) require disaster management centres to promote the recruitment, training and participation of volunteers in disaster risk management.
- This allows the municipalities, especially those that choose not to establish a unit of volunteers, to recruit individuals (or groups of individuals) who are prepared to assist in the event of a disaster but do not want to participate in an organized structure such as a unit or serve as active volunteers on an ongoing basis. This category provides a general pool of volunteers who can be drawn on by the municipality to perform a variety of functions that may or may not require specialized skills. Volunteers in this category must be registered and must meet minimum criteria set down in accordance with the national standard guideline.

3.5.2.1 3.5.3 Spontaneous Volunteers

- The Act recognizes that people will always respond spontaneously in emergencies. Such humanitarian response should not be discouraged. However, the municipality must take cognizance of the problems and complications, including the possibility of injury and damage to property that may result from the spontaneous, uncontrolled and uncoordinated actions of volunteers. Municipalities must take this matter into consideration and must make provision for it in their planning.

3.5.2.2 Key Performance Indicators

- Ndwedwe MDMAF has been formally constituted and operates effectively.
- Municipal disaster management forums or similar representative consultative forums have been established and are operating effectively.
- Mechanisms for stakeholder participation in disaster risk management planning and operations have been established and are operating effectively.
- Primary responsibility for the facilitation and co-ordination of disaster risk management planning and implementation has been assigned.
- Entities playing a supportive role in facilitating and co-ordinating disaster risk management planning and implementation have been identified and assigned secondary responsibilities.
- Heads of disaster management centres have full participation in integrated development planning processes and structures.
- Ward structures have been identified and tasked with responsibility for disaster risk management.
- Volunteer has been trained, in the process of activation.
- A current register of disaster risk management stakeholders and volunteers has been established and is maintained.
- Volunteers trained.
- Detailed roles and responsibilities of all role players and stakeholders incorporated into DMPs, SOPs and FOGs

4 Key Performance Area 2: Disaster Risk Assessment

Objective

- To establish a uniform approach to assessing and monitoring disaster risks that will inform disaster risk management planning and disaster risk reduction undertaken by organs of state and other role players.

Introduction

- KPA 2 outlines the requirements for implementing disaster risk assessment and monitoring by organs of state within all spheres of government. Furthermore, it shows that the outcomes of disaster risk assessments directly inform the development of disaster risk management plans. Planning for disaster risk management is discussed more fully in KPA 3.

Outline

- Section 4.1 introduces the process involved in conducting disaster risk assessments to inform disaster risk management and risk reduction policies, planning and programming.
- Section 4.2 addresses processes for generating an Indicative Municipality Disaster Risk Profile.
- Section 4.3 describes requirements for monitoring, updating and disseminating disaster risk information.
- Section 4.4 looks at measures to ensure quality control in disaster risk assessment and monitoring.
-

4.1 Disaster Risk Assessment and Risk Reduction Planning

- Disaster risk assessment is the first step in planning an effective disaster risk reduction programme. It examines the likelihood and outcomes of expected disaster events. This would include investigating related hazards and conditions of vulnerability that increase the chances of loss.
- Disaster risk assessment planning requires identification of key stakeholders, as well as consultation with them about the design and/or implementation of the assessment and the interpretation of the findings
- Disaster risk assessments, supported with good monitoring systems, are essential for:
 - Effective disaster risk management and risk reduction planning.
 - Sustainable development planning.
 - Identifying potential threats that can undermine a development's success and sustainability, making it possible for appropriate disaster risk reduction measures to be incorporated into the project design prior to implementation.

- Shaping focused disaster risk reduction programmes for specific threats.
- Identifying high-risk periods and conditions.
- Activating preparedness and response actions.

4.2 Situations Requiring a Disaster Risk Assessment

- Disaster risk assessments must be undertaken to:
 - Anticipate and plan for known hazards or disasters to prevent losses and limit endangering impacts
 - Ensure that development initiatives maximize their vulnerability reduction outcomes.

4.3 Undertaking Disaster Risk Assessments for specific known Hazards or Disasters

- A disaster risk assessment is required at district level to guide disaster risk reduction efforts for specific known hazards or disasters that:
 - Due to their scale and magnitude are likely to affect more than one municipal area in the district.
 - Are of recurrent high and medium magnitude, occur in most municipalities in the district and may require district support and/or intervention

4.4 Maximizing Vulnerability Reduction Outcomes

- With respect to the implementation of the Act, a disaster risk assessment must be undertaken when one or more of the vulnerability reduction criteria listed in Table 4.1 are considered priorities in any nationally initiated project or programme, and thus serve as guidelines for municipal programmes as far as is relevant and possible.

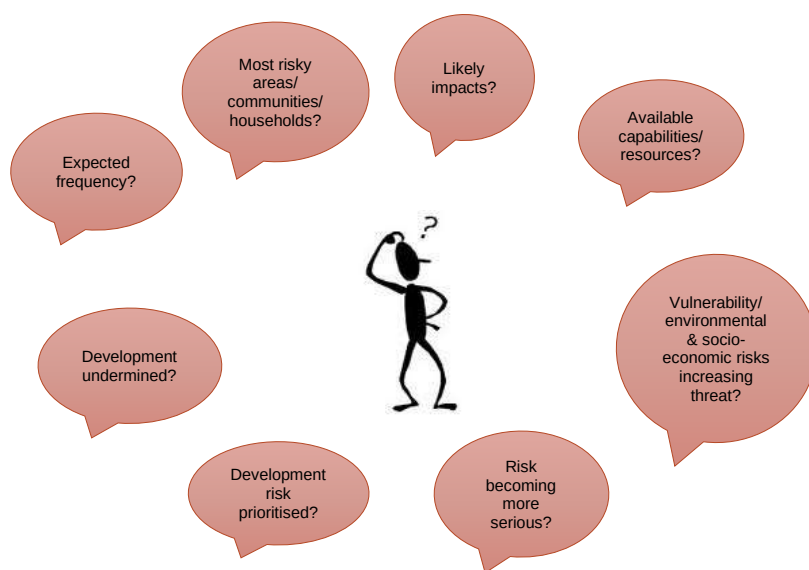
Key vulnerability criteria To achieve:	Examples of where disaster risk assessments must be done
Increased <i>sustainability</i> of a development project or programme to support vulnerable households	As part of the planning for an infrastructural development, for example, assessing the likelihood of weather, flooding, subsidence and other threats damaging the structure, so that these can be factored into the construction specifications.
<i>Reduction of potential harmful consequences</i> associated with industrial, commercial or other developments	As part of environmental impact assessments for large-scale developments, including industrial, commercial and other enterprises that may increase disaster risk.
Increased <i>understanding of a rapidly changing risk</i> for improved disaster risk management planning	In a sinkhole prone area that has recently experienced considerable population growth and is facing increased instability.
Increased <i>robustness of development initiatives</i> in poor communities and areas	In an informal settlement characterized by recurrent small and medium-size disaster losses that undermine assets and livelihoods
<i>Management of high-risk periods and conditions</i> to ensure service and/or business continuity	Electricity transmission lines and rail infrastructure, as well as health and emergency services, to ensure these essential services do not 'fail' under expected high-risk conditions.
Provision of appropriate <i>support for at-risk activities, services, areas, communities and households following an 'alert'</i>	Following a drought warning or cholera alert in rural areas, to identify communities and households most at risk and to focus or target preparedness and response actions.

Table 4-1: Situations requiring disaster risk assessments

4.4.1 Steps involved in a Disaster Risk Assessment

- Disaster risk assessment is a process that determines the level of risk by:
 - Identifying and analysing potential hazards and/or threats
 - Assessing the conditions of vulnerability that increase the chance of loss for particular elements-at-risk (that is, environmental, human, infrastructural, agricultural, economic and other elements that are exposed to a hazard, and are at risk of loss)
 - Determining the level of risk for different situations and conditions
 - Helping to set priorities for action.

A reliable disaster risk assessment for a specific threat should answer the following questions:



4.5 Undertaking a Disaster Risk Assessment

- There are many different methods for carrying out disaster risk assessments. These vary, depending on the type of risk being assessed, the specific characteristics of the population-at-risk, as well as those related to the area, infrastructure, service or business concerned. Methods used are also determined by the urgency for the assessment and the availability of relevant hazard and vulnerability information, as well as appropriate specialist and other resources to undertake it.
- The general process for assessing disaster risk as per the PDMF involves the following four stages. The PDMF should be consulted for further detail in this regard if needed.

4.5.1.1 **Stage 1: Identify the specific disaster risk(s)**

4.5.1.2 **Stage 2: Analyse the disaster risk(s)**

4.5.1.3 **Stage 3: Evaluate the disaster risk(s)**

4.5.1.4 **Stage 4: Monitor disaster risk reduction initiatives and update and disseminate disaster risk assessment information**

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- The disaster risk assessment process must be conducted using a staged approach if the outcomes are to be synchronised with the requirements of the planning process. Figure 2.1 shows the basic stages undertaken in a disaster risk assessment process. This diagram is taken from the PDMF and is a good schematic illustration of this point and is equally applicable to the District Municipality

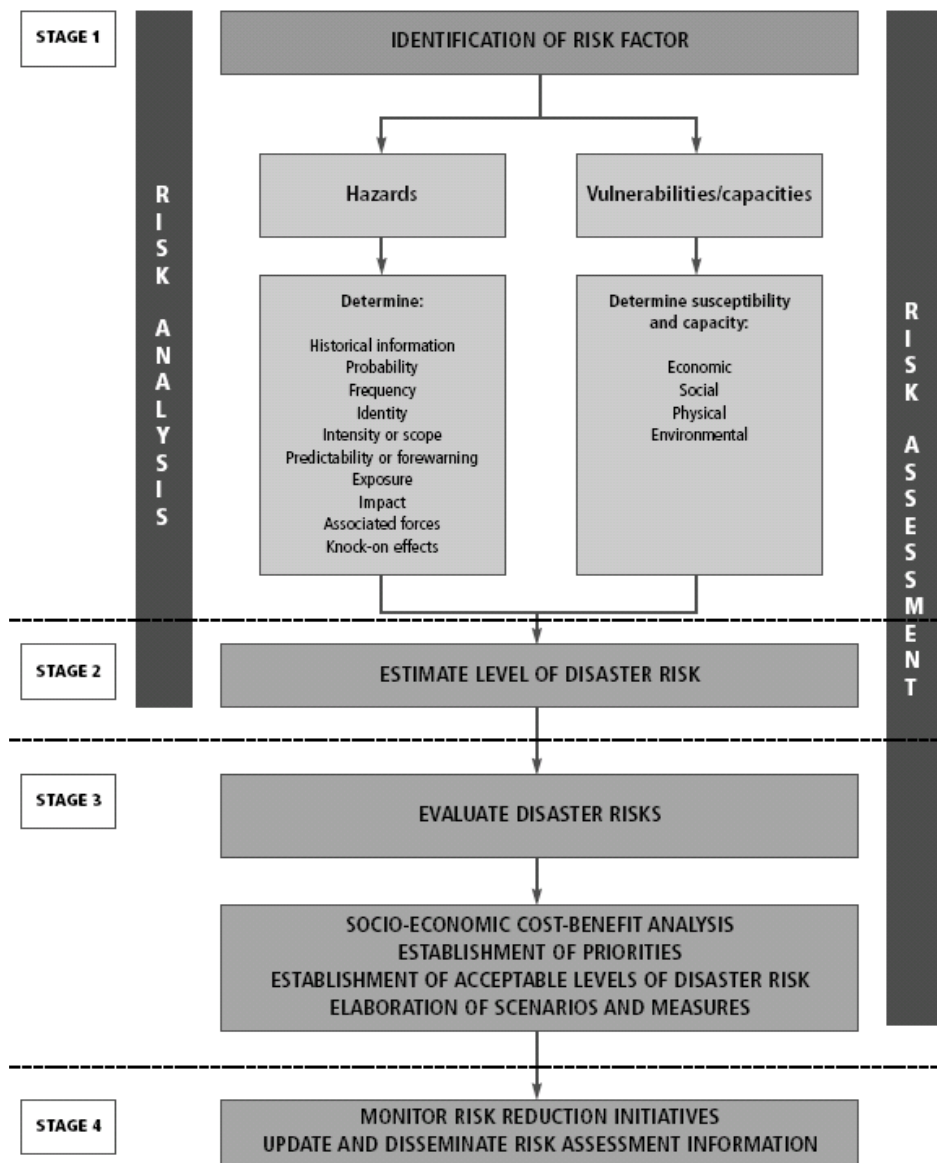


Figure 4-1: Basic stages in disaster risk assessment process

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4.5.1.5 Link with Disaster Risk Management Planning

- The findings of stages 1 and 2 will directly inform the development of a Level 1 Disaster Risk Management Plan (the first level of the planning process) as well as components of a Level 3 Disaster Risk Management Plan, by identifying:
 - Known priority risks for the purposes of contingency planning
 - Priorities for vulnerability reduction planning
 - High-risk areas, communities and households exposed to multiple risks, and high-risk developments requiring further evaluation and prioritisation through focused comprehensive disaster risk assessments.
- The outcomes of Stage 3 will directly inform the development of a Level 2 Disaster Risk Management Plan as well as components of a Level 3 Disaster Risk Management Plan.
- The results of Stage 4 will inform the development of a Level 3 Disaster Risk Management Plan.

4.5.2 Community-based Disaster Risk Assessment

- Disaster risk assessment efforts must actively include the participation of vulnerable communities and households, including physically isolated communities and female-headed and child-led households. The active engagement of special needs groups, such as women, children and the elderly, improves the quality of the disaster risk assessment findings and increases the likelihood of community ownership in any disaster risk reduction interventions that may follow.

4.5.3 Sourcing additional Information when undertaking a Disaster Risk Assessment

- It is important that the following is documented so as to avoid fragmentation:
 1. Do an audit of past significant events and events classified as disasters. A review of previous small and medium-size events as well as declared disasters, where relevant, can identify areas and communities most at risk and help focus more detailed disaster risk assessment efforts. A review of newspaper articles may facilitate this.
 2. Consult with community members and traditional leaders in areas affected by past events for information on frequency and severity of events classified as disasters, significant events and recurrent small-scale occurrences. Locate these events on a user-friendly map and record them on a graph to show seasonality/change over time.
 3. Consult with long-standing members of emergency services, the South African Red Cross Society, the Salvation Army or other humanitarian assistance organisations who can remember or have recorded ten years or more of past disaster responses.
 4. Consult with specialist research commissions, universities and the private sector and obtain existing or past research reports.
 5. Check with the appropriate ministries for information or relevant research that may have already been carried out or commissioned.

6. Consult with the (re-) insurance industry.

Types of risk	Possible disaster risk assessment methods	Expertise
Potential flood risk in a developed area	• Flood hydrology and hydraulics • Ecological and environmental assessment	• Environmental and hydrological specialists
Potential cholera risk in an isolated area known to be cholera-prone	• Epidemiological risk assessment • Environmental health assessment • Groundwater evaluation	• Public and environmental health specialists
Potential fire risk in a large informal settlement	• Historic and seasonality review of past fire events graphed or mapped over time • Aerial photographs to indicate density or other spatial changes over time • Participatory rural appraisal (PRA) / livelihoods analysis/focus group interviews • Demographic and socio-economic analysis	• Urban development facilitators/planners • Fire prevention specialists • Social scientists
Potential wind storm or tornado risk in a rural area	• Consultation with local leadership • History of past events • Historic climatology and seasonal analysis	• Indigenous knowledge • Community facilitators • Climate scientists
Drought risk in a rural community	• PRA/livelihoods analysis/focus group interviews • Historic rainfall information, history of drought and impacts • Remote-sensed information on vegetation and cloud cover	• Rural development facilitators • Agricultural specialists • Public health specialists • Climate scientists

Table 4-2: Types of disaster risk and disaster risk assessments

4.5.4 Provincial Standard for Assessment of Priority Disaster Risks

- The provincial disaster management framework gives priority to the establishment of a uniform approach to disaster risk management and the provision of a national standard to guide the assessment of priority disaster risks.
- In the interim, prior to the development of a national standard and guidelines for assessing priority disaster risks all proposed disaster risk assessments planned by district municipalities must be reviewed by the PDMC prior to commissioning of the assessments.

4.5.5 Consolidation and Classification of Disaster Risk Information

- Hazard and vulnerability assessment findings must be consolidated according to uniform classifications. This facilitates integrated multi-sectoral planning across government departments and

with other partners. It also supports risk management co-operation between administrative areas (for example, two or more municipalities) affected by the same risk.

- An internationally recognised classification of hazards that should be used is given in Table 4.3. Vulnerability should be assessed as social, economic, political, environmental or physical (infrastructural). As vulnerability factors are often the major drivers of disaster risk, rather than external hazard processes, it is critical to identify these during a disaster risk assessment. This provides important insights for developing vulnerability reduction interventions that lower the levels of disaster risk.

Natural hazards	Examples
Geological	Landslides, rockslides, liquefaction, subsidence
Biological	Epidemic diseases affecting people or livestock, veld fires, plant infestations
Hydro meteorological	Floods, debris flows, tropical cyclones, storm surges, severe storms, drought, desertification
Technological hazards	Industrial pollution, nuclear activities, toxic waste, dam failure, transport accidents
Environmental hazards	Examples
Environmental degradation	Land degradation, deforestation, loss of biodiversity

Table 4-3: Classification of Hazards

- Environmental hazards: Environmental degradation, Land degradation, deforestation, loss of biodiversity

4.5.6 Key Performance Indicators

- A municipal standard for conducting comprehensive disaster risk assessments has been generated by the MDMC.
- Municipal guidelines by the PDMC for application of a uniformed disaster risk assessment methodology have been generated by die PDMC.
- A municipal standard for assessing priority disaster risks has been generated by the MDMC.
- Municipal guidelines for assessing priority disaster risks in municipal spheres have been generated by the MDMC.
- Relevant risk assessment regulations, policy and implementation guidelines by municipal organs of state and their local counterparts have been developed and applied.
- Documented evidence of progressive integration of risk assessment into development planning of organs of state and other role players in IDPs and annual reports submitted to the PDMC and NDMC.

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4.6 Generating an Indicative District Disaster Risk Profile

- The District DMC must generate the necessary mechanisms to consolidate, document and make information accessible on the municipality priority risks. The MDMC must play their part to assist in this by providing maps and consolidated information on recorded losses for specific threats in individual areas. This is so as to assist in enabling the PDMC in compiling an Indicative Provincial Disaster Risk Profile.

4.6.1 Key Performance Indicators

- Mechanisms to consolidate document and make information accessible on the District Municipality's priority risks have been established by the MDMC.
- Priority risks of significance in the district have been identified and documented by the MDMC.
- Procedures to consolidate, map, update and make information accessible on the district's priority risks have been established and documented by the MDMC.

4.7 Monitoring, Updating and Disseminating Disaster Risk Information

4.7.1 Monitoring Disaster Risks

- Disaster risks are not static. They change seasonally and over time. Monitoring systems form the basis for sounding timely warnings of, or alerts for, impending significant events or disasters. They are also essential for monitoring the effectiveness of ongoing disaster risk reduction efforts.
- Risk monitoring systems involve:
 - Hazard Tracking
 - Vulnerability Monitoring
 - Disaster Event Tracking

4.7.2 Updating a Comprehensive Disaster Risk Assessment

- Municipal organs of state must seek technical advice from recognised risk specialists to determine the need for updating a comprehensive assessment for a specific threat.
- Municipal organs of state with responsibilities for reducing and managing specific risks, like the Ndwedwe Local Municipality, must review the Indicative District Disaster Risk Profile for their functional areas annually to determine if risk conditions have changed detrimentally. If physical, atmospheric, environmental, health or socio-economic conditions have worsened considerably, or if there are increasing disaster losses reported from small and medium-size events, the assessment and profile must be updated.

4.7.3 Responsibility for Monitoring and Updating Disaster Risk Information

- Municipal departments with responsibilities for reducing and managing disaster risks specific to their functional areas are to have established clear and documented mechanisms for accessing and updating of relevant hazard and vulnerability information based the provincial risk assessment standards on disaster risks specific to their functional areas and are also duty bound to rapidly make this information available to the PDMC.
- The Ndwedwe Local Municipality's DMC carries the following responsibilities in this regard:
 - Establish clear mechanisms for accessing, consolidating and updating relevant information on hazards, vulnerability and disaster occurrence from specialist government and non-governmental partners responsible for monitoring specific disaster risks, including fire, drought and epidemics.

- Develop and implement clear mechanisms for disseminating disaster risk assessment and monitoring information for ongoing planning, as well as for managing conditions of heightened risk.

4.7.3.1 Key Performance Indicators

- Line departments with responsibilities for reducing and managing disaster risks specific to their functional areas have established clear and documented mechanisms for rapid accessing and updating of relevant hazard and vulnerability information based on the provincial risk assessment standard, and for rapidly making this information available to the District DMC.
- Municipal disaster management centres as well as all municipal organs of state have established and documented clear mechanisms for accessing, consolidating and updating relevant hazard, vulnerability and disaster occurrence information from partners responsible for monitoring specific risks.
- The municipal disaster management centre as well as all municipal organs of state have established and documented clear mechanisms for disseminating risk assessment and monitoring information for ongoing planning, as well as for managing conditions of heightened risk.
- The municipal disaster management centres have established and documented clear procedures for accessing, interpreting and disseminating timely early warning information for both rapid and slow onset hazards.

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4.8 Conducting Quality Control

- Disaster risk assessments must be robust and reliable in order to inform disaster risk reduction planning.

4.8.1 Who should carry out Disaster Risk Assessments?

- Disaster risk assessments almost always require specialist input. This applies to both the process of characterising the hazard conditions that can trigger loss and understanding the vulnerability factors that increase the severity of the impact.
- Field consultation increases the accuracy of the disaster risk assessment findings, provides insight into the vulnerability conditions that can potentially be reduced, and builds a greater sense of responsibility for 'sharing the risk' among the communities affected. In this context, it is critical that the assessment process includes respectful pre-assessment consultation with the affected communities prior to the arrival of external assessment teams, to build a co-operative partnership.

4.8.2 Measures to establish the accuracy of Disaster Risk Assessments

- The following two mechanisms must be used to ensure the accuracy of the disaster risk assessment undertaken to inform national, provincial and municipal area planning:

- Establish a Technical Advisory Committee
- External Validation Process for Methods and Findings should be applied

4.8.3 Key Performance Indicators

- Disaster risk assessments undertaken show documented evidence of
Capacity building with respect to the commissioning authority;
Ground-truthing (that is, based on the actual situation 'on the ground' or verified by those being assessed);
through field consultations in the areas and with communities most at risk from the risk(s) being assessed;
and
Consultation with appropriate governmental and other stakeholders about the design and/or
implementation of the assessment, as well as the interpretation of the findings.
- There is documented evidence in disaster risk assessments undertaken of external validation prior to
–
The publication or dissemination of hazard, vulnerability or risk maps and/or reports for planning purposes;
and
The implementation of risk reduction or other initiatives based on the assessment results.
- Disaster risk assessments undertaken show documented evidence of technical consultation with the
appropriate disaster management centre(s) prior to implementation.

5 Key Performance Area 3: Disaster Risk Reduction

Objective

The objective is 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.

Introduction

- The successful implementation of the Act critically depends on the preparation and alignment of disaster management frameworks and plans for all spheres of government. The legal requirements for the preparation of disaster management frameworks and plans by provincial and municipal organs of state are specified in sections 38 and 52 of the Act. This KPA addresses requirements for disaster risk management planning within all spheres of government. It gives particular attention to the planning for and integration of the core disaster risk reduction principles of prevention and mitigation into ongoing programmes and initiatives.

Outline

- Section 5.1 introduces disaster risk management planning as a strategic priority.
- Section 5.2 describes priority setting with regard to disaster risk reduction initiatives.
- Section 5.3 outlines approaches for scoping and developing disaster risk reduction plans, projects and programmes.
- Section 5.4 addresses the integration of disaster risk reduction initiatives into other strategic integrating structures and processes.
- Section 5.5 focuses on the implementation and monitoring of disaster risk reduction activities.
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5.1 Disaster Risk Management Planning

- Ndwedwe must ensure:
 - Municipal disaster management responsibilities as required in times of the Municipal Systems Act are incorporated with iLembe District Municipality Disaster Management Plan.
 - Linkages that incorporate private sector and civil society initiatives.
 - Principles of shared services in the disaster management planning process.
 - Infrastructure development planning

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5.1.1 Disaster Management Frameworks and Disaster Risk Management Plans

- Disaster management frameworks and disaster risk management plans are the strategic mechanisms through which disaster risk management action is co-ordinated and integrated across all spheres of government

5.1.1.1 Municipal Disaster Management Frameworks

- The Act requires the development of disaster management frameworks for all district and metropolitan municipalities.
- MDMC is responsible for consultatively facilitating the development of the disaster management framework in its area of jurisdiction, and subsequently amending it in consultation with key stakeholders.
- Ndwedwe MDMF must, as previously mentioned:
 - Establish foundation institutional arrangements for disaster risk management, including formal consultative processes that provide for participative planning
 - Consultatively define an appropriate vision and approach to disaster risk management for the area concerned
 - Define processes for undertaking appropriate disaster risk assessments for the areas in which they will be implemented
 - Specify arrangements for disaster risk reduction planning and contingency planning, including response and recovery planning
 - Establish an integrated supportive disaster risk information system
 - Identify processes for building public awareness capabilities, as well as supporting relevant education, training and research initiatives
 - Define supportive funding arrangements for implementing disaster risk management.

5.1.2 Disaster Risk Management Plans

- In terms of section 53 of the Act, all Municipal organs of state and entities, must compile DMPs.

The DMPs for each level of administration form part of its tactical and planning processes. They determine the approach of the administration to risk reduction and in the event of an incident or disastrous event occurring, the response and recovery actions and matters incidental thereto. A detailed DMP on each identified hazard or risk must be drafted and be made available to iLembe District DMC, electronically and in hard copy. All contingency and disaster risk management planning must incorporate existing planning of the PDMC and the existing DMPs and contingency arrangements in the district, to ensure that valuable past efforts are not lost.

- *Inter alia* due to the fact that each, Ndwedwe local Municipality department knows its own particular functions and responsibilities best, each individual department is responsible for the compilation and maintenance of its own departmental disaster risk management plan, in consultation with the local

Municipalities and relevant external role players and other relevant departments. Each local Municipality must also draft its DMP in the same manner. The integrated Ndwedwe DMP (an incorporation of local Municipal DMPs and the departmental plans and other role players' emergency plans will be considered as integral part of the eventual iLembe District Corporate Disaster and Risk Management Plan, as well iLembe District IDP. Projects identified as part of the disaster risk management planning process, must be contained in each department's inputs to iLembe District IDP and subsequently included in iLembe District IDP and budget.

- To address the wide range of disaster risk management planning capabilities, the provincial disaster management framework provides for a phased approach to disaster risk management planning and implementation. It comprises three progressive steps from a Level 1 Disaster Risk Management Plan to a Level 3 Disaster Risk Management Plan. The district DMF should be consulted for more information hereon if needs be.

National, provincial and municipal organs of state, municipal entities and other institutional partners identified as key role players in disaster risk management are required to prepare and implement their disaster risk management plans in relation to their constitutional and legislative mandates.

In line with section 19(a) of the DMA and section 3.6 of the National Disaster Management Framework, the National Disaster Management Centre (NDMC) has published guidelines for developing disaster management plans to provide a uniform structure and checklist for organs of state to prepare their disaster management plans. These guidelines are not intended to be one size fits all' but provide a phased approach to disaster risk management planning and implementation which comprises of three progressive steps from a Level 1 Disaster Risk Management Plan to a Level 3. The completion of each level of disaster risk management plan yields indicative information about common vulnerabilities in communities, local areas or provinces. This information should be incorporated into IDP planning processes

5.1.3 Strategic Integrating Role of Disaster Management Centres

- The provincial and municipal disaster management centres play important strategic roles in integrating disaster management frameworks, plans and actions between the three spheres of government and across sectors and other role players within spheres.
- The MDMC must:
 - ensure that the municipal disaster management framework is consistent with the national disaster management framework and the provincial disaster management framework of the province concerned, as well as the priorities, strategies and objectives specified in the municipality's IDP
 - ensure that the municipality's disaster risk management plans inform and are aligned with those of other organs of state and role players
 - consult the MDMAF (or, in the absence of an advisory forum, an appropriate alternative consultative forum in the municipality) with regard to the development of disaster risk management plans as well as guidelines

5.1.4 Key Performance Indicators

- A municipal disaster management framework has been developed consistent with the provincial disaster management framework and submitted to the PDMC.
- Disaster risk management planning guidelines have been developed and disseminated by the NDMC.
- Disaster risk management plans have been submitted to the PDMC by iLembe District Municipality. Provincial and municipal disaster management frameworks and plans are revised at least two-yearly, as evidenced in annual reports submitted to the NDMC.

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5.2 Setting Priorities for Disaster Risk Management Planning

- It is not possible, given resource constraints, to address all potential threats facing the Ndwedwe Local Municipality at once. The process of identifying priority disaster risks is critically informed by the disaster risk assessment findings obtained by taking the steps described in KPA 2.

5.2.1 Identifying Priority Provincial and Municipal Disaster Risks

- Disaster priority setting is informed by three important considerations:
 - the expected magnitude for specific disaster types (variously referred to as 'impact', 'severity' or 'consequences' of a disaster)
 - the expected frequency of specific types of disaster (variously referred to as 'the probability' or 'likelihood' of a disaster)
 - the expected manageability of specific types of disaster at provincial and municipal levels (which refers to 'how difficult' it is to manage a disaster event, including the level of cross-sectoral management effort involved to reduce the risk).

Risks associated with Climate change

- Each municipality must prepare a disaster management plan setting out the way in which the concept and principles of disaster management are to be applied in its municipal area, including expected climate change impacts and risks for the municipality. Disaster Management Act of 2015 states that climate change means a change in the state of the climate that can be identified by changes in the variability of its properties and that persists for an extended period, typically decades or longer. Measures must be provided to reduce the risk of disaster through adaptation to climate change and developing of early warning mechanisms. Municipalities must provide measures and indicate how it will invest in disaster risk reduction and climate change adaptation, including ecosystem and community-based adaptation approaches. The following are some of the risk associated with climate change-;
- Power outages cause by extreme weather conditions could cripple hospitals and transportation systems when people need those most;
- There could be declines in food production which could lead to undernutrition, hunger, and higher food prices;
- Occupational hazards such as risk of heatstroke will rise, especially among farmers and construction workers when there are high climate change;

- Climate change can lead to floods, droughts, thunderstorms and heat waves which also increase chances of disasters; and
- Climate change can lead to water shortages which harm mostly people from rural areas.
-

5.2.2 Identifying the most vulnerable Areas, Communities and Households

- Not all areas, communities and households face the same disaster risks. In undertaking disaster risk management planning, priority must be placed on those areas, communities and households that are exposed to natural or other threats, and have the least capacity to resist and recover from the resulting impacts. These are called at-risk areas, communities or households.

5.2.3 Priorities for focusing Disaster Risk Protection efforts

- For disaster risk management planning purposes, all provincial and municipal organs of state must, according to their functional area or area of jurisdiction, give priority to protecting the following which should be mapped by the MDMC:
 - Strategic infrastructure or lifeline services whose damage or disruption in disaster events would result in serious and widespread consequences
 - Critical economic, commercial, agricultural and industrial zones or sites whose damage or disruption would have serious and widespread consequences
 - Fragile natural ecosystems and environmental assets that offer protective environmental services and which, if damaged or destroyed in a disaster event, would result in serious natural and economic losses
 - Communities in areas exposed to extreme weather and/or other natural and technological hazards and which are therefore likely to sustain serious human and property losses in the event of a disaster
 - Poor and underserved rural and urban communities, including informal settlements, especially those located in fragile ecological areas, that sustain repeated losses from recurrent small, medium, and large disaster events, and that lack insurance coverage to facilitate recovery
 - Highly vulnerable households in at-risk areas with limited capacity to resist or recover from external shocks, particularly child-headed households or those headed by the elderly or households affected by chronic illness.
 - District engineering design activities and other infrastructure delivery must take into account prevention and risk requirements
 - Education of disaster management functionaries – including accreditation of training material – and also of communities mostly affected
- Where possible, this process must take place in consultation with those most at risk.

5.2.4 Strategic Planning: Disaster Risk Reduction

- In keeping with the Act's emphasis on vulnerability reduction and the use of international best practice in this regard, strategic planning must focus efforts on reducing disaster risks. This includes the identification of strategies and measures that lessen the likelihood of harmful losses by avoiding endangering hazards or reducing vulnerability, as well as those that increase capacity to prepare for and enable timely response and recovery.
- Disaster risk management involves a wide range of role players, especially since it requires both developmental efforts that reduce the risk of disasters as well as strengthened capabilities for preparedness, response and recovery.

5.2.4.1 Core Disaster Risk Reduction Principles of Disaster Prevention and Mitigation

- All disaster risk management plans must give explicit priority to the core principles of disaster prevention and mitigation.

Disaster prevention

- Disaster prevention refers to actions that provide 'outright avoidance' of the adverse impact of hazards and related environmental, technological and biological disasters. Many disasters can be prevented through effective land-use planning, basic public works and effective municipal services that factor in the frequency and severity of natural or other hazards as well as human actions.
- Examples include:
 - replanting indigenous grasses or trees on a recently burned slope near roads or dwellings to stabilise the soil and prevent damaging land subsidence
 - locating critical rail, road and telecommunications structures behind a coastal 'setback' line in areas exposed to storm surges to prevent disruption to critical services during violent summer or winter storms
 - careful positioning of storm-water drainage and its ongoing maintenance, along with protection of natural wetlands, to prevent destructive flooding during heavy rain.
- Unfortunately, many small, medium and large disaster events cannot completely be prevented. Their severity can be reduced, however, through ongoing disaster mitigation efforts.

Disaster mitigation

- Disaster mitigation refers to structural and non-structural measures that are undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards on vulnerable areas, communities and households. These efforts can target the hazard or threat itself (for example, a fire break that stops a fire spreading close to residential areas). This is often referred to as 'structural mitigation', since it requires infrastructure or engineering measures to keep the hazard away from those at risk.
- Disaster mitigation efforts can also target people who are at risk, by reducing their vulnerability to a specific threat (for instance, promoting community responsibility for controlling fire risk in an informal settlement). This is often called 'non-structural mitigation', as it promotes risk-avoidance behaviours and attitudes.

5.2.4.2 Operational Planning: Preparedness, Response and Recovery

- Disaster risk management plans must also incorporate elements of preparedness, response and recovery appropriate to the respective functional areas of different organs of state.

Preparedness

- Preparedness contributes to disaster risk reduction through measures taken in advance to ensure effective response to the impact of hazards, including timely and effective early warnings and the temporary evacuation of people and property from threatened locations
- Preparedness enables organs of state and other institutions involved in disaster risk management, the private sector, communities and individuals to mobilise, organise, and provide relief measures to deal with an impending or occurring disaster, or the effects of a disaster.
- Preparedness differs from prevention and mitigation as it focuses on activities and measures taken in advance of a specific threat or disaster.
- Preparedness actions include:
 - planning for seasonal threats, such as heavy rainfall, flooding, strong winds, veld or informal settlement fires, and communicable disease outbreaks
 - anticipating and planning for the potential dangers associated with large concentrations of people at sporting, entertainment or other events
 - establishing clear information dissemination processes to alert at-risk communities of an impending seasonal threat, such as a potential outbreak of cholera during the rainy season
 - specifying evacuation procedures, routes and sites in advance of expected emergencies, including the evacuation of schools in areas exposed to flash-floods
 - defining in advance clear communication processes and protocols for different emergency situations, including the dissemination of an early warning for an impending extreme weather threat to isolated or remote communities.
- These actions are key components of the contingency plans that should be developed for specific threats as part of a provincial or municipal disaster risk management plan.

Disaster Response

- Disaster response 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 be of an immediate, short-term or protracted duration. (See KPA4.)
- Priorities should ensure that:
 - The Ndwedwe Local Municipality incorporates civil society and private sector response and mitigation programmes in its disaster management plans.
 - The Ndwedwe Local Municipality must indicate integration and coordination strategies for response and mitigation

Disaster Recovery

- Disaster recovery (including rehabilitation and reconstruction) focuses on the decisions and actions taken after a disaster to restore lives and livelihoods, services, infrastructure and the natural environment. In addition, by developing and applying disaster risk reduction measures at the same time, the likelihood of a repeated disaster event is reduced.
- Disaster recovery includes:
 - rehabilitation of the affected areas, communities and households
 - reconstruction of damaged and destroyed infrastructure
 - recovery of losses sustained during the disaster event, combined with the development of increased resistance to future similar occurrences.
- Disaster recovery initiatives present excellent opportunities to incorporate disaster risk reduction actions. Following a disaster event, there are usually high levels of awareness about the risk factors that increased its impact. These present opportunities to introduce disaster risk reduction efforts consultatively with the affected communities and key stakeholders in order to reduce the likelihood of future loss (See KPA 4).

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5.3 Scoping and Development of Disaster Risk Reduction Plans, Projects and Programmes

5.3.1 Eight key planning points for disaster risk reduction projects or programmes

- There are eight key planning points or requirements that must be applied and documented by all national and provincial organs of state and municipal entities when planning disaster risk reduction initiatives. These enhance the established principles and approaches detailed in existing guidelines for integrated development planning. If more in-depth expansion is required on these points, the PDMF should be consulted, the headings of which are as follows:
 - Planning point 1: Use Disaster Risk Assessment findings to focus planning efforts
 - Planning point 2: Establish an informed multidisciplinary team with capacity to address the disaster risk and identify a primary entity to facilitate the initiative
 - Planning point 3: Actively involve communities or groups at risk
 - Planning point 4: Address multiple vulnerabilities wherever possible
 - Planning point 5: Plan for changing risk conditions and uncertainty, including the effects of climate variability
 - Planning point 6: Apply the precautionary principle to avoid inadvertently increasing disaster risk
 - Planning point 7: Avoid unintended consequences that undermine risk-avoidance behaviour and ownership of disaster risk
 - Planning point 8: Establish clear goals and targets for disaster risk reduction initiatives, and link monitoring and evaluation criteria to initial disaster risk assessment findings

5.3.2 Research

- Disaster risk reduction initiatives must be preceded by transparent research and careful planning and must provide evidence of the relevance or likely effectiveness of the planned intervention(s).
- Robust research carried out as a prerequisite for any risk reduction intervention increases the likelihood of a successful programme. It also improves co-ordination across services and reduces the chance that resources are wasted in the long-term (See Enabler 2).

5.3.3 Monitoring effectiveness and disseminating results

- As part of the annual reporting requirements specified in the Act, Ndwedwe DMC must include documented accounts of the disaster risk reduction projects, programmes and initiatives planned and implemented, including those aimed at reducing vulnerability and loss for defined priority disaster risks. This information must be further consolidated by the NDMC in its annual report to the Minister, and communicated accessibly via the NDMC's website.

5.3.4 Key Performance Indicators

- Case studies/lessons learned in risk reduction measures and initiatives have been disseminated and documented MDMC.
- Documentation, which is accessible to stakeholders, demonstrates the effectiveness of risk reduction measures for different risk scenarios.
- Guidelines for incorporating disaster management programmes and initiatives into the activities local municipalities in the district and key institutional role players have been developed and implemented.

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5.4 Inclusion of Disaster Risk Reduction Efforts in other Structures and Processes

5.4.1 Integration of Disaster Risk Reduction with Spatial Development Planning

- Disaster risk is driven by both hazard and vulnerability factors reflected in spatial development frameworks. In addition, disaster risk assessment findings, along with ongoing monitoring information on disaster occurrence, are directly applicable to spatial development planning of the District Municipality.
- For this reason, the Ndwedwe MDMC must establish mechanisms in association with spatial planners in both spheres to ensure that relevant spatial information informs disaster risk reduction planning. They must also ensure that verified risk information is incorporated into spatial development plans and maps.

5.4.2 Incorporation of Disaster Risk Reduction Planning into Integrated Development Planning

- As disaster risk reduction efforts are medium- to long-term multi-sectoral efforts focused on vulnerability reduction, they must be incorporated into ongoing IDP projects, processes, programmes and

structures. Effective and adaptive disaster risk reduction interventions in the municipal sphere are best-planned and implemented as development initiatives through IDP mechanisms and phases.

- In addition, Ndwedwe Local Municipality must also test and evaluate specific disaster risk reduction initiatives before these are undertaken and implemented. This is to foster innovation and cross-sectoral linkages at a small or local scale. It also provides for assessment of the vulnerability reduction potential, appropriateness, cost effectiveness and sustainability of previously untested disaster risk reduction strategies prior to a more widespread programme roll out or 'scaling-up'.
- Focused pilot projects are particularly applicable when investigating ways to:
 - add value to an existing municipal programme
 - protect a specific at-risk group
 - introduce a new initiative or project to address a specific risk scenario
 - integrate disaster risk reduction with relief or recovery actions, to identify opportunities for changing the underlying drivers of risk as well as possible unintended consequences
 - investigate new approaches to promoting risk-avoidance attitudes and behaviour.

5.4.3 Risk-avoidance Enforcement Mechanisms

- Critical components of effective disaster risk reduction are regulations, standards, bylaws and other legal enforcement instruments that discourage risk-promoting behaviour and minimise the potential for loss.
- Municipality must assess the disaster risk management component of their existing policies, regulations, by-laws and other relevant legal instruments for their functional areas and introduce measures to ensure alignment with the requirements specified in the Act.
- This may involve:
 - amendment of urban planning standards
 - amendment of land-use regulations and zoning
 - amendment of minimum standards for environmental impact assessments
 - introduction of standards for 'risk-proofing' lifeline services and critical facilities from known priority disaster risks
 - introduction of by-laws to implement extraordinary measures to prevent an escalation of a disaster or to minimise its effects.

5.4.4 Key Performance Indicators

- Mechanisms to disseminate experience from pilot and research projects that explore the vulnerability reduction potential, appropriateness, cost-effectiveness and sustainability of specific risk reduction initiatives have been established.
- Risk-related information has been incorporated into spatial development frameworks.
- Risk reduction-related projects and initiatives have been included in IDPs.

- Regulations, standards, by-laws and other legal instruments that encourage risk-avoidance behaviour have been enforced by iLembe District Municipality and documented in annual reports to the NDMC.

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5.5 Implementation and Monitoring of Disaster Risk Reduction Programmes and Initiatives

5.5.1 Effective Implementation of Disaster Risk Reduction Programme

- The eight planning points outlined in subsection 3.3.1 above must also be applied when implementing disaster risk reduction programmes and initiatives. The monitoring processes and evaluations for disaster risk reduction initiatives specifically targeted at at-risk communities must include both qualitative and quantitative vulnerability reduction outcomes.
- In addition, projects should demonstrate close compliance with the goals, objectives, time frames and resource requirements identified in the planning process. Mechanisms must also be established to allow for project adaptation and adjustment for unforeseen conditions and opportunities.
- Ndwedwe must include in their annual reports documented accounts of the disaster risk reduction projects, programmes and initiatives planned and implemented. This includes reports documenting effectiveness of disaster risk reduction pilot projects and research initiatives, as well as initiatives that aim to reduce vulnerability and loss for defined priority disaster risks.

5.5.2 Measurable Reductions in small-, medium- and large-scale disaster losses

- The Act specifies that MDMC's must incorporate in their respective annual reports, as well as in a disaster management information system, a report on disaster risk reduction initiatives undertaken. They are also required to report on disasters that occurred within their specific areas of jurisdiction.
- In this context, Ndwedwe MDMC must report on the frequency and severity of small-, medium- and large-scale disaster events, especially those in communities and areas identified as high risk through disaster risk assessment processes. Significant changes in frequency and severity, type or location of occurrences must also be reported, including systematic accounts of recorded loss.

5.5.3 Reduced need for Social Relief in Disaster-prone and Economically Vulnerable Communities

- While effective social relief is an important component of disaster response and recovery, the Act explicitly gives priority to vulnerability reduction in disaster-prone areas, communities and households. Annual reports generated by the national Department of Social Development and its provincial counterparts must include an account of the number of households receiving social relief assistance. This information must be further differentiated by location, date, disaster type and amount provided. An important benchmark for monitoring the effectiveness of disaster risk reduction initiatives in the most vulnerable communities will be changing demands for social relief assistance.

5.5.4 Generation and dissemination of Case Studies and best-practice Guides in Disaster Risk Reduction

- The promotion of a 'culture of prevention' is practically enabled by access to examples of best practice in disaster risk reduction. In addition to the adoption of measures outlined in subsections 3.3.1 and 3.5.1, MDMC must develop as a component of its education, training and capacity-building strategy, mechanisms for disseminating information on best practice in disaster risk reduction for South Africa. This includes the development of learning materials and support guides for different risk scenarios and contexts (See Enabler 2).

5.5.5 Progressive application of Disaster Risk Reduction Strategies, Techniques and measures by Provincial Organs of State, Municipalities and other Key Stakeholders

- In consultation with other municipalities in its district, iLembe PDMC must develop monitoring indicators for tracking the application of disaster risk reduction strategies, techniques and measures in all spheres. These include indicators to track shifts in policies, planning and project implementation, generation of standards, regulations, by-laws and other risk-avoidance enforcement mechanisms

5.5.6 Key Performance Indicators

- Disaster risk reduction programmes, projects and initiatives have been implemented by municipal organs of state and other key role players.
- Measurable reductions in small-, medium- and large-scale disaster losses have been recorded.
- A measurable reduction in social relief in disaster-prone economically vulnerable communities has been recorded.
- Case studies and best-practice guides in disaster risk reduction, facilitated by iLembe MDMC have been generated and disseminated.
- There is evidence of the progressive application of disaster risk reduction techniques and measures by MDMC as reported in annual reports submitted to the District DMC.

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6 Key Performance Area 4: Response and Recovery

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Objective

The object of this KPA is 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 personal injury, health, loss of life, property, infrastructure, environments 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.

Introduction

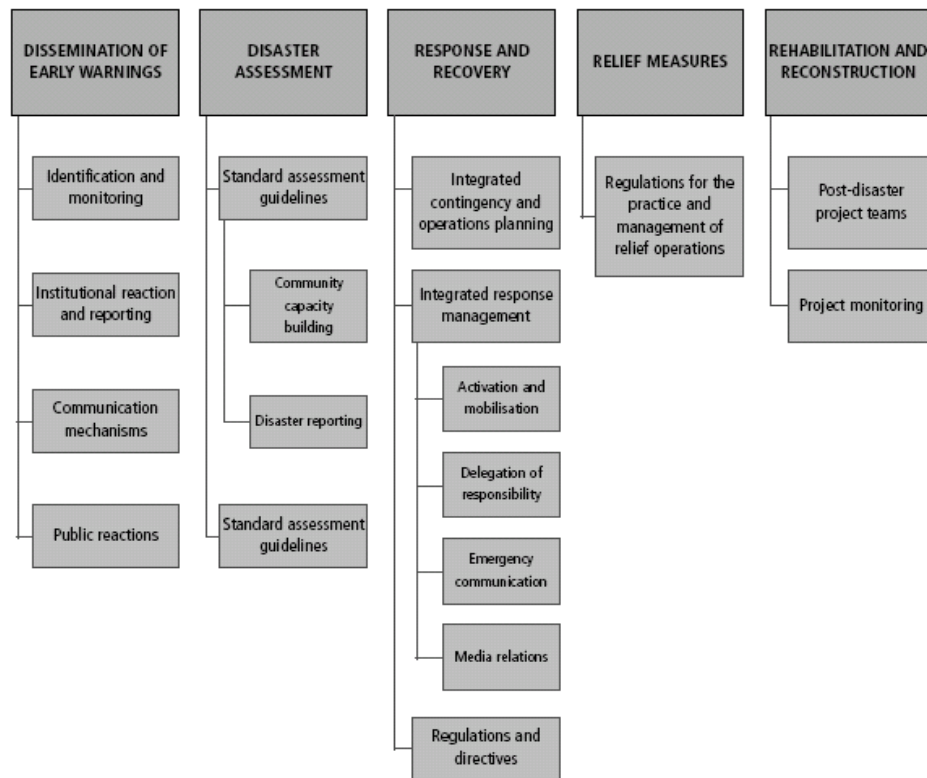
- The Act requires an integrated and co-ordinated policy that focuses on rapid and effective response to disasters and post-disaster recovery and rehabilitation. When a significant event or disaster occurs or is threatening to occur at iLembe District, it is imperative that there should be no confusion as to roles and responsibilities and the procedures to be followed. This section addresses key requirements that will ensure that planning for disaster response and recovery as well as for rehabilitation and reconstruction achieves these objectives.

Outline

- Section 6.1 addresses the requirements for disseminating effective early warnings.
- Section 6.2 focuses on procedures and guidelines in respect of the assessment, classification, declaration and review of disasters.
- Section 6.3 outlines mechanisms to ensure integrated response and recovery plans.
- Section 6.4 focuses on relief measures following a significant event or an event classified as a disaster.
- Section 6.5 deals with rehabilitation and reconstruction processes following a significant event or an event classified as a disaster
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6.1 Overview of Disaster Response and Recovery

- Figure 6.1 here below, taken from the PDMF provides a good summary of the components and procedures applicable to disaster response and recovery:



• Figure 6-1: Disaster response and recovery

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6.2 Early Warnings

- Effective and appropriate early warning strategies are to be developed and implemented and the information communicated to stakeholders to enable appropriate responses.

6.2.1 Dissemination of Early Warnings

- Early warnings 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 the risk and prepare for an effective response.
- Ndwedwe MDMC must prepare and issue hazard warnings of district significance in a timely and effective manner and ensure that the warnings are disseminated to those communities known to be most at risk, including those in isolated and/or remote areas. Warnings of impending or imminent

significant events and/or disasters must include information and guidance that will enable those at risk to take risk-avoidance measures to reduce losses.

- Ndwedwe Local municipality must identify and establish strategic inter-sectoral, multidisciplinary and multi-agency communication mechanisms, including emergency communication mechanisms accessible to communities at risk, for the purposes of disseminating early warnings. iLembe MDMC must also identify communication links and mechanisms for the dissemination of early warnings through the media (television, radio and electronic and print media) (See Enabler 1).

6.2.2 Key Performance Indicator

- Effective and appropriate early warning strategies are to be developed and implemented
- The information is to be communicated to stakeholders to enable appropriate responses.

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6.3 Assessment, Classification, Declaration and Review of a Disaster

- To ensure immediate and appropriate response and relief actions when significant events or disasters occur or are threatening to occur, clear guidelines for the measures that have to be taken need to be established.

6.3.1 Assessment of a Disaster- uniform methods and guidelines

- Uniform methods and guidelines for conducting initial on-site assessments of both damage and needs when significant events or disasters occur or are threatening to occur are critical tools for informed decision making.
- Typically, on-site assessments would include 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.
- Those agencies tasked with primary responsibility for co-ordinating specific activities associated with disaster response and relief efforts, such as emergency medical care, search and rescue, evacuation, shelter and humanitarian relief, must prepare operational guidelines for initial assessments of the immediate needs of those affected.
- municipal disaster management centre must ensure that the information contained in the guidelines is also disseminated to the relevant role players in communities and/or areas at risk. The dissemination of the guidelines must be complemented by training and capacity building to ensure their correct application.
- The guidelines must include protocols for the inclusion of the results of initial assessments in reports of significant events and events classified as disasters of Ndwedwe Local Municipality. It is critical that these assessments show evidence that due consideration had been given to the implications of sections 56 and 57 of the Act.
- On the whole, limited information about the costs associated with disasters or significant events in KwaZulu - Natal is available. Disaster reviews must therefore include information about the costs of

significant events and disasters to inform planning, budgeting and evaluation processes (see subsection 4.2.3 below). To capture this information, a template for the collection of the relevant data must be produced.

6.3.2 Classification of a Disaster and the Declaration of a State of Disaster

- With the exception of a security-related event, the responsibility for strategic co-ordination in responding to a national disaster or significant event which occurs or is threatening to occur rests with the Head of the NDMC.
- When a disastrous event occurs or threatens to occur iLembe MDMC must determine whether the event should be regarded as a disaster in terms of the Act (s 49), and, if so, the MDMC must immediately:
 - Initiate efforts to assess the magnitude and severity or potential magnitude and severity of the disaster;
 - Inform the District and KZN PDMC of the disaster and an initial assessment of the magnitude and severity or potential magnitude and severity of the disaster;
 - Alert disaster management role-players in the province that may be of assistance in the circumstances; and
 - Initiate the implementation of any contingency plans and emergency procedures that may be applicable in the circumstances.
- When informing the NDMC and PDMC in terms of subsection (1)(b) of the Act the MDMC may make such recommendations regarding the classification of the disaster as may be appropriate.
- In terms of Section 54 (1) (b) of DM Act 57 of 2002 states, "Irrespective of whether a local disaster has been declared in terms of section 55, the council of a district municipality, after consultation with the relevant local municipality, is primarily responsible for the coordination and management of local disasters that occur in its area".

- Figure 6.2 from the PDMF schematically represents the procedure as follows, as a helpful tool in assisting in decision making in this regard:

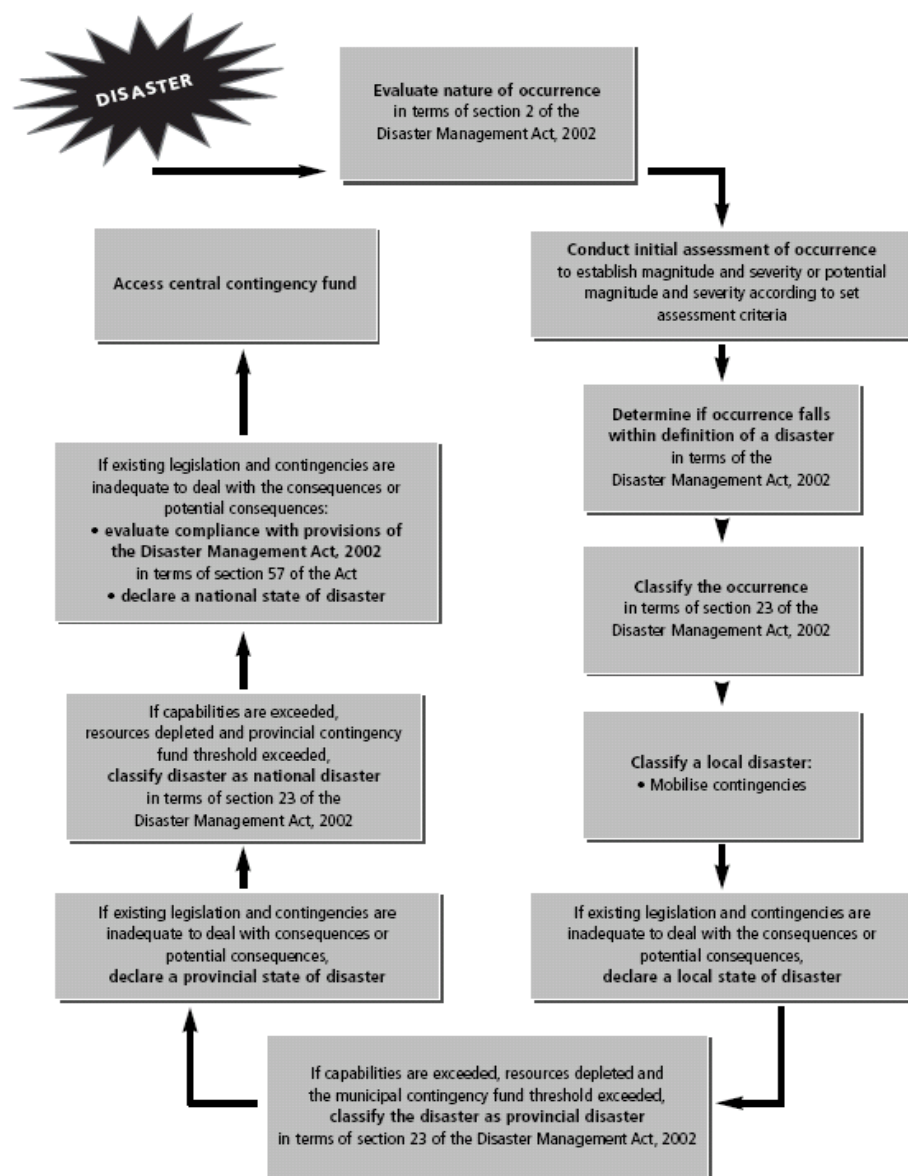


Figure 6-2: Process for the classification and declaration of a state of disaster

6.3.3 Disaster Reviews and Reports

- Comprehensive reviews must be conducted routinely after all significant events and events classified as disasters.
- The reviews will provide the information against which to assess the application of the principles of sections 56 and 57 of The Act. The findings will directly influence the review and updating of disaster risk management plans and will also serve as valuable training aids.
- To maximize the benefits gained from regular reviews of significant events and disasters, iLembe MDMC must develop a review programme in consultation with municipalities in its district.
- Such a programme should include:
 - guidelines for the process and procedures to be followed in conducting reviews of significant events and events classified as disasters, including the principles specified in section 56 and the requirements outlined in section 57 of the Act
 - appointment of review panels with the relevant expertise
 - a mechanism for reporting on the actual performance in a disaster situation with the aim of improving performance
 - mechanisms to ensure that post-disaster reviews and reports are disseminated to stakeholders
 - mechanisms to ensure that immediately following a significant event or disaster, disaster risk management plans are reviewed and, based on the outcomes of post-disaster reviews, appropriate amendments are made
 - mechanisms to ensure that learning occurs.
- iLembe MDMC is responsible for providing guidance on the review process. When conducting a review, the appointed review team must take into account local conditions, disaster risk management plans implemented prior to the significant event or disaster, and existing disaster risk management plans.

6.3.4 Key Performance Indicators

- Guidelines and uniform methods, including templates for the assessment and costing of significant events or disasters have been developed by iLembe MDMC.
- Mechanisms for the rapid and effective classification of a disaster and the declaration of a state of disaster have been established by iLembe MDMC.
- Mechanisms for conducting disaster reviews and reporting, including mechanisms to enable assessments that will comply with and give effect to the provisions of sections 56 and 57 of the Act, have been developed and implemented.
- Review and research reports on significant events and trends are routinely submitted to the iLembe MDMC and disseminated to stakeholders.
- Review reports on actual disasters are routinely submitted as per section 50 of the Act (to the district municipal council, each local municipality in its district, the NDMC and PDMC)

6.4 Integrated Response and Recovery

6.4.1 Co-ordination of Response and Recovery Efforts

- Responsibility for co-ordinating response to specific known rapid- and slow-onset significant events and disasters must be allocated to a specific organ of state. For example, flood response and recovery efforts would involve the combined efforts of many stakeholders, but the primary responsibility must be allocated to a specific organ of state with the other stakeholders assuming supportive responsibilities. In the case of riverine floods, for example, the Department of Water Affairs and Forestry could bear primary responsibility. In the case of drought, the Department of Agriculture could be the primary agency, and in the case of extreme weather events, iLembe District or KZN PDMC could assume primary responsibility.
- 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. In this regard, primary and secondary responsibilities must be allocated for each of the operational activities associated with disaster response, for example, evacuation, shelter, search and rescue, emergency medical services and firefighting.
- Response and recovery operations must also make provision for the delegation of responsibilities of the Head of the district centre and the assignment of alternate arrangements for a disaster management centre in a particular sphere as a contingency in the event that the particular disaster management centre itself is affected and unable to continue to operate.

6.4.1.1 Resources

- Mechanisms for the activation and mobilisation of additional resources for response and recovery measures must be clearly set out in the operational plans.

6.4.1.2 Volunteers

- Mechanisms for the deployment of volunteers must be outlined in operational plans.

6.4.2 Municipal Incident Management System compliant with the District and Provincial Standard Response Management System

- Incidents and emergencies handled on a daily basis by emergency and essential services personnel are routinely managed by an incident commander of a particular agency. However, in the case of significant events and disasters which occur or are threatening to occur, a response management system must be implemented to ensure a systematic approach to the effective utilisation of facilities, personnel, equipment, resources, procedures and communication. An incident management system provides for the clear allocation of responsibilities, mechanisms for strategic, tactical and operational direction and a participative approach to the management of the event (See Enabler 1).
- The system must identify specific roles and responsibilities for each response and recovery activity included in the operational plans of the various agencies participating in response and recovery efforts. It must also provide for mechanisms to determine the level of implementation of response and recovery measures according to the magnitude of the event or disaster and the capacity of an agency to deal

with it. The system must be introduced in all spheres of local government in the district. It should also make provision for the development of partnerships between agencies involved in response and recovery and the private sector, NGOs, traditional leaders, technical experts, communities and volunteers for the purposes of enhancing capacity.

- Each agency identified in the incident management system must establish standard operating protocols or procedures (SOPs) for co-ordinating response and recovery operations and for ensuring government/business continuity. The SOPs must be consistent with the requirements of relevant legislation, regulations and standards.

6.4.3 Emergency Communication System

- In view of the critical role of interagency communication in the management of incidents, significant events and disasters, Ndwedwe must give priority attention to the continued development of an emergency communication system for this purpose. (See Enabler 1)

6.4.4 Media Relations

- Responsibilities and protocols for media liaison, including press releases and media interviews, in the event of a provincial disaster occurring or threatening to occur must be determined by iLembe MDMC (see subsection 6.5.3 below).

6.4.5 Regulations and Directives for Response and Recovery Operations

- The ILembe District must ensure the development of directives to standardise and regulate the practice and management of response and recovery operations in the local spheres of government.

6.4.6 Key Performance Indicators

- The organs of state that must bear primary responsibility for contingency planning and the coordination of known hazards have been identified and allocated such responsibility
- Stakeholders that must bear secondary responsibility for contingency planning and the coordination of known hazards have been identified and allocated such responsibility.
- Contingency plans for known hazards by national organs of state have been developed.
- Response and recovery plans are reviewed and updated annually.
- Field operations guides (FOGs) for the various activities associated with disaster response and recovery have been developed and are reviewed and updated annually
- A district standard incident management system has been developed and is reviewed and updated annually.
- SOPs and checklists have been developed and are understood by all stakeholders in their respective fields of responsibilities.
- Regulations and directives for management of disaster response and recovery operations have been developed and gazetted or published.

6.5 Relief Measures

6.5.1 Regulations of Relief Measures

- Relief operations following significant events and/or events classified as disasters must be co-ordinated and relief assistance and donations equitably distributed.
- Progressive monitoring and annual reviews of regulations for the management of relief operations, based on lessons learned must be conducted.
- These reviews must include:
 - responsibilities for the release of appeals for donations
 - standards of relief (in keeping with international standards)
 - duration of relief efforts
 - acceptance of assistance

6.5.2 Key Performance Indicators

- Regulations for the management of relief operations have been developed.
- Progressive monitoring and annual reviews of regulations for the management of relief operations, based on lessons learned are conducted.

6.6 Rehabilitation and Reconstruction

- In order to ensure a holistic approach to rehabilitation and reconstruction in the aftermath of a significant event or disaster, the organ of state tasked with primary responsibility for a known hazard must facilitate the establishment of project teams for this purpose.
- Checks and balances must be effected to ensure that projects and programmes maintain a developmental focus. Project teams established for this purpose must determine their own terms of reference and key performance indicators and must report on progress to iLembe MDMC.

6.6.1 Key Performance Indicators

- Post-disaster project teams for rehabilitation and reconstruction have been established and operate effectively
- Mechanisms for the monitoring of rehabilitation and reconstruction projects have been established and regular progress reports are submitted to iLembe MDMC.

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7 Enabler 1: Information Management and Communication

Objective

The object is to guide the development of a comprehensive information management and communication system and establish integrated communication links with all disaster risk management role players.

Introduction

- Disaster risk management is a collaborative process that involves all spheres of government, as well as NGOs, the private sector, a wide range of capacity-building partners and communities. It requires capabilities to manage risks on an ongoing basis, and to effectively anticipate, prepare for, respond to and monitor a range of natural and other hazards. Integrated disaster risk management depends on access to reliable hazard and disaster risk information as well as effective information management and communication systems to enable the receipt, dissemination and exchange of information.
- It requires systems and processes that will:
 - provide an institutional resource database, including a reporting and performance measurement facility
 - facilitate information exchange between primary interest groups in the district
 - facilitate risk analysis, disaster risk assessment, mapping, monitoring and tracking
 - guide and inform focused risk management and development planning and decision making in the district
 - facilitate timely dissemination of early warnings, public awareness and preparedness, especially for at-risk people, households, communities, areas and developments in the district
 - enable timely and appropriate decision making to ensure district-wide rapid and effective response and recovery operations
 - facilitate integrated and co-ordinated multi-agency response management
 - record and track real-time disaster response and recovery information
 - facilitate education, training and research in disaster risk management in the district
 - facilitate funding and financial management for the purposes of district disaster risk management.
- The system must have the capabilities to acquire, sort, store and analyse data for the purposes of targeting information for primary interest groups. In addition, it must include GIS (geographical information systems) mapping and information display applications, as well as standardised multimedia communication capabilities.

Outline

- Section 7.1 introduces the basic requirements of an integrated information management and communication system for the purposes of disaster risk management.

- Section 7.2 outlines an integrated information management
- Section 7.3 addresses the requirements for the collection of data required to achieve the objectives described in the Act and the national as well as provincial disaster management frameworks.
- Section 7.4 focuses on the information and communication requirements in respect of the KPAs and enablers described in the national and provincial disaster management frameworks.
- Section 7.5 focuses on additional specialised functionalities that need to be included in the integrated information management and communication system.
- Section 7.6 outlines the development and system requirements of an integrated information management and communication system.
- Section 7.7 describes the various communication media required to enable the receipt, dissemination and exchange of information.
-

7.1 Establishing an Information Management and Communication System

- Sections 16 and 17 of the Act envisage an integrated and uniform system that provides for information exchange between all the relevant interest groups in all three spheres of government, in communities and in the private sector through a variety of communication mechanisms and media. The system must provide for the receipt, storage, analysis and dissemination of information.
- In addition, the information management and communication system must include the establishment of communication links, which will 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. In this regard, 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 will require the use of a dedicated two-way, national emergency radio communication network.
- The NDMC serves as an information-clearing house for disaster risk management. In this it is supported by the PDMC and municipal disaster management centres, which must assist the NDMC with the development and maintenance of information management and communication systems relevant to their areas of responsibility. The KZN PDMC and iLembe's MDMC's systems must be compatible with the national system and must conform to the requirements of the NDMC.
- Responsibility for the various components of the information management and communication system is addressed below.
- The figure below shows a conceptual layout of a typical environment in which disaster risk management information is processed:

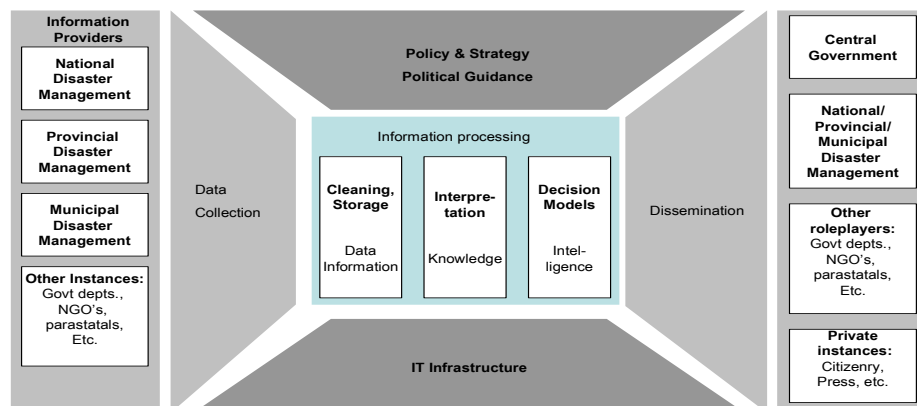


Figure 7-1 Typical disaster risk management information management process

7.2 Integrated Information Management and Communication Model

- An integrated information management and communication system must be established to achieve the objectives of the key performance areas and enablers outlined in the national disaster management framework. Such a system must encompass the following primary functionalities (see Figure 7.2):
 - Data acquisition system (data gathering and collection) (see below).
 - Support for KPAs (see below)
- institutional capacity
- disaster risk assessment
- disaster risk reduction
- response and recovery.
 - Support for the enablers (see section below)
- education, training and research
- funding.
 - Additional functionalities required (see section below).
 - Integrated disaster risk management database and information management (see section below).
 - Information dissemination and communication links to facilitate information flow between role players (see section below).
- Responsibility for the different components of the integrated information and communication system needs to be assigned to specific role players. This will ensure that the functionalities required to support

the system are developed and maintained. The components must be integrated into a single standardised system.

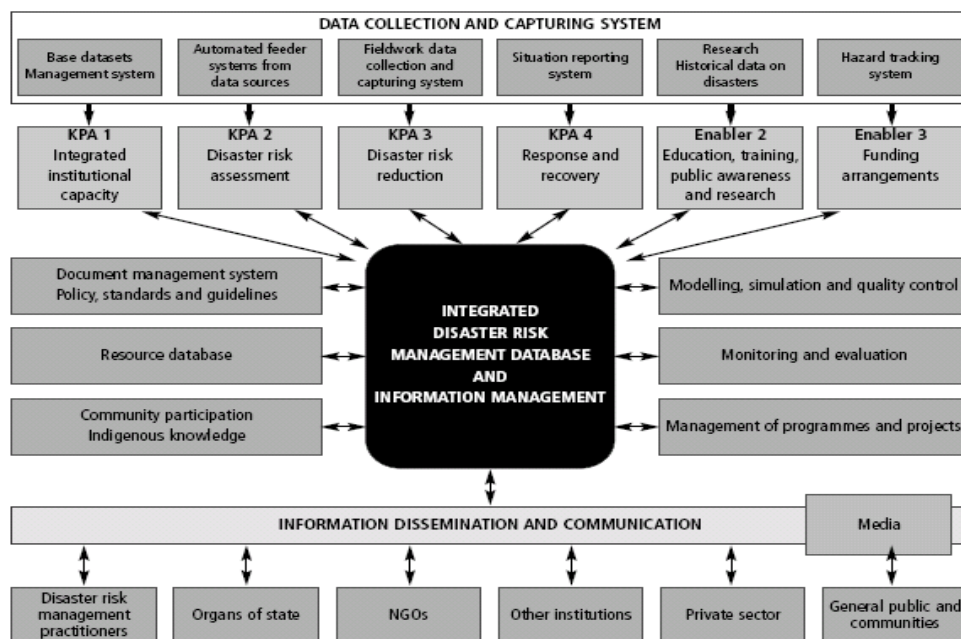


Figure 7-2: Model of an integrated information management and communication system for disaster risk management

7.3 Data Acquisition (data collection and capturing)

- A detailed analysis of the data needs of each KPA and enabler must be done in order to ensure the objectives of the Act and the provincial disaster management framework are met. To this end, it must identify both the inputs and data sources (data custodian's/data owners) that will be required to ensure effective support for the implementation of the Act and the framework.
- The following types of data, among others, will be required:
 - base data (for example, topographical, census, land cover, infrastructure, deeds, environmental)
 - dynamic data (for example, contact and other relevant details of all role players)
 - field data (for example, features of buildings, infrastructure)
 - situational reporting system (for example, incidents, local conditions)
 - research and historical data (for example, research reports, data on historical incidents)
 - hazard tracking (for example, weather conditions, flood, fire hazard conditions, droughts)
 - early warnings.

- Data obtained in the field, whether electronically recorded (for example, with electronic hand-held devices and differential GPS for real-time data capture) or paper-based (for example, questionnaires) must be uploaded to the district's integrated disaster risk management database using standardised input forms or templates to ensure uniformity of data capturing formats. The Internet, via wireless communication, could also be used to obtain access to source data.
- To obtain access to data required for disaster risk management activities, provision must be made for importing data from identified existing databases and GIS systems owned and used by other organs of state and organisations to perform their primary activities

7.3.1 The objectives of Indigenous Knowledge in disaster risk management

- To promote the value and application of indigenous knowledge, through information and communication technology for the management of land, water and biodiversity resources;
- To strengthen the capacities of communities within the Ndwedwe.
- To harness and promote indigenous knowledge by integrating tradition and science through information and communication technology in order to mitigate environmental degradation and impacts of hydrological hazards on the natural environment;
- To cope with impacts of floods and droughts so as to save lives, property and the environment within Ndwedwe;
- To increase awareness and participation among and by local communities in nature conservation;
- To increase coordination and improve effectiveness in the management of disasters;
- To ensure cost effectiveness in the utilisation of resources in the management of disasters.

7.3.2 Significance of indigenous knowledge in Disaster Risk Management

- Historically a form of reactive planning only during a disastrous incident was followed instead of proactive planning. Indigenous knowledge is therefore vital in ensuring that communities are proactive in order to save lives, property and damage to the environment. Indigenous knowledge is a precious national resource that can facilitate the process of disaster prevention, preparedness and response in cost-effective, participatory and sustainable ways.
- Amakhosi (Traditional Leaders) are therefore very important stakeholders particularly with regards to mobilising communities, information sharing, training and preparedness of communities before disasters strike their communities. Traditional leadership plays a key role in identifying local risks, community vulnerabilities, mobilising local community resources and identifying roles and responsibilities (with the guidance of the Disaster Management Centre). They provide greater support to ensure that local municipalities and their villages participate in disaster reduction activities.
- The National Disaster Management Framework (NDMF) places emphasis on measures that reduce the vulnerability of disaster-prone areas, communities and households. This includes the involvement of, amongst others, traditional leaders and community participation in disaster management. The Head of the Disaster Management Centre should therefore ensure that the traditional leadership are consulted and takes part in disaster management activities including contributing to awareness and training. The goal of this framework is to assist Ndwedwe Municipality to be better prepared to manage emergencies – “from self-pity to self-help”.

7.3.3 Key Performance Indicators

- Agreements with identified data custodians have been negotiated by iLembe MDMC to ensure availability, quality and reliability of data.
- Indigenous knowledge to be taken into account in planning and strategies

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7.4 Information management and Communication Support for Key Performance Areas and Enablers

- This section describes the basic information management and communication system features required to support the key performance areas and enablers described at iLembe District disaster management framework.

7.4.1 General

- The following is a general summary of the below, as pertaining to iLembe District Municipality, which is discussed in more detail herein below

7.4.1.1 Information Management and the Disaster Management Centre

- The following functions are generally applicable to information management by the DMC:
 - Communication links with disaster risk management role players.
 - The establishment and management of the disaster risk management Information System and inclusive of the information mentioned in sections 17(2) (a) to (m) of the Act.
 - Dissemination of information gathered from any organ of state, body or person.
 - A repository of disaster risk management plans for all levels of government, incorporating their status in terms of the disaster plan review process and relevant KPIs.
 - High level information to be included in periodic reports to the Minister (e.g. the Annual Report).
 - Contact details of all disaster risk management role-players

7.4.1.2 Pre-disaster information

- Information relating to pre-disaster activities is typically that which is assimilated and/or exchanged prior to the occurrence of disasters and is generally aimed at mitigating the effects of disasters or in some cases preventing disasters altogether. This type of information relates to:
 - Strategies, guidance and methodologies on prevention and mitigation of disasters, including the components listed in sections 20, 33 and 47.
 - Conditions which may lead to environmental disasters e.g. impending weather phenomena, oil tanker activity, fire hazards etc.
 - The recruitment, training and participation of volunteers.
 - Capacity building of disaster risk management role-players.

- Contingency plans

7.4.1.3 During a state of disaster information

- Information falling into this category is typically that data which is assimilated and/or exchanged during the occurrence of disasters at any level of government and is generally used in the operational environment for purposes of disaster resolution and reporting purposes (e.g. to central government). Examples of this type of information are:
 - Situation report detail of disaster occurrences.
 - Measurement of disasters in accordance with disaster grading criteria.

7.4.1.4 Post-Disaster Information

- This type of Information is assimilated and/or exchanged largely for academic purposes in order to prevent or mitigate disasters of a similar nature in the future. This data is also utilised for reporting purposes. Examples of this type of information are:
 - Lessons learnt
 - Feedback to pre-disaster planners
 - Measurement in terms of KPIs
 - Post-disaster recovery
- The NDMC is nationally responsible to ensure effective and accurate disaster risk management information communication. This function is also a responsibility of Ndwedwe DMC. This must be executed through the utilisation of monitoring, evaluation and programme management techniques.
- It is crucial that Ndwedwe DMC ensure that communication and information systems developed are in alignment with those developed at District level, for neighbouring DMCs and the PDMC.
- Disaster risk management role players relevant to the Municipal level have been identified, must be updated constantly and will be linked to the disaster risk management plans and circulated to the various role players. The Municipality must compile its own contacts database annexed to their DMPs. A copy of these databases must also be provided to the PDMC as soon as they have been compiled.
- Execution of these elements must be done in accordance with the NDMF and NDMC guidelines, or where the NDMF does not specifically address an element, through proper planning and communication.
- The DMIS must link with incident management systems and/or other related DMIS requirements as specified by the NDMF or the NDMC and PDMC. It must make provision for disaster risk planning, response, recovery and all related matters pertaining to effective disaster risk management communication and reporting. It must, as a minimum requirement, be fully compatible with and be able to communicate with the PDMC DMIS and the PDMF's guidelines relating to a DMIS and related information management must be consulted in this regard.

7.4.1.5 Key Performance Indicators

- All relevant disaster risk management-related information gathered and disseminated to the district and relevant role players and stakeholder.
- A DMIS procured.
- An information management and communication strategy, including communication protocols, developed

7.4.2 Key Performance Area 1: Integrated Institutional Capacity for Disaster Risk Management

- Key performance area 1 deals with the establishment of integrated institutional capacity to give effect to the Act. In this regard, it outlines a number of functions that have to be performed by the information management and communication system. These are listed below.
 - A directory of the names, contact details and roles and responsibilities of all key role players in municipal organs of state in the district involved in disaster risk management must be developed and maintained.
 - A directory of the names, contact details and roles and responsibilities of all key role players in the ICDM (Provincial Intergovernmental Committee on Disaster Management) must be recorded and regularly updated.
 - The names, contact details and roles and responsibilities of all members of iLembe MDMAF and similar forums established at provincial and local municipal levels, as well as mechanisms for accessing emergency resources under their control, must be recorded and regularly updated.
 - A record of decisions and recommendations made by the iLembe MDMAF and NDW DMAF must be disseminated to all role players in the Municipality affected by the decisions. A directory of the names and contact details of all members of planning project teams initiated by the various disaster management advisory forums must be established and maintained. Minutes of meetings must also be recorded and records kept. A central communications centre, with a central 24-hour communications facility for reporting purposes as well as for managing the dissemination of early warnings, must be established. A reflexive facility for confirming or acknowledging receipt of early warnings should be part of the system. The centre must also allow for the co-ordination of response measures in the case of significant events and disasters.
 - Memoranda of understanding, mutual assistance agreements and bilateral and multilateral agreements must be recorded and updated.
 - An accurate record-keeping system, incorporating disaster risk management, disaster risk reduction and contingency plans, plans for specific projects, minutes, reports, memoranda and correspondence, must be established and maintained.
 - Comprehensive records of units of volunteers in the municipalities, including skill levels and capabilities, must be maintained.
 - A directory of the names of district community participation structures and the contact details of the participants must be established and maintained.
 - A record of performance measurement and monitoring of Ndwedwe DRMC and primary entities tasked with disaster risk management responsibilities must be kept.

7.4.3 Key Performance Area 2: Disaster Risk Assessment

- Critical analysis and assessment of the implications of natural or technological hazards and environmental degradation in the municipality depend on both spatial and non-spatial information.
- Such information assists in:
 - identifying hazards and their potential impacts
 - mapping of hazards and disaster risks
 - planning appropriate disaster risk reduction measures
 - monitoring and tracking hazards for the purposes of early warnings and updating this information
 - facilitating response management when significant events or events classified as disasters occur, assessing and tracking the damage caused by hazards, and planning appropriate response and recovery measures
 - evaluating the appropriateness and effectiveness of disaster risk reduction measures as well as response and recovery plans.
- The disaster risk assessment component of the information management system must therefore be able to produce electronic GIS-based risk profiles generated from standardized data inputs. Such inputs may be drawn from a range of sources, including hazard and disaster event tracking, vulnerability monitoring, historical reviews of significant events and disasters, scientific and specialist research, and field consultations in areas and communities most at risk. Data and information captured and used in the district municipal and provincial spheres also need to be incorporated into the information management system. To develop comprehensive profiles, the information management system is required to reflect changes in status through the use of predefined and customizable parameters.
- The hazard and vulnerability functionality must allow for disaster risk assessment information to be represented as GIS-based risk maps, with different layers holding data about particular features of the map. Maps must be produced for different types of hazard, including, among others, fire, flood, drought, major transport incidents and infrastructure collapse. In addition, they should provide information on political boundaries, transport networks, settlements and natural resources. These maps must make provision for layers of data containing basic location information about hazards with thematic support maps displaying data about specific feature such as population distribution, infrastructure, geological information, landforms, drainage, land use/land cover and soils.
- The vulnerability of communities, businesses and infrastructure must be determined by overlaying different risk maps on base maps to evaluate and analyse the potential impacts of identified hazards and risks. These hazard and vulnerability maps must also be disseminated or displayed for orientation or training purposes.

7.4.4 Key Performance Area 3: Disaster Risk Reduction

7.4.4.1 Disaster Risk Reduction Planning Component

- Once indicative disaster risk profiles have been developed, an integrated planning functionality will be required to assist role players in the district with the development and updating of disaster risk management plans. Such a component would need to draw on the risk profiles and a detailed resource database and would have to facilitate both risk reduction planning and contingency planning.

7.4.4.2 Disaster Risk Reduction Component

- This component must facilitate the inclusion of disaster risk reduction strategies in IDPs and other development initiatives and programmes. It must enable tracking of the status of these initiatives, programmes and plans and storage of related documentation and correspondence.

7.4.5 Key Performance Area 4: Response and Recovery

7.4.5.1 Response and Recovery Component

- This component is intended to facilitate the management of response and recovery operations and the recording, retrieval and updating of specific real-time information during single and multiple significant events and/or disasters. It must also allow for direct links with the communication system to provide the information required for mobilisation.
- The response and recovery component must include the following:
 - the area affected (indicating the specific and surrounding affected areas and links to all the spatial and other relevant data associated with the area)
 - the type of event (classification by type, magnitude and severity)
 - analysis of status of critical lifeline infrastructure
 - analysis of reported impacts and monitoring of progress with recovery operations in accordance with standard assessment and situation report formats
 - situation reporting, tracking and analysis of status of critical disaster operations, such as search and rescue, emergency medical care, access routes and fire suppression
 - response and recovery resource database, including:
 - primary agency (contact details of the primary agency, response and recovery plans and SOPs applicable to the specific area and event)
 - resources and support agencies (contact details of the support agencies, response and recovery plans and SOPs applicable to the specific activity)
 - relevant service providers (listing of all other related services that may be required to assist with response and recovery operations in a specific area).
- The response and recovery features should be designed as templates and drop-down menus to make the information easily accessible for use during a disaster or significant event.
- Provision must be made for real-time manipulation of data related to the event or disaster gathered during the planning phase. The component must also be linked to the resource database (see subsection 5.5.2 below) to assist in identifying the location of resources locally and to facilitate and record the management and allocation of resources during a significant event or disaster. The DOC (Disaster Operations Centre) in the MDMC must be able to access this information in order to track the deployment of resources and the progress of response activities. Specialist GIS-based applications, linked to the information management system, must facilitate computer-aided management of response and recovery operations by allowing for simulated or real-time modelling, tracking and situational reporting in an affected area.

7.4.5.2 Mobilization and Communication Component

- The primary system requirements for mobilisation and communication are an on-site automated dialling and/or message delivery system and two-way radio communication facilities that call designated small or large groups of people, community members, volunteers and response agencies where required. The method of communication should be determined consultatively with various role players.
- The system must be able to use standard landline (Telkom) telephones, cellular telephones connected to all available networks, and telephony-enabled radio systems. It must relay digitally recorded voice messages to and request responses from recipients, who must be able to use the telephone keypad to send signals in reply. All details of all calls must be logged and reports generated from this information. The system must also be capable of sending messages to pagers (alpha and digital) and sending e-mails and faxes.

7.4.5.3 Event Logging and Tracking Management Component

- The system must allow for the recording and logging of all messages received and sent, all decisions made, and instructions or directives communicated during a significant event or disaster. Recording devices must allow for the recording and storage of voice, pictures and documents as well as their retrieval 'on the fly' for management and evaluation purposes.

7.4.6 Enabler 2: Education, Training, Public Awareness and Research

- To support the education, training, public awareness and research enabler, the following functionalities are required:
 - Education and training programmes pertaining to disaster risk management in all spheres of the education in the district system need to be recorded and monitored.
 - The content of district-wide education and training programmes as well as records of participants (professionals, volunteers, communities, learners) and the education and training programmes they attended must be recorded.
 - A register and records need to be kept of all accredited service providers as well as accredited facilitators in the district to ensure that minimum standards set by Sector Education and Training Authorities (SETAs) are met.
 - District research programmes and projects need to be registered and monitored and the information disseminated to relevant stakeholders in the district.
 - Initiatives related to an integrated awareness programme by all spheres of government in the district need to be captured to minimise duplication and to ensure synergy among stakeholders.
- All organs of in the district must use the system to record information related to disaster risk management training, education, awareness and research.

7.4.7 Enabler 3: Funding arrangements for Disaster Risk Management

- Provision must be made for a database that contains data relating to all funding matters for the district. The funding mechanisms for different aspects of disaster risk management, budgets, applications for

funding, approvals and spending need to be recorded to ensure proper usage and management of iLembe district's available funding.

7.4.8 Key Performance Indicators

- An integrated information management and communication system has been designed and implemented to support:

Integrated Institutional capacity.

Disaster risk assessment.

Disaster risk reduction programmes and plans.

Response and recovery operations.

Education, training, public awareness and research.

Funding mechanisms and financial controls.

7.5 Specialised System Functionalities

7.5.1 Document Management System

- A comprehensive documentation management system must be developed to allow for classification, storage and retrieval of all documents pertaining to disaster risk management policies, standards, regulations and guidelines.
- The system must also provide for the classification, storage, and retrieval of all documents pertaining to institutional capacity (minutes of meetings, agreements), disaster risk assessments (risk assessment reports), disaster risk reduction programmes, plans and operational activities (action plans, SOPs, memoranda).
- This would facilitate ease of access for all users in the three spheres of government. It would also facilitate the inclusion of relevant information in the training and information systems. The system must accommodate text, video, digital, electronic and voice formats.
- The NDMC is responsible for developing a uniform documentation management system, which must be used by the district and its local and municipal organs of state to submit, record and retrieve documentation related to disaster risk management.

7.5.2 Resource and Capacity Database

- A comprehensive, uniform and easily updateable resource and capacity database must be developed and implemented to support the activities described in the KPAs and enablers.
- To this end, the following data must be captured:
 - infrastructure and facilities
 - human resources
 - equipment and material

These users must be able to access, record and update their data sections, which should include the resources and capacities they have available for the purposes of disaster risk management. It is therefore necessary to assign responsibility for the updating and maintenance of the respective sections of the database to designated officials in the relevant organs of state.

7.5.3 Modelling and Simulations Functionality

- The functionality to perform modelling and simulation of risks related to different scenarios and the probability that specific events would occur must be provided in order to ensure a continuous situational awareness and the effective allocation of resources.
- Furthermore, simulations can also be used in training programmes aimed at developing and evaluating skills and competencies in particular roles. The effectiveness of specific courses of action in real life situations can also be determined through the use of modelling and simulations. Such models can be used to ensure that policies and procedures to address specific situations or events follow best practice.

7.5.4 Monitoring and Evaluation System

- The Act and the national as well as provincial disaster management frameworks emphasise the role of the NDMC, PDMCs and MDMCs in monitoring and measuring performance and evaluating the status of all disaster risk management activities in their respective areas of jurisdiction.
- To facilitate a uniform approach and simplify reporting on the status of disaster risk management by organs of state in all spheres of government, one integrated monitoring, reporting and evaluation system must be developed and implemented. The NDMC is responsible for the development and implementation of such a system. All organs of state in all spheres of government must use the system to report on the status of their programmes, plans and operations.
- The key performance indicators outlined in the provincial disaster management framework must be used as a basis for the monitoring and evaluation system of the district's system. Annual reports submitted by iLembe MDMC, as required by the Act, must also be included in the system.

7.5.5 Management of Disaster Risk Management Programmes and Projects

- An integrated portfolio (homogeneous grouping of programmes or projects and programmes per KPA or department), programme and project management system must be developed and implemented by the MDMC.
- Features that need to be included in this component are:
 - disaster risk management planning
 - mechanisms to monitor progress with the preparation and regular updating of disaster risk management plans
 - mechanisms to track the status of projects.
- The portfolio, programme and project management system must allow all role players in the district, as well as the local municipalities in its area involved in implementing disaster risk management programmes and projects to view information related to their respective programmes and projects.

These role players must also have secure access to the system, allowing them to register new projects, update existing information, view and track progress and cost information.

7.6 Development of an Integrated Information Management and Communication System

- The initial step in developing an integrated information management and communication system for disaster risk management is to integrate the data in existing databases and information management systems, as well as the databases developed for each KPA and enabler (as described in this enabler), into a coherent, integrated database (utilising a tool appropriate for the purpose). In addition, shortcomings and problem areas must be identified and addressed to ensure that the system meets the requirements detailed at iLembe District Disaster Management Framework.
- A comparative analysis to identify the difference between the actual or current system and the desired, future system described in the national and provincial disaster management frameworks must be undertaken to inform the development process. The analysis must incorporate relevant standards and inputs from all stakeholders.

7.6.1 System Requirements

- The minimum system requirements for an information management and communication system are listed below:
 - The development and management of the information management and communication system must occur within the context of the objectives identified in the Act.
 - The information management and communication system must be designed in such a way that it can be built, implemented, maintained and modified in a modular, flexible, evolutionary and incremental manner.
 - The various components and functionalities of the information management and communication system must provide the platform for a single, shared Disaster Risk Management Common Operating Environment designed for use in the field of disaster risk management. The Common Operating Environment (COE) must facilitate:
 - interoperability between systems and system components
 - sharing of common system components
 - common infrastructure components and common data/information
 - reuse and customisation of system solutions or components.
 - A critical aspect of the COE, and, by extension, the entire information management and communication system, is the need for improved, high-performance communications solutions.
 - Clear roles and responsibilities for the provision and governance of an information management and communication system for disaster risk management must be identified and assigned to the appropriate primary and support agencies and stakeholders involved in disaster risk management.

- Users and user communities must carefully formulate their own requirements with regard to management information requirements.
- Secure access remains a crucial concern. Users must be able to trust the information management and communication system.
- The information management and communication system must accommodate a management information component for the production of reports as required by the Act.
- The information management and communication system must be designed to keep pace with the constantly increasing flow of data, information and intelligence resulting from greater use of computer systems as well as the ongoing development of high-performance data communications and powerful sensor systems.
- Appropriate and ongoing training in working with new digital tools must be provided.

7.6.2 Key Performance Indicators

- A disaster risk management information and communication system for the municipality has been established and implemented.
- The disaster risk management information and communication system supports the key performance areas and enablers.
- Information management and communication systems municipality are fully compatible with the District and provincial systems and are part of a single integrated network.

7.7 Information Dissemination and Display System

- To ensure accessibility and widespread use of disaster risk management data and information, an effective information dissemination and display system needs to be developed and implemented by the NDMC in consultation with PDMCs and MDMCs. The identification and definition of the information needs of all role players as well as the identification of the most appropriate channels of communication are an integral part of this process. In addition, the NDMC must ensure that public-access systems are available in several languages.
- Section 17(3) of the Act requires the NDMC to take reasonable steps to ensure that disaster risk management information is electronically available to any person free of charge. To this end, the NDMC will develop, implement and maintain an interactive website to provide controlled access to the information management system based on defined information needs.

7.7.1 Key Performance Indicators

- Information dissemination programmes and channels of communication between all spheres of government, organs of state, communities and the media have been established.
- Disaster risk management information is easily accessible for all at no additional charge

8 Enabler 2: Education, Training, Public Awareness and Research

Objective

The object of this enabler is 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.

Introduction

- This enabler addresses the requirements for the development and implementation of a municipal education, training and research needs and resources analysis and a municipal disaster risk management education and training framework, the development of an integrated public awareness strategy, including effective use of the media, the development of education and training for disaster risk management and associated professions, and the incorporation of disaster risk management in school curricula. It also outlines mechanisms for the development of a disaster risk research agenda.

Outline

- Section 8.1 focuses on the development of a district municipal education, training and research needs analysis.
- Section 8.2 outlines the requirements for the development and implementation of an integrated district municipal disaster risk management education and training framework
- Section 8.3 discusses the promotion of education for professionals in disaster risk management and associated fields and for learners in primary and secondary schools.
- Section 8.4 addresses the development of disaster risk management training programmes.
- Section 8.5 describes the development of an integrated public awareness strategy and the promotion of risk-avoidance behaviour and the establishing of good media relations
- Section 8.6 focuses on research programmes and the provision of information and advisory services.
-

8.1 Municipal Education, Training and Research Needs and Resources Analysis

- A municipal education, training and research needs and resources analysis must be conducted to determine the disaster risk management education, training and research needs of those involved in disaster risk management across sectors, levels and disciplines.
- The needs and resources analysis must include an audit of existing resources. The design of the analysis must be based on scientifically acceptable research principles and methods and not on perceived needs.

8.1.1 Mechanisms for Standards, Accreditation and Registration

- A technical advisory body, straddling both national and provincial spheres of government, must be established to assist the NDMC, PDMC, MDMCs and SETAs to maintain the required standards of disaster risk management education across all functional/professional areas. The technical advisory body should also ensure that similar standards underpin the national education and training framework. Subcommittees of the technical advisory body with specific roles and responsibilities may be initiated by each province. iLembe District Municipality is expected to participate in this body.

8.1.2 Key Performance Indicators.

- All disaster risk management education and training standards and qualifications comply with the requirements of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995) and the guidelines prescribed in the National Qualifications Framework.
- A technical advisory body has been established Municipality participates in it.
- An accreditation and registration system has been established to ensure that all education and training providers and facilitators are registered and accredited.

8.2 Disaster Risk Management Education

- Disaster risk management education programmes must be designed as part of the formal education system and must be in line with the NETaRNRA (National education, training and research needs and resources analysis), the national and provincial education and training framework and SAQA and NQF requirements.

8.2.1 Education for Disaster Risk Management Professionals (NQF levels 5-8)

- Specific education programmes that will enhance a professional career path in disaster risk management must be further developed and implemented by tertiary institutions in accordance with approved unit standards and academic requirements.

8.2.2 Education for Practitioners in Professions Associated with Disaster Risk Management (NQF 5-8)

- Aspects of disaster risk management must be integrated into the existing education programmes of relevant professions associated with disaster risk management.

8.2.3 Integration of Disaster Risk Reduction Education in Primary and Secondary School Curricula (NQF levels 1-4)

- Disaster risk reduction education must be integrated in primary and secondary school curricula. Schools should be regarded as focal points for raising awareness about disaster risk management and disaster risk reduction. The risk reduction component of disaster risk management education should be linked to broader education programmes on development and the environment.

8.2.4 Responsibility for the Development of Accredited Education Programmes

- The NDMC is responsible for promoting, facilitating and monitoring the development, implementation and accreditation of education programmes for professionals in disaster risk management and associated fields. The NDMC should also promote, facilitate and monitor the development and implementation of education programmes in schools.

8.2.5 Monitoring and Evaluation

- The NDMC must establish a register of all disaster risk management programmes and institutions offering education in disaster risk management and related fields.
- The NDMC must facilitate the appointment of an independent body to serve as an education and training quality assurer (ETQA) to facilitators, presenters, other service providers and course materials.
- The NDMC must also establish a register of all accredited facilitators, presenters, instructors, educators and institutions offering formal disaster risk management programmes, as well as a register of formal disaster risk management course materials.
- The MDMC should leverage off the above.

8.3 Training Programmes for Disaster Risk Management

- Disaster risk management training programmes must be designed in line with the NETaRNRA, the national education and training framework and, where appropriate, SAQA and NQF requirements.

8.3.1 Types of Training

- Training outside of the formal primary, secondary and tertiary education systems has a pertinent role to play in the drive to transfer skills and to capacitate disaster risk management stakeholders and other interested persons. Such training programmes may include accredited interventions registered with the NQF which may earn trainee's credits towards a registered qualification, as well as programmes that are not accredited.
- Training interventions may include:
 - modular courses
 - short courses
 - workshops
 - conferences
 - seminars
 - mentorships
 - in-service training
 - leaner ship,
 - self-teaching, experiential training
 - mass communication

- indigenous knowledge
 - drills, exercises and rehearsals.
 - Loud hailing,
- Ndwedwe MDMC must make every effort to promote the registration of training programmes, such as short courses and workshops, with the relevant SETAs so that they can count as credits towards formal qualifications.

8.3.2 Training Programmes for Government Officials and Policy Makers

- Training programmes for government officials and policy makers must cover disaster risk reduction and other relevant areas, which may include development planning, hazard identification and assessment, communicable diseases, dry land agriculture, participatory rural appraisal, applied climate science and GIS. Such training programmes must embrace the multidisciplinary and interdisciplinary dimensions of disaster risk reduction and should be informed by the relevant indicative risk profile.
- The training of **municipal councillors and officials** should take place within the context of the national education and training guidelines provided by the Skills Development Act, 1998 (Act No. 97 of 1998), the Skills Development Levies Act, 1999 (Act No. 9 of 1999) and the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995). The provisions contained in these Acts will have a direct bearing on the qualifications and career paths of officials involved in disaster risk management.

8.3.3 Training Programmes for Communities

- Training programmes for communities must focus on disaster risk awareness, disaster risk reduction, volunteerism and preparedness. Local indigenous knowledge needs to be incorporated into training programmes aimed at local communities. Where appropriate, communities must be given the opportunity to modify and enhance training programmes through the inclusion of indigenous knowledge, practices and values, and the incorporation of local experience of disasters and disaster risk management. Indigenous knowledge must also be harnessed and incorporated into needs analyses and course development processes.

8.3.4 Training of Volunteers

- Special training programmes must be developed for persons interested in volunteering their services. These programmes should address issues such as disaster risk reduction, vulnerability assessments, greater awareness of risks and hazards and general preparedness and response.
- There should be an emphasis on the training of community trainers in order for them to serve as 'force multipliers' by, in turn, training others. In this regard, special consideration must be given to the costs of training, provision of protective clothing, travel expenses, insurance and incentives. The list of their names should be submitted to iLembe MDMC to maintain a record of all volunteers trained in such programmes for submission to the NDMC for inclusion in the national database.

8.3.5 Training of Trainers and Facilitators

- Training programmes must facilitate the development of accredited trainers and facilitators in the field of disaster risk management so that they can transfer improved skills and knowledge to relevant organisations and or communities at risk. Such programmes must be in line with the education and training framework and informed by the NETaRNRA. Attendance should be encouraged by the MDMC.

8.3.6 Learner ships

- Disaster risk management learner ships must be developed and promoted by Ndwedwe DMC. These should include mentorship programmes that involve the transfer of skills from experienced officials to young inexperienced learners. Such learner ships must be in line with SAQA and NQF requirements. Existing learner ship programmes covering aspects of disaster risk management should also be explored, both for training purposes and to augment disaster risk management learner ships.

8.3.7 Responsibility for the Development of Training Programmes

- The PDMC is responsible for promoting, facilitating and overseeing the development and implementation of training programmes and materials for practitioners in disaster risk management and associated fields (including government officials, policy makers, trainers and facilitators), relevant stakeholders and interested people and communities.
- Provincial and municipal organs of state must plan, organise and implement training programmes relevant to their respective areas of responsibility in consultation with local communities and in line with the NETaRNRA.
- NGOs and private sector institutions should be encouraged to plan, organise and implement disaster risk management training programmes for clients, suppliers, service providers and the general public.

8.3.8 Monitoring and Evaluation

- The NDMC establish a service provider register to regulate the quality and standards of training programmes. The NDMC will ensure that a register of facilitators, presenters, service providers and course materials is kept in accordance with the national disaster risk management education and training framework.
- The NDMC will facilitate the appointment of an independent body to serve as an ETQA to approve course materials as well as facilitators, presenters and other service providers.

8.3.9 Key Performance Indicators

- Ongoing training interventions including short courses, workshops, seminars and conferences, are available to stakeholders.
- Training programmes have been developed and implemented.
- Facilitators, instructors and presenters have become qualified and have been accredited.

- Approved service providers have been registered and are offering training services and products.
- Widespread community-based disaster risk management training (in line with national training standards) is taking place.

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8.4 Creating Awareness, promoting a Culture of Risk Avoidance and Establishing Good Media Relations

8.4.1 Integrated Public Awareness Strategy

- An integrated public awareness strategy must be developed and implemented to encourage risk-avoidance behaviour by all role players, including all provincial and local government departments, and especially in schools and in communities known to be at risk. Such a strategy is necessary for the promotion of an informed, alert and self-reliant society capable of playing its part in supporting and co-operating with the government in all aspects of disaster risk and vulnerability reduction.
- The National Indicative Disaster Risk Profile (see KPA 2) and the NETaRNRA must inform the integrated awareness strategy. To achieve this objective, a disaster risk management public awareness and information service, which takes cognisance of relevant international trends and initiatives as well as indigenous knowledge, must be established. As part of this service, the NDMC will support the PDMC and municipal disaster management centres with the implementation of programmes in communities at risk which focus on the hazards to which the communities are exposed and the steps they should take to reduce the impact.
- The disaster risk management public awareness and information service will be a critical interface between the information management system, the emergency communication system, all organs of state involved in disaster risk management and the general public. (See Enabler 1.)
- The development of a user-friendly public-access website with relevant and up-to-date information on disasters, disaster risk and key institutional role players is a critical component of such an information service. The employment of qualified resource personnel to take responsibility for functions, for example, materials development, external consultation processes and liaison with the media (print, radio and television), will be necessary to ensure the success of the service. (this is being done by the NDMC)
- In order to instil 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.
- Such campaigns could include:
 - organised and planned awareness programmes aimed at communities, officials, politicians and other stakeholders, using the media, posters, videos, publications and any other innovative means
 - planned conferences by all disaster management centres in all spheres of government, with participation by the relevant intergovernmental relations structures, and, in the case of the province, the inclusion of municipal intergovernmental structures in provincial conferences
 - Imbizo meetings (the participation of volunteers at such meetings is recommended)

- awareness campaigns conducted at least 30 days before a change of season or climate
- annual recognition and celebration of World Disaster Risk Reduction Day (the first Wednesday in October)
- rewards, incentives, competitions and recognition schemes to enhance awareness of and participation in risk reduction activities
- dissemination of information to all role players, especially those at risk, through the use of communication links and early warning systems.
- Public information should be disseminated through radio, television, print and electronic media and schools. In addition, information centres and networks should also be established.

8.4.2 Schools

- Ndwedwe MDMC must seek to establish links with existing awareness creation programmes in schools for the purposes of disseminating information on disaster risk management and risk avoidance in the district.
- Ndwedwe must play an active part in engaging schools to ensure a practical approach to awareness programmes. School awareness programmes must be conducted, assessed and adapted on an annual basis.

8.4.3 Role of the Media

- Communication about disaster risk reduction, preparedness, response and recovery activities is important to ensure that information is passed on to communities and those involved in early warning, response and recovery efforts. The role of the media during disasters must be defined and managed through a consultative process involving the media, role players involved in response and recovery efforts, and communities routinely affected by disasters or impending disasters.
- Informed publicity about disaster risk management initiatives and achievements will increase public awareness and support. In order to achieve this, iLembe MDMC must establish and manage ongoing relations with relevant local and national media. Media relations can be complicated and, at times, of a sensitive nature. It is therefore advisable that all centres adhere to organisational policy guidelines in this regard.
- Organised promotions and positive reinforcement of disaster risk reduction programmes through the media must be initiated in order to ensure public participation in, and support for, such programmes. The objectives, benefits and major activities of disaster risk reduction programmes must be communicated to all role players and specifically to communities that are directly affected by disaster risks.
- The following has to be monitored on a regular basis:
 - positive and negative publicity
 - effectiveness of media communications, especially in communities at risk.

8.4.4 Responsibility for an Integrated Public Awareness Strategy

- It is the responsibility of the MDMC to ensure that programmes aimed at creating awareness and encouraging risk-avoidance behaviour by stakeholders are developed and implemented. Ndwedwe MDMC must also establish good media relations to ensure balanced media coverage and publicity to increase public awareness and understanding of disaster risk management.
- Each organ of state in all three spheres of government must formulate and implement appropriate public awareness programmes that are aligned with the national strategy.
- Communities, NGOs and the private sector must be consulted about the design of such programmes. The use of volunteers to assist with the roll-out of awareness creation programmes should be encouraged to ensure ownership of and participation in public awareness programmes.
- The aims of a research programme and information and advisory services are to:
 - create additional applied knowledge and information on disaster risk,
 - provide access to disaster risk management and related information to all stakeholders and role players,
 - provide an organised and value-added advisory service to all stakeholders.

8.5 Research Programme and Information Advisory Services

8.5.1 Research

- The Act calls for ongoing research into all aspects of disaster risk reduction and management.
- Through a process of consultation, must develop a strategic disaster risk reduction research agenda to effectively inform disaster risk management planning and implementation in the province. Research initiatives should also be linked to the IDP processes of municipalities in the district.
- Research is the responsibility of each and every role player in the disaster risk management arena.

8.5.2 Information Provision

- In order to provide a comprehensive information service, Ndwedwe MDMC must undertake the following:
 - develop an information database
 - establish a library or resource centre on disaster risk reduction
 - make provision for easy access to the information database.

8.5.3 Advisory Services

- An effective advisory service must encompass the following:
 - Technical advice should be provided to national, provincial and municipal spheres of government by other specialist stakeholders.
 - Ndwedwe MDMC must create the capacity to act as information repository of, and conduit for, disaster risk reduction information in its respective areas.
 - Consultants must be registered to ensure that acceptable standards of consulting services.

8.5.4 Key Performance Indicators

- A strategic disaster risk research agenda has been established for the district.
- Research institutions participate in the national research programme on an organised basis.
- A link between scientific research and policy exists (evidence-based policy and policy-oriented research).
- Regional and international exchange, co-operation and networking occur on a regular basis.
- Disaster risk management research contributes to technology development.
- All stakeholders have access to comprehensive research database.
- All stakeholders have access to a comprehensive advisory services.

9 Enabler 3: Funding Arrangements for Disaster Risk Management

Objective

The objective is to establish mechanisms for the funding of disaster risk management at Ndwedwe.

Introduction

- Section 7(2)(k) of the Act requires that the national disaster management framework makes provision for 'a framework within which organs of state may fund disaster risk management with specific emphasis on preventing or reducing the risk of disasters, including grants to contribute to post-disaster recovery and rehabilitation and payment to victims of disaster and their dependants'. Given the provisions of the Act, funding arrangements must be designed in a manner that ensures that disaster risk management activities are funded adequately and in a sustainable way. This enabler describes the disaster risk management funding arrangements for organs of state in the national, provincial and local spheres of government.
- Enabler 3 builds on the recommendations made by the Financial and Fiscal Commission (FFC) on funding arrangements in its Submission on the Division of Revenue 2003/04.

Outline

- Section 9.1 describes the legislative framework governing funding arrangements for organs of state.
- Section 9.2 reviews the principles underpinning funding arrangements.
- Section 9.3 provides an overview of the recommended funding arrangements.
- Section 9.4 describes the funding arrangements required to establish the necessary institutional arrangements, including an information management and communication system for disaster risk management, for the effective implementation of the Act.
- Section 9.5 sets out the mechanisms for funding disaster risk assessment in different spheres of government as part of a national disaster risk reduction strategy.
- Section 9.6 examines the funding requirements for disaster risk reduction planning and its integration with existing development planning processes.
- Section 9.7 delineates the funding arrangements for disaster response and recovery.
- Section 9.8 addresses ways of funding education, training, public awareness and research.

9.1 Legislative Framework for Funding Arrangements

- The following primary legislation provides the context within which funding arrangements for disaster risk management should be designed:
 - Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996)
 - Disaster Management Act, 2002, (Act No. 57 of 2002)
 - Public Finance Management Act, 1999 (Act No. 1 of 1999) (PFMA)
 - Municipal Finance Management Act, 2003 (Act No. 53 of 2003) (MFMA)
 - Municipal Systems Act, 2000 (Act No. 32 of 2000).
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- The KZN PDMF discusses the relevant sections of the above-mentioned acts which should be referred to for further background information and provisions in this regard.
- It is however pertinent to note that the broad funding guidelines set out in sections 56 and 57 of the Act make access to disaster recovery and rehabilitation funding contingent on organs of state earmarking funds for disaster risk reduction activities.

9.2 Principles underpinning Funding Arrangements

- Any funding arrangement must be consistent with the principles set out in the Act and any other related legislation (see section 7.1 above). Furthermore, the management of intergovernmental transfers must be grounded in public finance theory. Anwar Shah, in his seminal book, *The Reform of Intergovernmental Fiscal Relations in Developing and Emerging Market Economies* (published in 1994), points out that the design of any funding mechanism should ensure that the objectives of the relevant legislation are safeguarded, and that the recipients of the funds are held accountable for implementation of the legislation. According to Shah, the important criteria against which any funding mechanism should be evaluated include the following here below, which are equally applicable to the ILembe District Municipality:
 - **Adequacy:** Provincial governments and municipalities should have adequate resources to perform their functions effectively. In relation to disaster risk management, all organs of state should have access to sufficient funding to be able to discharge their legislative responsibilities.
 - **Equity:** Funding mechanisms should ensure that legislation is implemented equitably across provinces and municipalities. This would help to avoid inter-jurisdictional spill overs arising from uneven and inequitable implementation.
 - **Predictability:** Any funding mechanism that includes intergovernmental transfers should ensure predictability by making allocations from national to provincial and local organs of state over the term of the Medium-term Expenditure Framework (MTEF). Any allocations to municipalities should be disclosed timeously so that municipalities are able to take cognisance of these allocations in their annual budgets.
 - **Administrative efficiency:** The cost of administering the funding mechanisms should be kept to a minimum. Ideally, the funding mechanisms should not impose new reporting obligations on

provincial or local organs of state. Rather, the reporting process should be integrated into the existing reporting cycle.

- **Incentive effects:** Funding mechanisms should be designed in such a way that they provide incentives for sound fiscal management and reduce the likelihood of inefficient fiscal practices. In this way, perverse incentives in the system may be minimized and the risk of moral hazard behaviour by recipients of the funds discouraged.
- **Autonomy:** The assignment of functions or the transfer of funds between spheres of government should not undermine the constitutionally mandated autonomy of provincial and municipal organs of state. The autonomy criterion should be viewed within the context of co-operative governance.
- **Risk pooling:** The cost of a disaster can become so substantial that no single provincial and municipal organ of state is able to fund recovery efforts on its own. In such cases, funding mechanisms should make provision for post-disaster recovery costs to be shared across the widest possible population.



9.3 Overview of Funding Arrangements

- Funding arrangements for disaster risk management must be based on the legislative framework outlined in section 7.1 above and take into account the various criteria for an optimal funding mechanism.

9.3.1 Funding Options for Disaster Risk Management

- The responsibilities imposed by the Act on provincial and municipal organs of state require substantial start-up costs, including both the investment in infrastructure for provincial and municipal disaster management centres as well as funding for capacity building. Given the substantial start-up costs involved, it is unlikely that all the provinces and municipalities will be able to fund these amounts from their own budgets.
- National government in some cases funds certain costs associated with particular disaster risk management activities. It can either use conditional grants or the equitable share, or a combination thereof, to fund disaster risk management at provincial and local government level. Funding for disaster risk management at iLembe District must be executed in accordance with the guiding principles set out in the Act, the guidelines of the NDMF, PDMF and any other related legislation and policies.

Each iLembe District Municipality department, local Municipality, organ of state and municipal entity must budget separately (on their own) for their disaster risk management planning and implementation efforts and inputs.

The DMC must constantly endeavour to find additional funding for disaster risk management activities. The principles of economy of scale and linkages with other developmental and infrastructure projects must be adhered to. Budgetary priority must be provided to disaster risk management efforts.

9.3.2 Design and Structure Considerations

- In relation to disaster risk management, the start-up costs and initial capital outlays required to implement to Act are incurred in the short term. Long-term costs include the operational costs involved

in disaster risk reduction activities. These costs must be included in the budget once disaster risk management is integrated into routine planning and budgeting activities.

- The Municipal Systems Act 2000 (Act No. 32 of 2000) consolidates disaster risk management planning as part of integrated development planning. Accordingly, funds allocated to disaster risk management planning are part of the funds allocated to IDP processes.
- It is recommended that each local municipality at iLembe district undertakes a study of the further discussions regarding funding as discussed in the KZN PDMF.

9.3.3 Recommended Funding Arrangements

- This section provides a general overview of the recommendations on funding arrangements for disaster risk management to cover the costs associated with the following activities:
 - start-up activities
 - disaster risk management ongoing operations
 - disaster risk reduction
 - response, recovery and rehabilitation activities
 - training and capacity-building programmes.
- Table 9.1 provides an overview of the recommended funding mechanisms for each of the five disaster risk management activities mentioned above. These are discussed in greater detail for the KPAs and enablers in the following section.
- In general, the funding arrangements attempt to enable organs of state to budget effectively for disaster risk reduction costs. The risk of perverse incentives must be minimized by requirements for matching funds from organs of state, as far as this is practicable.
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ACTIVITY	FUNDING SOURCE	FUNDING MECHANISM
Start-up activities (KPA 1, Enabler 1)	National Government	Conditional grant for local government – district and metropolitan municipalities, where necessary
		Conditional grant for provinces with counter-funding component
		Budget of national departments
Disaster risk management ongoing operations (KPA 2 and 3)	National and provincial government	Own departmental budgets
	New assignment to local government	Increase in the I (Institutional) component of the equitable share of local government
Disaster risk reduction (KPA 2 and 3)	National departments	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 the case of low-capacity, resource-poor municipalities	Additional funding released from the NDMC targeted at these categories of municipalities
Response, recovery and rehabilitation and reconstruction efforts (KPA 4)	National Government	Own budget for those departments frequently affected by disasters
		Access to central contingency funds
		Reprioritise within capital budgets for infrastructure reconstruction
	Provincial Government	Own budget, particularly for those departments frequently affected by disasters
		Conditional infrastructure grants
		Access to central contingency fund once threshold is exceeded on a matching basis
		Reprioritise within capital budget for infrastructure reconstruction
	Local Government	Access to central contingency fund once threshold is exceeded
Education, training and capacity-building programmes (Enabler 2)	All spheres of government	Conditional infrastructure grant, i.e. Municipal Infrastructure Grant (MIG)
		Own budgets and reimbursement through SETAs
		Public awareness programmes and research activities can also be funded through the private sector, research foundations, NGOs and donor funding

Figure 9-1 Funding Arrangements for Disaster Management

9.4 Key Performance Area 1: Institutional capacity for disaster risk management and

Enabler 1: Information Management and Communication

- Key performance area 1 focuses on creating the institutional capacity within all spheres of government to give effect to the principle of intergovernmental co-operation for the purposes of disaster risk management. It describes the various intergovernmental structures that facilitate consultation on issues relating to disaster risk management; key responsibilities of the NDMC, PDMCs and MDMCs; and the minimum infrastructural requirements for the establishment of the DMC's.

9.4.1 Funding Options

- To establish integrated institutional capacity to enable the effective implementation of disaster risk management policy and legislation, funding will be required for the following programmes, projects and activities:
 - Local government conditional grants must be disbursed to district municipalities to cover the start-up costs involved in establishing municipal disaster management centres.
 - Ongoing operations of the MDMC is to be funded as per the required IDP and budgeting process
 - Regional co-operation and humanitarian assistance may be required and given.

9.4.2 Key Performance Indicators

- Assessing required budgetary needs of the district and including these in the IDP process, in consultation with the municipalities in the district

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9.5 Key Performance Area 2: Disaster Risk Assessment

- The Act requires all organs of state to determine levels of risk and assess their vulnerability to these risks in order to implement disaster risk reduction strategies. Initial expenditure on disaster risk assessments can be offset by long-term benefits accruing from well-designed risk reduction measures.

9.5.1 Funding Options

- Since disaster risk management is a concurrent national and provincial competence, national and provincial disaster risk assessments should be funded through the budgets of the relevant organs of state. Costs involved in updating disaster risk assessments must be budgeted for on a regular basis.
- Expenditure incurred in monitoring disaster risk should be part of the routine operation of the relevant organs of state and disaster management centres, and should be budgeted for accordingly. At municipal level, there are two options with regard to funding disaster risk assessments.
- The first option allows for the initial disaster risk assessments to be included in the start-up costs of MDMCs. Thereafter disaster risk assessments of the district and local municipalities can be funded through the local government conditional grant. The conditions of access to grant funding should be linked to national guidelines setting out the norms and standards for disaster risk assessments.

- The benefits of this option are that disaster risk assessments are standardised across municipalities and the data produced at local government level are aligned with current and future information needs of the NDMC and the PDMC. In addition, with sufficient resources, district municipalities could provide their local municipalities with the technical support needed to integrate risk assessments in sectoral plans, thus facilitating disaster risk management planning. The costs associated with updating relevant hazard and vulnerability information should be budgeted for by iLembe District Municipality.
- The second option is to allow districts to fund the initial disaster risk assessments and any subsequent assessments and updates themselves. However, this can compromise disaster risk management planning. Without a comprehensive disaster risk assessment, disaster risk reduction planning becomes an ineffective tool. An unreliable risk assessment can result in resources being redirected from high-priority risks to low-priority risks. In addition, variations in the content, methodologies and quality of the initial disaster risk assessments could compromise the effectiveness of provincial and national level functions.

9.5.2 Key Performance Indicators

- The costs of disaster risk assessments are included in the budgets of local and district organs of state.
- The costs of initial disaster risk assessments are included in the local government conditional grant.
- The costs of disaster risk assessments have been estimated and are included in the budgets of municipal disaster management centres.

9.6 Key Performance Area 3: Disaster Risk Reduction.

- In terms of funding arrangements, this KPA can be separated into disaster risk management planning and disaster risk management implementation. The Act requires all spheres of government to develop disaster management frameworks that guide disaster risk management activities, including planning and implementing disaster risk reduction projects and programmes.

9.6.1 Funding Options

- Disaster risk management planning must be incorporated into the strategic plans and the IDPs of municipalities including iLembe District Municipality. Sectoral plans must also include specific disaster risk management plans for the relevant departments within all municipalities. These planning processes must be funded through the budgets of the relevant organs of state. If disaster risk management planning is integrated into general IDP processes, then little or no additional budgetary allocation for disaster risk management will be required.
- Organs of state must include risk reduction as part of a broader strategy to reduce the overall risk and fiscal exposure of their organisations. In addition, risk reduction activities, including preparedness, must be part of the operational activities of the various organs of state and must be reflected in their plans and budgets.
- When additional expenditure is required to develop structural mitigation infrastructure municipal organs of state must establish whether they could fund such projects from their own resources. If they lack

funds to implement these projects, they must include the costs of structural mitigation infrastructure in their three-year capital plans. Municipalities, including iLembe and its local municipalities must prioritise these projects in their IDPs. Further information in this regard is expanded on in the KZN PDMF

- In the case of activities or projects aimed at preventing or reducing a national priority disaster risk, provincial and municipal organs of state may apply for additional funding from the NDMC. The NDMC may choose to place a limit on the funding available per project. The NDMC should develop clear and unambiguous criteria for evaluating applications for funding and distribute to provinces and municipalities.
- Section 19 of the MFMA requires that a municipality conduct a feasibility study before it can budget for a capital project. The feasibility study must include risk assessment findings and recommendations for disaster risk reduction. If the project goes ahead, the cost estimate of mitigation infrastructure or measures should be included in the total cost of the project. Funds can be accessed either through the B component grant for basic services infrastructure, or through the P component grant for any additional funds required to reduce risks associated with existing infrastructure. The benefit of this option is that the conditionality of the grant can help to ensure that disaster risk reduction is integrated into infrastructure development, thus reducing the risk of disasters in the long term.
- The PDMC is required to provide technical assistance in disaster risk management planning to municipalities. Technical assistance forms part of the routine activities of the NDMC and PDMCs and should therefore be funded through their budgets.

9.6.1.1 Preparedness

- In terms of the Act, section 53(j) states that municipal disaster management plans 'must facilitate maximum emergency preparedness'. The Act prescribes one of the means through which this can be done in section 58(1), which provides metropolitan or district municipalities with the option of establishing units of volunteers to participate in disaster management. The FFC has noted that there are costs involved in emergency preparedness, such as the costs of recruiting, training and mobilising volunteers. Since disaster management is deemed to be a new constitutional function for local government, strong arguments can be made for funding the costs associated with preparedness, including the recruitment and training of volunteers, through an increase in the equitable share. Alternatively, the costs may be funded through the budgets of municipal organs of state. However, a drawback of this option is that preparedness activities may be underfunded. In addition, municipalities may not have sufficient resources to fund the extra costs associated with preparedness.

9.6.2 Key Performance Indicators

- Budgets in all spheres of government include the costs of routine disaster risk reduction measures and activities.
- Feasibility studies for capital projects include information drawn from disaster risk assessments and appropriate risk reduction measures.
- Capital budgets clearly reflect the costs of disaster risk reduction.
- Preparedness actions are funded through the recurrent budgets of all relevant organs of state.

9.7 Key Performance Area 4: Response and Recovery

- Chapter 6 of the Act governs the funding arrangements for disaster response and recovery and rehabilitation and reconstruction. Section 56(3) requires that organs of state set aside a percentage of their budgets for post-disaster recovery efforts. Access to national funding is dependent on whether the organ of state affected by the disaster had taken sufficient risk reduction measures to reduce the severity and magnitude of the disaster.

9.7.1 Funding Options

- The main activities within the broad scope of disaster response and recovery include early warnings, disaster response and recovery operations, relief measures, as well as rehabilitation and reconstruction.

9.7.2 Early Warnings

- The development, implementation and dissemination of early warnings form part of the routine planning processes undertaken by organs of state and must therefore be funded through their existing budgets. The NDMC plays a significant role in identifying and monitoring potential hazards and disseminating early warnings. These activities must be funded through the NDMC budget.

9.7.3 Disaster Response and Recovery Operations

- Funds need to flow quickly to support response and recovery efforts. Rescue efforts, disaster containment activities, provision of immediate basic services, emergency health services and critical infrastructure repair all form part of response and recovery.
- Once budgets for response and recovery activities have been exhausted, the relevant organ of state may request financial assistance from national government. Financial assistance will only be provided after taking into account the disaster risk reduction measures taken prior to the onset of the disaster.
- Information on proposed thresholds and percentages for provincial and local government budgets and local government budgets can be found in the PDMF.

9.7.4 Relief Measures

- The aim of relief measures is to provide immediate access to basic necessities for those severely affected by disasters, and the ILembe District Municipality should adequately budget for this, or proposes to use the mayoral discretionary fund of the LM if available.

9.7.5 Rehabilitation and Reconstruction

- The Act places the onus for rehabilitation and reconstruction of infrastructure on the organ of state responsible for maintaining such infrastructure. However, rehabilitation is not only limited to infrastructure repair, it also includes rehabilitation of the environment and communities. Rehabilitation and reconstruction projects can be funded through:

- own budgets
- conditional grants (including MIGS)
- reprioritisation within existing capital budgets
- access to the central contingency fund (as a last resort)
- The methods of funding rehabilitation and reconstruction are complementary rather than competing.

9.7.6 Key Performance Indicators

- The percentage of the budget of Ndwedwe Municipality as a threshold for accessing additional funding from national government for response and recovery efforts has been established and implemented.
- Response and recovery efforts are funded through budgeted threshold allocations.
- A mechanism has been developed to ensure rapid access to national funds for disaster response.
- Organs of state across all spheres of government have budgeted for threshold allocations.
- People, households and communities affected by a significant event or disaster have immediate access to relief measures.
- Financial thresholds for rehabilitation and reconstruction funding in the different spheres of government have been set
- Rehabilitation and reconstruction efforts are funded through a combination of own budgets, reprioritisation, budgeted threshold allocations and conditional grants.
- National government funding of start-up costs could also act as a catalyst for the institutionalization of disaster risk management in provincial and municipal organs of state.
- Once the institutional structures are set up, provinces and municipalities must plan and budget for the costs as part of their operational activities. The primary disadvantage of this approach is that it may require national government either to redirect resources from other priorities to disaster risk management or to increase total expenditure through additional taxation or borrowing. The latter could compromise fiscal discipline. A further limitation of this approach is that the ability to access national funds might create a perverse incentive for provinces and municipalities to budget for disaster risk management activities from their own resource.

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9.8 Establish Funding Arrangements for DRM Education, Training, Public Awareness and Research (Enabler 2)

9.8.1 Education and Training

- Ndwedwe DMC must make budgetary provision for the implementation of a municipal needs and resources analysis to determine the disaster risk management education, training and research needs of those involved in disaster risk management across sectors, levels and disciplines. It must also make provision for the development of a municipal disaster risk management education and training framework.

- Provincial organs of state already have substantial budgets for the education and training of officials and policy makers. Where possible, the relevant organs of state should ensure that courses are accredited. In the case of programmes that are not accredited, organs of state must budget for this form of training.
- Accreditation is a way of ensuring the quality of education and training interventions. In compliance with SAQA legislation and the NQF, service providers have to develop outcomes- based courses and materials. Expenditure on accredited education and training initiatives can be reimbursed from SETAs. This type of funding mechanism is well suited to recovering expenditure on accredited disaster risk management education and training initiatives.
- In general, most of the education and training costs in municipalities have been funded through the Financial Management Grant (FMG). The MIG, along with capacity-building grants, will soon be consolidated into the Municipal Systems Improvement Grant (MSIG). The DPLG must ensure that the new MSIG does cater for accredited disaster management education and training. It is envisaged that once this grant is consolidated, municipalities should be able to access funds for education and training in accordance with disaster risk management unit standards.

9.8.2 Integrated Public Awareness Strategy

- Municipalities should include public awareness campaigns in community participation processes. In this way, they will not require additional funds for these programmes. Municipalities should also forge links with NGOs and the private sector in order to share costs for dedicated public awareness programmes that focus on priority risks.

9.8.3 Research Programme and Information and Advisory Services

- Once iLembe MDMC has developed its research agenda, it should approach various other government departments, private companies, research foundations and NGOs to fund disaster risk management research. The MDMC must also allocate a portion of its budget to research activities and routine post-disaster reviews.
- Technical line departments that are regularly affected by disasters must budget for research on priority risks and disaster risk reduction.
- The content of the information management database must be electronically accessible to any person free of charge. The cost of information provision and advisory services should be kept to a minimum and funded through the budget of the PDMC.

9.8.4 Key Performance Indicators

- There is documented evidence of an increase in expenditure on accredited education and training programmes.
- Organs of state recover their expenditure on accredited education and training from the relevant Sector Education and Training Authorities.
- The condition of the Municipal Systems Improvement Grant has been extended to cater for disaster risk management education and training programmes.

- All organs of state involved in public awareness budget for integrated public awareness programmes.
- Partnerships between municipal organs of state and the private sector, non-governmental organisations and community-based organisations exist for the purpose of funding public awareness programmes and projects.
- Funds are available from government departments, international donor organisations, private companies, research foundations and non-governmental organisations for research programmes.