#### 1 EXECUTIVE SUMMARY

The Constitution of the Republic of South Africa (Act 108 of 1996) places a legal obligation on the Government of South Africa to ensure the health (personal and environment) and safety of its citizens. In terms of section 41(1)(b) of the Constitution, all spheres of Government are required to "secure the well-being of the people of the Republic". Section 152(1)(d) also requires that local government "ensure a safe and healthy environment". In the light of the above, and the established understanding of disaster risk management, the primary responsibility for disaster risk management in South Africa rests with Government.

Section 26(g) of the Municipal Systems Act 32 of 2000 as well as sections 52 and 53 of the Disaster Management Act 57 of 2002 compels each municipal entity to develop a disaster risk management plan as part of and an integrated part of their Integrated Development Plans. This plan establishes the arrangements for disaster risk management within the Matjhabeng Local Municipality (MLM) and has been prepared in accordance with the requirements of the Disaster Management Act, 57 of 2002 and section 26(g) of the Municipal Systems Act, of 2000.

The purpose of Matjhabeng Local Municipality Disaster Risk Management Plan (DRMP) Level 1 is to document the institutional arrangements for disaster risk management planning which includes the assignment of primary and secondary responsibilities for priority disaster risks posing a threat in Matjhabeng Local Municipality. It further provides the broad framework within which the departments will implement the disaster risk management planning requirements of the Act and other entities included in the organisational structure of the Matjhabeng LM. It establishes the operational procedures for disaster risk reduction planning as well as the emergency procedures to be implemented in the event of a disaster occurring or threatening to occur in council's area. It aims to facilitate an integrated and coordinated approach to disaster risk management in the municipality which will ensure that the Matjhabeng Local Municipality achieves its vision for disaster risk management which is to build a resilient people in the Matjhabeng LM who are alert, informed and self-reliant by establishing risk reduction and resilience building as core principles, developing adequate capabilities for readiness, effective, rapid, response and recovery.

This disaster risk management plan is in line with the National Disaster Management Framework and addresses disaster risks through four key performance areas (KPAs) and three Enablers:

- KPA 1: Integrated Institutional Capacity for Disaster Risk Management
- KPA 2: Disaster Risk Assessment
- KPA 3: Disaster Risk reduction
- KPA 4: Response and recovery
- Enabler 1: Information Management and Communication
- Enabler 2: Education, Training, Public Awareness and Research
- Enabler 3: Funding arrangements for Disaster Risk Management

This plan provides a brief background study of the Matjhabeng LM in line with its current Integrated Development Plan (IDP). The Matjhabeng LM disaster risk management plan contains a macro disaster risk assessment based on field research, observation, primary- and secondary data sources. The Matjhabeng LM DMP has as far as possible been imbedded in the current reality of the municipality. The macro disaster risk assessment provides the foundation towards risk reduction planning based on the identified and prioritised disaster risks and vulnerabilities of the Matjhabeng LM. This DMP for the Matjhabeng LM furthermore provides the municipality with a guiding framework for future disaster risk management planning by the municipality as a whole as required by the Disaster Management Act 57 of 2002 and the Municipal Systems Act 32 of 2000. The relationship between, and different roles and responsibilities of, the Lejweleputswa District Disaster Risk Management Centre (LD DRMC) and the DRMC of the Matjhabeng LM are alluded to. This plan also gives guidance in relation to the declaration of a local state of disaster, disaster classification and the institutional arrangement necessary for the successful implementation of the Act. Each section of this plan contains a number of actions to be taken, which need to be considered and implemented in order for the Matjhabeng LM to obtain the outcomes envisaged by this plan.

#### 2 INTRODUCTION TO THE PLAN

Disaster risk management plan for the Matjhabeng LM has as much as possible been embedded in the current local reality of the municipality. Therefore, this brief description of the most salient features of the municipality is added to sketch this current local reality. More extensive information can be obtained from the Matjhabeng LM Integrated Development Plan.

#### 2.1 REQUIREMENTS OF A DISASTER RISK MANAGEMENT PLAN

According to the NDMF, a Disaster Risk Management Plan applies to national or provincial organs of state or municipal entities that have not previously developed a coherent Disaster Risk Management Plan. It focuses primarily on establishing foundation institutional arrangements for DRM, putting in place contingency plans for responding to known priority risks as identified in the initial stage of the DRA, identifying key governmental and other stakeholders, and developing the capability to generate a Level 2 plan. A Disaster Risk Management Plan for a local municipality should therefore have the following components:

- Explanation of the institutional disaster risk management arrangements in the municipality;
  - Political forum for disaster risk management;
  - Senior management forum for disaster risk management;
  - Disaster Risk Management Centre (or equivalent);
  - Head of the Disaster Risk Management Centre (or equivalent);
  - Volunteer structures.
- The identification of key governmental and external role-players which needs to be consulted (typically through the senior management forum as shown above).
- A macro risk profile (hazard, vulnerabilities and capacities) for the area in question;
- Contingency plans for the prioritised risks (as per the macro risk profile);
- Evidence of the ability to generate a Disaster Risk Management Plan.
   Sec 53 Sub 1 & 2

#### 2.2 THE CUSTODIAN IF THE PLAN

The Municipal Manager and the designated official of the Matjhabeng LM Disaster Risk Management Centre (MLM DRMC) are the custodians of the disaster risk management plan for the Matjhabeng LM Municipality and are responsible to ensure the regular review and updating of the plan.

The Municipal Manager (MM) and the designated official of the MLM DRMC will ensure that copies of the completed plan as well as any amendments to the plan are submitted to:

- Lejweleputswa District Disaster Risk Management Centre;
- The Disaster Risk Management Centre of the Free State Province;

- The National Disaster Management Centre (NDMC);
- The Matjhabeng LM ward disaster risk management structures; and
- Each of the neighbouring municipalities of the Matjhabeng LM.

In terms of section 52 of the Act each municipal organ of state and any other municipal entity operating within council's organisational structure is responsible for the development and maintenance of the disaster risk management plan for its functional area. Departmental plans and plans of other entities are an integral part of council's disaster risk management plan and therefore the head of each department and of each entity must ensure that copies of the plan and any amendments to the plan are submitted to the Matjhabeng LM DRMC.

#### 2.3 THE PURPOSE OF THE PLAN

The purpose of the Matjhabeng LM Disaster Risk Management Plan (DRMP) is to document the institutional arrangements for disaster risk management planning which includes the assignment of primary and secondary responsibilities for priority disaster risks posing a threat in the Matjhabeng LM. It further provides the broad framework within which the departments will implement the disaster risk management planning requirements of the Act and other entities included in the organisational structure of the Matjhabeng LM. It establishes the operational procedures for disaster risk reduction planning as well as the emergency procedures to be implemented in the event of a disaster occurring or threatening to occur in council's area. It aims to facilitate an integrated and co-ordinated approach to disaster risk management in its area of jurisdiction, which will ensure that the Matjhabeng LM achieves its vision for disaster risk management which is to build a resilient people in the Matjhabeng Local Municipal area who are alert, informed and self-reliant by establishing risk reduction and resilience building as our core principles, and developing adequate capabilities for readiness; and effective and rapid, response and recovery.

#### 3. LEGISLATIVE COMPETENCE

#### 3.1 THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA 1996

The Constitution redefined local government as a sphere of government that is distinctive from, yet interdependent and inter-related with provincial and national government. Importantly, the Constitution conferred developmental duties to local government.

# 3.2 PUBLIC FINANCE MANAGEMENT ACT NO. 1 OF 1999 (AS AMENDED BY THE PUBLIC FINANCE MANAGEMENT AMENDMENT ACT NO. 29 OF 1999)

To regulate financial management in the national and provincial governments; to ensure that all revenue, expenditure, assets, and liabilities of those governments are managed efficiently and effectively; to provide for the responsibility of persons entrusted with financial management in those governments; and provide for matters connected therewith.

#### 3.3 MUNICIPAL SYSTEMS ACT NO. 56 Of 2000

The Act introduces changes towards the way municipalities are organized internally, the way they plan and utilize resources, monitor, and measure their performance, delegate authority, deliver services and manage their finances and revenue. Critically, the MSA formalises a range of alternative service delivery mechanisms that could be used to complement traditional service delivery mechanisms / arrangements used by municipalities.

#### 3.4 MUNICIPAL DEMARCATION ACT NO. 27 OF 1998

The Municipal Demarcation Act 27 of 1998 provided for the re-demarcation of municipal boundaries, and this resulted in the rationalization of 843 municipal entities into 284 larger and possible economically viable entities.

## 3.5 MUNICIPAL STRUCTURES ACT NO. 117 OF 1998 AS AMENDED IN 1999 AND 2000

The Act defined new institutional arrangements and systems for local government. Importantly, the Act laid a foundation for local government performance management and ward committee systems.

#### 3.6 WHITE PAPER ON LOCAL GOVERNMENT OF 1998

The White Paper on Local Government is a broad policy framework that proposes wholesale changes in the areas of political, administrative structures of local government, electoral systems, demarcations, finances, services, infrastructure development, planning and so forth.

The White Paper maps out a vision of developmental local government that is committed to working actively with citizens to identify sustainable ways of meeting their social, economic, and material needs and thereby improve their quality of life. Developmental local government envisages the transformation of municipal administrations into rationalized, representative, less bureaucratic, people-centred, efficient, transparent, accountable, and responsive entities.

#### 3.7 THE FUND-RAISING ACT NO. 107 OF 1978

It provides for the declaration of a disaster by the President to provide relief to the Victims of disasters such as drought disaster.

#### 3.8 DISASTER MANAGEMENT ACT NO. 57 OF 2002

Streamlines and unifies disaster management and promotes a risk reduction approach particularly at provincial and local levels. It eliminates the confusion around disaster declaration and addresses current legislative gaps.

## 3.9 NATIONAL DISASTER MANAGEMENT FRAMEWORK (NOTICE 654 OF 2005)

The framework provides guidelines for the development of the provincial and municipal disaster management frameworks.

#### **3.10 FIRE BRIGADE ACT NO. 99 OF 1987**

Forms an element of disaster management in terms of norms and standards in the prevention of fires or any hazards leading to risks and or disasters.

#### 3.11 NATIONAL VELD AND FORESTRY ACT NO. 101 OF 1998

It emphasizes the formation of Fire Protection Associations for the purpose of predicting, preventing, managing, and extinguishing veld fires.

# 3.12 THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT NO 107 OF 1998

Provides for environmental management strategies to prevent and mitigate environmental disasters.

#### 3.13 NATIONAL BUILDING REGULATION ACT NO 103 of 1977

To provide for the promotion of uniformity in the law relating to the erection of buildings in the areas of jurisdiction of local authorities; for the prescribing of building standards; and for matters connected therewith.

#### 3.14 CLIMATE CHANGE BILL 9/2022

To enable the development of an effective climate change response and long term, just transition to a low carbon climate resilient economy and society for south Africa in the context of sustainable development; and to provide for matter connected there within

## 4. THE MATJHABENG LOCAL MUNICIPALITY DISASTER RISK MANAGEMENT CONTEXT

#### 4.1 Geographic Location

#### 4.1.1 Lejweleputswa District Municipality

The area of jurisdiction of Lejweleputswa District Municipality is situated in the north-western part of the Free State and borders North West Province to the north; Fezile Dabi and Thabo Mofutsanyane Districts to the north east and east; Motheo and Xhariep Districts to the south; and the Northern Cape Province to the west. The Lejweleputswa District is situated north of Mangaung Municipality in the Free State Province. It is accessible from Johannesburg, Durban, Cape Town, Klerksdorp and Kimberley (Lejweleputswa District Economic Development Strategy).

**Lejweleputswa District** comprises of the following 5 municipalities and covers an area of 31686 square kilometres:

- Masilonyana Local Municipality consisting of the following towns: Theunissen, Brandfort, Winburg, Soutpan and Verkeerdevlei.
- Matjhabeng Local Municipality consisting of the following towns: Welkom, Virginia, Odendaalsrus, Hennenman, Ventersburg and Allanridge.

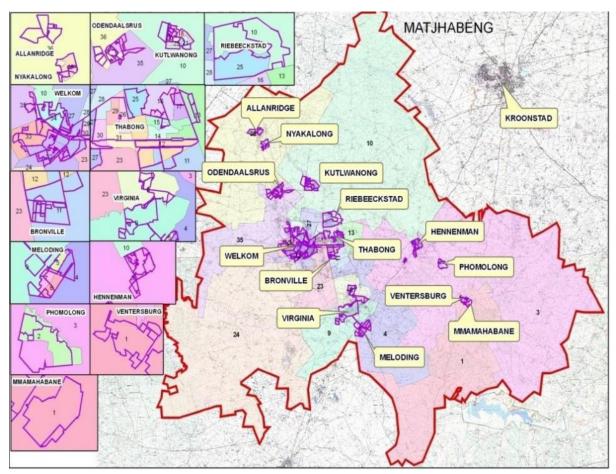
- Nala Local Municipality consisting of the following towns: Bothaville and Wesselsbron.
- **Tokologo Local Municipality** consisting of the following towns: Boshof, Dealesville and Hertzogville.
- Tswelopele Local Municipality consisting of the following towns: Bultfontein and Hoopstad.

#### 4.1.2 MATJHABENG MUNICIPAL AREA

The Matjhabeng municipal area, previously known as the Free State Goldfields, consists of the following:

- Welkom/Thabong/Bronville
- Allanridge/Nyakallong
- Odendaalsrus/Kutlwanong
- Hennenman/Phomolong
- Ventersburg/Mmamahabane
- Virginia/Meloding

The area is favourably located in the north-eastern Free State about 250 km south of Johannesburg and 160 km north of Bloemfontein. The nearest harbour is Durban, approximately 565 km from Matjhabeng by road.



4.2 DEMOGRAPHIC PROFILE

#### 4.2.1 DEMOGRAPHIC PROFILE AND STATISTICAL DATA

A comparative analysis of official statistics by Stats SA Census 2011 and Community Survey 2016 (See table 1 and 2) demonstrates that MLM is growing in terms of number of household but register a decline on population. The decline can be attributed to migration while substantial increase in number of households came as result of division of families. This significant increase on the number of households poses service delivery and expansion challenges.

Population and Households	Census 2011	Community survey 2016
Population	406 461	429 113
Households	123 195	149 166

Table 1: Source Stats SA

Race Group	Census 2011	Community Survey 2016
Black	87.7	88.9
Coloured	2.1	2.4
Indian or Asian	0.4	0.3
White	9.6	8.5
Other	0.2	-

Table 2: Source SA

#### 4.3 ECONOMIC ENVIROMENT

It is important to note that since 2011 (See Table 3) the number of people employed has increased and the number of unemployed residents has marginally Increased. Therefore, it is important to note that the material conditions of the people of MLM have been undergoing a steady movement even though there is serious decline in mining activities around the area.

Economic Status	Census 2011	Community Survey 2016
Employed	99 650	99 886
Unemployed	58 524	58 579
Discourage Work Seeker	13 290	13 310
Not Economically Active	105 159	105 237

Table 3: Source Stats SA

#### 4.4. INCOME LEVEL

MLM display a positive upward migration of residents from low-income levels to middle to middle income levels. As exhibited in the table 9 below, the number of low-income earners between no income and R 4 800 have significantly decreased between 2011 and 2016. Most

importantly the number of residents with no income has reduced by around 50%. This is indication of the improvement of socio-economic condition of our people.

Income Category	2011	2016
No income	16.3	8.8
Under R 4 800	5.4	4
R 5 k - R 10 k	7.4	8.1
R 10 k – R 20 k	17.4	17.1
R 20 k - R 40 k	18.2	17.3
R 40 k - R 75 k	15.3	18.5
R 75 k - R 150 k	9.5	12.7
R 150 k - R 300 k	6.5	7.6
R 300 k - R 600 k	3.1	2
R 600 k – R 1,2 m	0.7	0.3
R 1,2 m – R 2,5 m	0.2	0.2
R 2,5 million or more	0.4	0.2

Table 5 Source: Stats SA

#### 4.5 ECONOMIC PROFILE (DISTRICT WIDE)

The economic state of Lejweleputswa District Municipality is put in perspective by comparing it on a spatial level with its neighbouring district municipalities, Free State Province and South Africa. The section will also allude to the economic composition and contribution of the regions within Lejweleputswa District Municipality.

The Lejweleputswa District Municipality does not function in isolation from Free State, South Africa and the world and now, more than ever, it is crucial to have reliable information on its economy for effective planning. Information is needed that will empower the municipality to plan and implement policies that will encourage the social development and economic growth of the people and industries in the municipality respectively.

#### 4.5.1 GROSS DOMESTIC PRODUCT BY REGION (GDP-R)

The Gross Domestic Product (GDP), an important indicator of economic performance, is used to compare economies and economic states. Gross Domestic Product by Region (GDP-R) represents the value of all goods and services produced within a region, over a period of one year, plus taxes and minus subsidies.

GDP-R can be measured using either current or constant prices, where the current prices measure the economy in actual Rand, and constant prices measures the economy by removing the effect of inflation, and therefore captures the real growth in volumes, as if prices were fixed in a given base year.

Gross Domestic Product (GDP) - Lejweleputswa, Free State and National Total, 2011-2021 [R billions, Current prices]

Years	Lejweleput	Free	National	Lejweleputswa	Lejwelep
	swa	State	Total	as % of	utswa as
				province	% of
					national
2011	28.7	170.4	3,327.0	16.8%	0.86%
2012	29.1	177.0	3,566.4	16. <b>4</b> %	0.82%
2013	30.5	191.1	3,868.6	15.9%	0.79%
2014	31.9	205.3	4,133.9	15.5%	0.77%
2015	33.5	221.5	4,420.8	15.1%	0.76%
2016	36.4	236.9	4,759.6	15. <b>4</b> %	0.77%
2017	38.4	254.4	5,078.2	15.1%	0.76%
2018	39.3	265.0	5,348.6	14.8%	0.73%
2019	41.3	277.8	5,613.7	14.9%	0.73%
2020	43.8	280.1	5,556.9	15.6%	0.79%
2021	47.5	308.9	6,225.4	<i>15.4</i> %	0.76%

Source: IHS Markit Regional eXplorer version 2257

With a GDP of R 47.5 billion in 2021 (up from R 28.7 billion in 2011), the Lejweleputswa District Municipality contributed 15.39% to the Free State Province GDP of R 309 billion in 2021 increasing in the share of the Free State from 16.81% in 2011. The Lejweleputswa District Municipality contributes 0.76% to the GDP of South Africa which had a total GDP of R 6.23 trillion in 2021 (as measured in nominal or current prices). It's contribution to the national economy stayed similar in importance from 2011 when it contributed 0.86% to South Africa, but it is lower than the peak of 0.86% in 2011.

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Gross Domestic Product (GDP) - Lejweleputswa, Free State and National Total, 2011-2021 [R billions, Current prices]

	Lejweleputswa	Free	National	Lejweleputswa	Lejweleputswa
		State	Total	as % of	as % of
				province	national
2011	28.7	170.4	3,327.0	16.8%	0.86%
2012	29.1	177.0	3,566.4	16.4%	0.82%
2013	30.5	191.1	3,868.6	15.9%	0.79%
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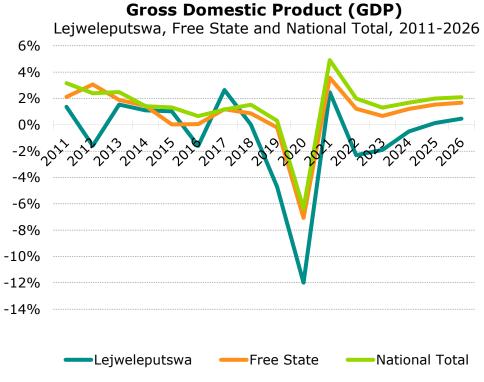
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national economy stayed similar in importance from 2011 when it contributed 0.86% to South Africa, but it is lower than the peak of 0.86% in 2011.

#### 4.5.1.1 ECONOMIC GROWTH FORECAST

It is expected that Lejweleputswa District Municipality will grow at an average annual rate of -0.83% from 2021 to 2026. The average annual growth rate of Free State Province and South Africa is expected to grow at 1.26% and 1.81% respectively.

Gross Domestic Product (GDP) - Lejweleputswa, Free State and National Total, 2011-2026 [Average annual growth rate, constant 2010 prices]



Source: IHS Markit Regional eXplorer version 2257

In 2026, Lejweleputswa's forecasted GDP will be an estimated R 29.9 billion (constant 2010 prices) or 12.6% of the total GDP of Free State Province. The ranking in terms of size of the Lejweleputswa District Municipality will remain the same between 2021 and 2026, with a contribution to the Free State Province GDP of 12.6% in 2026 compared to the 13.9% in 2021. At a -0.83% average annual GDP growth rate between 2021 and 2026, Lejweleputswa ranked the lowest compared to the other regional economies.

Gross Domestic Product (GDP) - local municipalities of Lejweleputswa District Municipality, 2021 to 2026, share and growth

	2026	Share of	2021	2026	Average
	(Current	district	(Constant	(Constant	Annual
	prices)	municipality	prices)	prices)	growth
Masilonyana	3.90	7.03%	2.26	1.98	<b>-2.62</b> %
Tokologo	2.33	4.20%	1.15	1.28	<b>2.18</b> %
Tswelopele	5.02	9.05%	2.57	2.70	<i>0.96</i> %
Matjhabeng	37.49	67.52%	21.64	20.11	<b>-1.46</b> %
Nala	6.78	12.20%	3.55	3.83	<b>1.53</b> %
Lejweleputswa	55.52		31.17	29.90	

Source: IHS Markit Regional eXplorer version 2257

When looking at the regions within the Lejweleputswa District Municipality it is expected that from 2021 to 2026 the Tokologo Local Municipality will achieve the highest average annual growth rate of 2.18%. The region that is expected to achieve the second highest average annual growth rate is that of Nala Local Municipality, averaging 1.53% between 2021 and 2026. On the other hand the region that performed the poorest relative to the other regions within Lejweleputswa District Municipality was the Masilonyana Local Municipality with an average annual growth rate of -2.62%.

#### 4.5.2 GROSS VALUE ADDED BY REGION (GVA-R)

The Lejweleputswa District Municipality's economy is made up of various industries. The GVA-R variable provides a sector breakdown, where each sector is measured in terms of its *value added* produced in the local economy.

Gross Value Added (GVA) is a measure of output (total production) of a region in terms of the value that was created within that region. GVA can be broken down into various production sectors.

The summary table below puts the Gross Value Added (GVA) of all the regions in perspective to that of the Lejweleputswa District Municipality.

Gross Value Added (GVA) by broad economic sector - Lejweleputswa District Municipality, 2021 [R billions, current prices]

	Lejwelepu	Free State	National	Lejweleputsw	Lejweleputswa
	tswa		Total	a as % of	as % of national
				province	
Agriculture	4.0	18.4	152.8	21.7%	2.6%
Mining	16.0	28.3	474.9	56.6%	3.4%
Manufacturing	1.4	27.2	729.8	5.0%	0.2%
Electricity	1.4	9.1	171.7	15.4%	0.8%
Construction	0.5	4.7	141.0	10.0%	0.3%
Trade	4.7	34.9	751.3	13.4%	0.6%
Transport	2.2	21.4	397.8	10.3%	0.6%
Finance	6.3	56.3	1,320.5	11.1%	0.5%
Community	7.3	77.1	1,432.9	9.5%	0.5%
services					
<b>Total Industries</b>	43.7	277.4	5,572.6	15.8%	0.8%

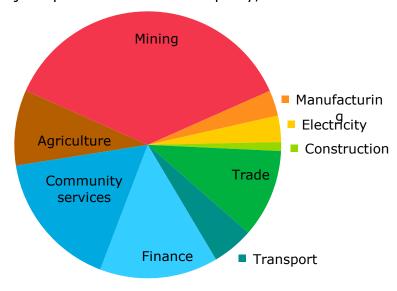
Source: IHS Markit Regional eXplorer version 2257

In 2021, the mining sector is the largest within Lejweleputswa District Municipality accounting for R 16 billion or 36.7% of the total GVA in the district municipality's economy. The sector that contributes the second most to the GVA of the Lejweleputswa District Municipality is the community services sector at 16.7%, followed by the finance sector with 14.3%. The sector that contributes the least to the economy of Lejweleputswa District Municipality is the construction sector with a contribution of R 470 million or 1.08% of the total GVA.

Gross Value Added (GVA) by broad economic sector - Lejweleputswa District Municipality, 2021 [percentage composition]

### Gross Value Added (GVA) by broad economic sector

Lejweleputswa District Municipality, 2021

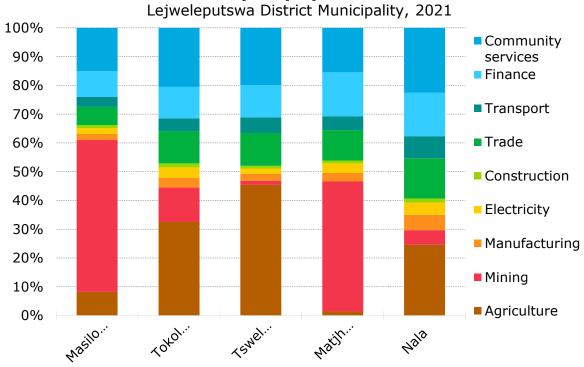


Source: IHS Markit Regional eXplorer version 2257

The community sector, which includes the government services, is generally a large contributor towards GVA in smaller and more rural local municipalities. When looking at the regions within the district municipality, the Matjhabeng Local Municipality made the largest contribution to the community services sector at 64.54% of the district municipality. The Matjhabeng Local Municipality contributed R 30.5 billion or 69.81% to the GVA of the Lejweleputswa District Municipality, making it the largest contributor to the overall GVA of the Lejweleputswa District Municipality.

Gross Value Added (GVA) by broad economic sector - local municipalities of Lejweleputswa District Municipality, 2021 [percentage composition]

#### Gross Value Added (GVA) by broad economic sector



Source: IHS Markit Regional eXplorer version 2257

#### 4.5.2.1 HISTORICAL ECONOMIC GROWTH

For the period 2021 and 2011, the GVA in the agriculture sector had the highest average annual growth rate in Lejweleputswa at 1.83%. The industry with the second highest average annual growth rate is the finance sector averaging at 0.33% per year. The manufacturing sector had an average annual growth rate of -2.77%, while the construction sector had the lowest average annual growth of -3.99%. Overall a positive growth existed for all the industries in 2021 with an annual growth rate of 2.31% since 2020.

Gross Value Added (GVA) by broad economic sector - Lejweleputswa District Municipality, 2011, 2016 and 2021 [R billions, 2010 constant prices]

	2011	2016	2021	Average
				Annual growth
Agriculture	1.81	1.36	2.18	<b>1.83</b> %
Mining	11.32	11.42	8.61	<b>-2.70</b> %
Manufacturing	1.28	1.18	0.97	<b>-2.77</b> %
Electricity	1.18	1.16	1.07	<i>-0.95</i> %
Construction	0.64	0.65	0.43	<b>-3.99</b> %
Trade	4.54	4.81	4.08	<b>-1.06</b> %

	2011	2016	2021	Average
				Annual growth
Transport	1.88	1.92	1.61	<b>-1.52</b> %
Finance	4.06	4.24	4.20	<b>0.33</b> %
Community services	5.45	5.60	5.56	<b>0.19</b> %
Total Industries	32.17	32.33	28.70	<i>-1.13</i> %

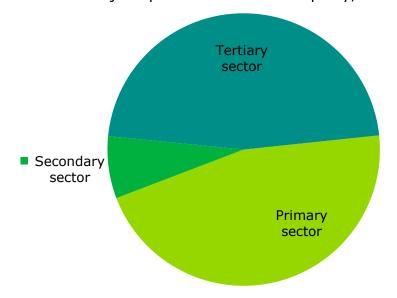
Source: IHS Markit Regional eXplorer version 2257

The tertiary sector contributes the most to the Gross Value Added within the Lejweleputswa District Municipality at 46.8%. This is significant lower than the national economy (70.0%). The primary sector contributed a total of 45.9% (ranking second), while the secondary sector contributed the least at 7.4%.

Gross Value Added (GVA) by aggregate economic sector - Lejweleputswa District Municipality, 2021 [percentage]

Gross Value Added (GVA) by aggregate sector

Lejweleputswa District Municipality, 2021



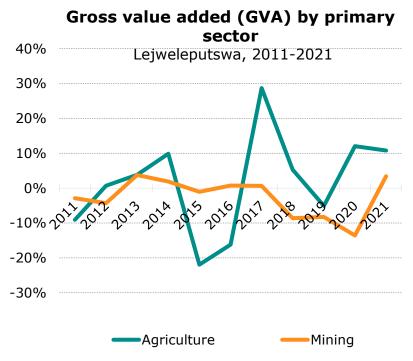
Source: IHS Markit Regional eXplorer version

The following is a breakdown of the Gross Value Added (GVA) by aggregated sector:

#### 4.5.2.2 PRIMARY SECTOR

The primary sector consists of two broad economic sectors namely the mining and the agricultural sector. The following chart represents the average growth rate in the GVA for both of these sectors in Lejweleputswa District Municipality from 2011 to 2021.

GROSS VALUE ADDED (GVA) BY PRIMARY SECTOR - LEJWELEPUTSWA, 2011-2021 [ANNUAL PERCENTAGE CHANGE]



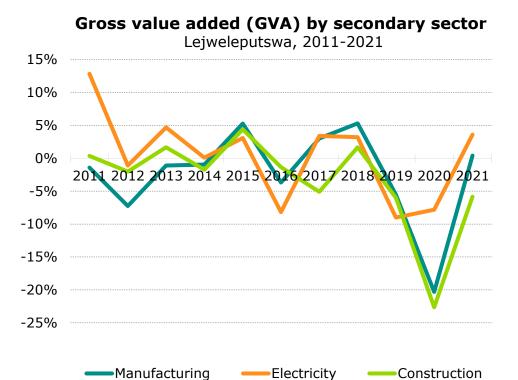
Source: IHS Markit Regional eXplorer version

Between 2011 and 2021, the agriculture sector experienced the highest positive growth in 2017 with an average growth rate of 28.7%. The mining sector reached its highest point of growth of 3.8% in 2013. The agricultural sector experienced the lowest growth for the period during 2015 at -21.9%, while the mining sector reaching its lowest point of growth in 2020 at -13.6%. Both the agriculture and mining sectors are generally characterised by volatility in growth over the period.

#### 4.5.2.3 SECONDARY SECTOR

The secondary sector consists of three broad economic sectors namely the manufacturing, electricity and the construction sector. The following chart represents the average growth rates in the GVA for these sectors in Lejweleputswa District Municipality from 2011 to 2021.

GROSS VALUE ADDED (GVA) BY SECONDARY SECTOR - LEJWELEPUTSWA, 2011-2021 [ANNUAL PERCENTAGE CHANGE]



Source: IHS Markit Regional eXplorer version 2257

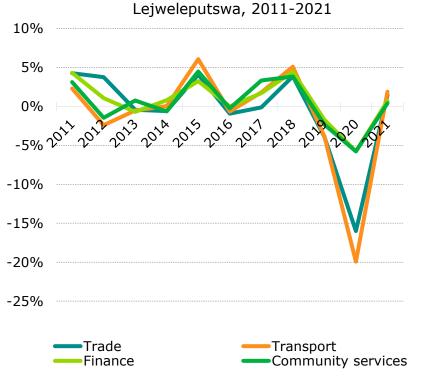
Between 2011 and 2021, the manufacturing sector experienced the highest positive growth in 2018 with a growth rate of 5.3%. The construction sector reached its highest growth in 2015 at 4.4%. The manufacturing sector experienced its lowest growth in 2020 of -20.3%, while construction sector also had the lowest growth rate in 2020 and it experiences a negative growth rate of -22.6% which is higher growth rate than that of the manufacturing sector. The electricity sector experienced the highest growth in 2011 at 12.8%, while it recorded the lowest growth of -9.0% in 2019.

#### 4.5.2.4 TERTIARY SECTOR

The tertiary sector consists of four broad economic sectors namely the trade, transport, finance and the community services sector. The following chart represents the average growth rates in the GVA for these sectors in Lejweleputswa District Municipality from 2011 to 2021.

GROSS VALUE ADDED (GVA) BY TERTIARY SECTOR -LEJWELEPUTSWA, 2011-2021
[ANNUAL PERCENTAGE CHANGE]

#### **Gross value added (GVA) by tertiary sector**



Source: IHS Markit Regional eXplorer version 2257

The trade sector experienced the highest positive growth in 2011 with a growth rate of 4.3%. The transport sector reached its highest point of growth in 2015 at 6.1%. The finance sector experienced the highest growth rate in 2018 when it grew by 4.4% and recorded the lowest growth rate in 2020 at -5.8%. The Trade sector also had the lowest growth rate in 2020 at -16.0%. The community services sector, which largely consists of government, experienced its highest positive growth in 2015 with 4.5% and the lowest growth rate in 2020 with -5.8%.

#### 4.5.3 SECTOR GROWTH FORECAST

The GVA forecasts are based on forecasted growth rates derived from two sources: historical growth rate estimates and national level industry forecasts. The projections are therefore partly based on the notion that regions that have performed well in the recent past are likely to continue performing well (and vice versa) and partly on the notion that those regions that have prominent sectors that are forecast to grow rapidly in the national economy (e.g. finance and telecommunications) are likely to perform well (and vice versa). As the target year moves further from the base year (2010) so the emphasis moves from historical growth rates to national-level industry growth rates.

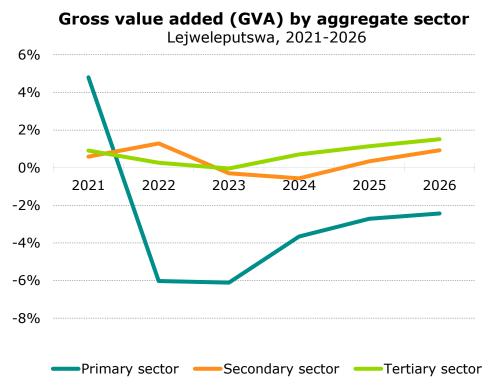
GROSS VALUE ADDED (GVA) BY BROAD ECONOMIC SECTOR - LEJWELEPUTSWA DISTRICT MUNICIPALITY, 2021-2026 [R BILLIONS, CONSTANT 2010 PRICES]

							Average
	2021	2022	2023	2024	2025	2026	Annual
							growth
Agriculture	2.18	2.18	2.21	2.23	2.28	2.32	<b>1.30</b> %
Mining	8.61	7.96	7.31	6.93	6.63	6.38	<b>-5.82</b> %
Manufacturing	0.97	0.97	0.96	0.95	0.94	0.94	<i>-0.51</i> %
Electricity	1.07	1.10	1.09	1.08	1.09	1.10	<i>0.58</i> %
Construction	0.43	0.43	0.44	0.45	0.45	0.46	<b>1.57</b> %
Trade	4.08	4.10	4.10	4.12	4.14	4.18	<b>0.47</b> %
Transport	1.61	1.62	1.63	1.65	1.68	1.71	<b>1.24</b> %
Finance	4.20	4.24	4.29	4.36	4.45	4.55	1.61%
Community	F F 6	E E 2	E 46	E 46	<i>E E</i> 0	E	0.040/
services	5.56	5.53	5.46	5.46	5.50	5.57	<i>0.04</i> %
Total	28.70	28.12	27.49	27.23	27.17	27.21	-1.06%
Industries	20.70	20.12	21.43	21.23	21.11	£1.£1	-110070

Source: IHS Markit Regional eXplorer version 2257

The finance sector is expected to grow fastest at an average of 1.61% annually from R 4.2 billion in Lejweleputswa District Municipality to R 4.55 billion in 2026. The mining sector is estimated to be the largest sector within the Lejweleputswa District Municipality in 2026, with a total share of 23.4% of the total GVA (as measured in current prices), growing at an average annual rate of -5.8%. The sector that is estimated to grow the slowest is the mining sector with an average annual growth rate of -5.82%.

GROSS VALUE ADDED (GVA) BY AGGREGATE ECONOMIC SECTOR - LEJWELEPUTSWA DISTRICT MUNICIPALITY, 2021-2026 [ANNUAL GROWTH RATE, CONSTANT 2010 PRICES]



Source: IHS Markit Regional eXplorer version 2257

The Primary sector is expected to grow at an average annual rate of -4.20% between 2021 and 2026, with the Secondary sector growing at 0.33% on average annually. The Tertiary sector is expected to grow at an average annual rate of 0.71% for the same period.

Based on the typical profile of a developing country, we can expect faster growth in the secondary and tertiary sectors when compared to the primary sector. Also remember that the agricultural sector is prone to very high volatility as a result of uncertain weather conditions, pests and other natural causes - and the forecasts presented here is merely a long-term trend rather than trying to forecast the unpredictable weather conditions.

#### 4.5.4. AGRICULTURE AND RURAL DEVELOPMENT

Agriculture is a primary economic activity within the municipal region and is ranging from farming, hunting, and fishing. The agricultural sector plays a key role in job creation and self-employment of residents It covers all activities within MLM involving the utilisation of

Agricultural resources, and including at the production, handling, processing, marketing and retailing of agricultural products, inputs and implements.

Main Agricultural products in MLM are the following: -

Crops: Wheat, maize, Sorghum, groundnuts, Sunflower, soy

➤ Livestock: Cattle, sheep, horses

> Vegetables: Potatoes, asparagus et.al

> Horticulture: Cherries, other fruit

Game Farming

> Agric-tourism

Agricultural equipment, Agric-professional services

> Agricultural processing (incl. meat, wheat, vegetables, etc.)





#### 4.6 SOCIAL PROFILE

#### **4.6.1 PUBLIC SAFETY**

The current level of crime is of concern and is not bound to a specific area or person. There is also an increase in the number of housebreaking and violence against women and children, who are the most vulnerable, is unacceptably high, some contributing factors are as follows:

- High unemployment rate and migration from rural to urban areas.
- Lack of resources within the police service (transport, manpower).
- Ineffective functioning of neighbourhood watches organization and community police forums.

- Lack of visible policing.
- Lack of accessibility to police stations

More facilities such as mobile police stations, available transport and accessible communication systems are required to improve crime prevention and emergency response.

#### 4.6.2 CRIME

It needs to be mentioned that specific statistics for Matjhabeng is not available and therefore statistics for the Free State Province will be used to track the trend of crime in and around Matjhabeng. The types of crimes imposing on the safety of the people of the district are as follow:

https://www.gov.za/sites/default/files/gcis\_documents/Final%20Q2\_%20July%20to%20September.pdf

## FREE STATE CRIME SITUATION



CRIME CATEGORY	January to March 2017_18	January to March 2018_19	January to March 2019_20	January to March 2020 21	January to March 2021 22	Count Diff	% Change
CON	ITACT CRIMES (	CRIMES AGAINS	T THE PERSON)				
Murder	234	258	205	200	240	40	20,0%
Sexual Offences	802	908	847	763	923	160	21,0%
Attempted murder	137	226	165	196	227	31	15,8%
Assault with the intent to inflict grievous bodily harm	2 529	2 782	2 785	2 434	2 990	556	22,8%
Common assault	3 053	3 247	3 227	3 211	3 710	499	15,5%
Common robbery	518	476	472	365	436	71	19,5%
Robbery with aggravating circumstances	1 158	1 136	1 136	964	1 029	65	6,7%
Total Contact Crimes ( Crimes Against The Person)	8 431	9 033	8 837	8 133	9 555	1 422	17,5%
	Total	Sexual Offence	s				
Rape	645	669	641	594	711	117	19,7%
Sexual Assault	104	155	140	110	144	34	30,9%
Attempted Sexual Offences	32	58	32	34	45	11	32,4%
Contact Sexual Offences	21	26	34	25	23	-2	-8,0%
Total Sexual Offences	802	908	847	763	923	160	21,0%
SON	ME SUBCATEGOR	IES OF AGGRAV	ATED ROBBERY				
Carjacking	53	55	49	49	58	9	18,4%
Robbery at residential premises	181	172	165	168	145	-23	-13,7%
Robbery at non-residential premises	209	212	200	190	187	-3	-1,6%
Robbery of cash in transit	4	1	4	1	4	3	300,0%
Bank robbery	0	0	0	0	0	0	0 Count
Truck hijacking	8	9	18	14	21	7	50,0%

## FREE STATE CRIME SITUATION



CRIME CATEGORY	January to March 2017_18	January to March 2018_19	January to March 2019_20	January to March 2020 21	January to March 2021 22	Count Diff	% Change
CONTACT-RELATED CRIMES							
Arson	39	21	32	29	40	11	37,9%
Malicious damage to property	1 349	1 466	1 361	1 423	1 708	285	20,0%
Total Contact-Related Crimes	1 388	1 487	1 393	1 452	1 748	296	20,4%
PROPERTY-RELATED CRIMES							
Burglary at non-residential premises	1 287	1 308	1 385	1 099	1 027	-72	-6,6%
Burglary at residential premises	3 320	3 234	3 031	2 566	2 911	345	13,4%
Theft of motor vehicle and motorcycle	382	313	263	238	207	-31	-13,0%
Theft out of or from motor vehicle	1 118	1 228	996	947	946	-1	-0,1%
Stock-theft	1 019	952	840	740	807	67	9,1%
Total Property-Related Crimes	7 126	7 035	6 515	5 590	5 898	308	5,5%
OTHER SERIOUS CRIMES							
All theft not mentioned elsewhere	3 386	3 834	3 683	3 342	4 030	688	20,6%
Commercial crime	984	1 005	994	1 072	1 064	-8	-0,7%
Shoplifting	622	726	578	555	489	-66	-11,9%
Total Other Serious Crimes	4 992	5 565	5 255	4 969	5 583	614	12,4%
Total 17 Community Reported Serious Crimes	21 937	23 120	22 000	20 144	22 784	2 640	13,1%
CRIME DETECTED AS A RESULT OF POLICE ACTION							
Illegal possession of firearms and ammunition	133	123	101	79	122	43	54,4%
Drug-related crime	3 191	903	964	947	1 266	319	33,7%
Driving under the influence of alcohol or drugs	545	665	549	600	544	-56	-9,3%
Sexual Offences detected as a result of police action	82	145	184	269	364	95	35,3%
Total Crime Detected As A Result Of Police Action	3 951	1 836	1 798	1 895	2 296	401	21,2%

# 5. KEY PERFORMANCE AREA 1: INTEGRATED INSTITUTIONAL CAPACITY FOR DISASTER RISK MANAGEMENT IN MATJHABENG LOCAL MUNICIPALITY

# 5.1 INSTITUTIONAL ARRANGEMENTS FOR INTEGRATED POLICY MAKING, DIRECTION AND THE EXECUTION OF POLICY AND LEGISLATION

#### **5.1.1 OBJECTIVES**

 To establish procedures for the development, approval and implementation of integrated disaster risk management policy, including the making of by-laws, issuing directions and authorisations for the issuing of directives;

- To establish mechanisms which will provide clear direction and allocate responsibilities for the implementation of the Disaster Management Act 57 of 2002 (hereinafter referred to as "the Act");
- To develop a strategic plan for phasing in and maintaining the requirements of the Act and the national disaster management framework; and
- To establish and maintain effective institutional arrangements to ensure adequate operational capacity for the implementation of the requirements of the Act and to enable stakeholder participation which will promote an integrated and co-ordinated approach to disaster risk management in Council's area.

#### 5.1.2 ARANGEMENTS FOR INTEGRATED POLICY

#### **5.1.2.1 THE COUNCIL**

Council is responsible to ensure the implementation of the Disaster Management Act No 57, 2002 for the area of Matjhabeng Local Municipality and makes all policy decisions in relation to disaster risk management.

Having consulted with the district municipality in the area (Sections 55(1)(b) and 55(2) of the Disaster Management Act 57, 2002), the Lejweleputswa District Municipality has primary responsibility for the co-ordination and management of local disasters threatening to occur or occurring within the area of the district municipality (section 54(1)

#### 1. Action to be taken:

The Matjhabeng LM and the Lejweleputswa District Municipality must consult and determine primary responsibility as per sections 54 and 55 of the Disaster Management Act for the Matjhabeng LM.

#### **5.1.2.2 THE POLICY MAKING PROCESS**

Action to be taken on matters relating to disasters and disaster risk management policy must be submitted to the Matjhabeng LM DRMC for consideration. The DRMC will refer the Action to be taken to the Matjhabeng LM Inter-Departmental Disaster Risk Management Committee (IDRMC) for consideration before submitting them to the relevant portfolio committee prior to submitting them to the Council. Policy adopted by Council will then be referred back to the DRMC for implementation.

The Matjhabeng LM DRMC must ensure that action to be taken on policy include details of any financial, constitutional, human resource or interdepartmental implications before they are submitted to the relevant portfolio committee and the Council.

The following flow chart provides a diagrammatic view of the process for the submission action to be taken relating to policy.

Recommendation impacting on provincial policy referred to Free State PDRMC **Recommendation impacting** Recommendation impacting on on national policy referred to district policy referred to LD DRMC **NDMC** Matjhabeng Local Municipality Submission of Action to be **DRMC** taken on disaster risk management policy Matjhabeng Local Municipality **IDRMC** Policy to DRMC for implementation or further processing 2 5 Matjhabeng Local Municipality Relevant Council Portfolio 4 Committee 3

Figure 1: The Matjhabeng LM disaster risk management policy-making framework

#### 2. Action to be taken:

The Matjhabeng LM Council should agree on the above policy-making framework and pass a Council resolution in this regard.

#### 5.1.3 ARRANGEMENTS FOR DIRECTION AND EXECUTION OF POLICY

### 5.1.3.1 MATJHABENG LOCAL MUNICIPALITY DISASTER RISK MANAGEMENT CENTRE

Although the Act does not require a disaster risk management centre (DRMC) to be established within a local municipality, it is recommended in the national framework that all local municipalities identify appropriately qualified staff in their employ to serve as their disaster risk management focal point. The framework further suggests that this person serve on the relevant IDP structures due to the inextricable relationship between disasters and development.

In order to ensure continuous monitoring of progress with regard to the execution of the provisions of the Act the centre responsible for disaster risk management (Disaster risk management Centre) within the municipality must also submit reports in an agreed format on its performance for consideration to every meeting of the Public Safety Portfolio Committee and the Lejweleputswa District DRMC.

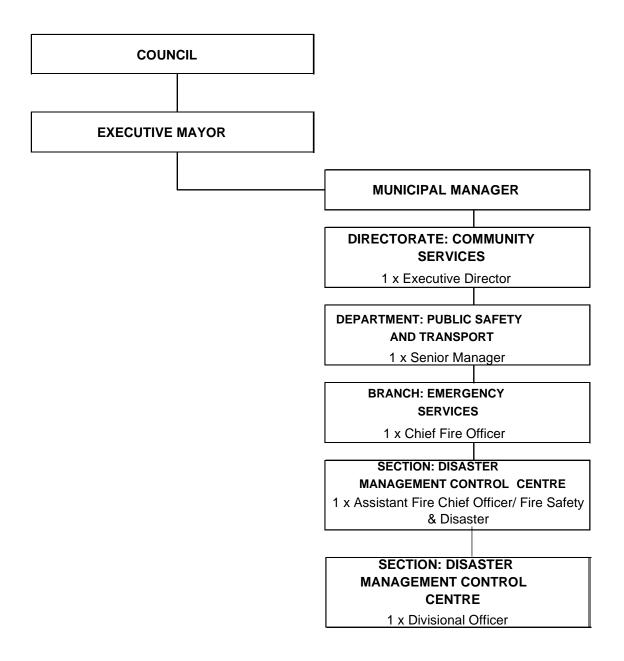
#### 5.1.3.1.1 ESTABLISHMENT AND PHYSICAL LOCATION OF THE OFFICE

In terms of the Act there is no requirement for local municipality to establish a disaster risk management centre or office. It is however recommended within the National Disaster Management Framework that disaster risk management focal/designated person be appointed or identified to deal with issues pertaining to disaster risk management.

### 5.1.3.1.2 LOCATION OF THE DISASTER RISK MANAGEMENT FUNCTION WITHIN COUNCIL ADMNISTRATION

In terms of section 45(1)(b) of the Act the district disaster risk management centre exercises its powers and performs its duties in accordance with the *directions* of the municipal council and in accordance with the *administrative* instructions of the Municipal Manager. On this basis, it is recommended that the Matjhabeng LM DRMC be handled in a similar manner.

The proposed location of the centre within Council's administration and reporting lines for direction and administrative purposes are illustrated in the chart below



#### 5.1.4 KEY RESPONSIBILITIES OF THE MATJHABENG LOCAL MUNICIPALITY DRMC

The key responsibilities of the Matjhabeng LM DRMC will be as follows:

 Establish and maintain adequate institutional capacity to enable the implementation of the requirements of the Act which will promote an integrated and co-ordinated approach to disaster risk management in Council's area subject to the agreement on primary

- responsibility with the Matjhabeng District DRMC (see section 54 of the Disaster risk management Act);
- Implement measures to conduct comprehensive and progressive assessments which will
  contribute to the development of disaster risk profiles which are current and relevant, and
  which will inform planning and the implementation of risk reduction strategies;
- Facilitate the development, implementation and maintenance of disaster risk management plans, programmes and practices for strategic disaster risk reduction which will ensure that individuals, households, communities, infrastructure and the environment in council's area are resilient to disaster risk;
- Facilitate the development and implementation of contingency plans to ensure rapid, appropriate and effective disaster response and recovery to disasters which occur or are threatening to occur in council's area;
- Develop, establish and maintain a comprehensive information management system, an
  effective communication system and an accessible public awareness and information
  service:
- Make provision for accessible training, education and research opportunities for disaster risk management stakeholders in the municipality;
- Make action to be taken regarding the funding for disaster risk management in the council's area of jurisdiction and initiate and facilitate efforts to make such funding available;
- Develop, implement and maintain dynamic mechanisms for monitoring, evaluating and continuously improving disaster risk management practice, projects and programmes;
- Commissioning the development and maintenance of a disaster risk profile for council's area which is current and relevant;
- Ensuring the development, implementation and maintenance of comprehensive disaster risk reduction planning and implementation for council's area by the relevant municipal organs of state and other municipal entities/departments within council's administration, and other municipal entities operating within council's jurisdiction;
- Identifying cross boundary disaster risks which pose a threat to council's area or to neighbouring jurisdictions and facilitating the development, implementation and maintenance of plans to manage such risks (Masilonyana, Setsoto, Moqhaka and Nala Municipality)
- Establishing and maintaining an information management system which includes the
  development and maintenance of a database linked to a Geographical Information System
  (GIS); hazard maps and risk maps informed by the disaster risk profile; a register of
  volunteers; a communication directory and a record of available resources;

- Serving as a conduit and repository for information concerning disasters, impending disasters and disaster risk management in general;
- Acting in an advisory and consultative capacity on issues concerning disasters and disaster risk management in the area by the establishment of the Matjhabeng LM Disaster risk management Advisory Forum;
- Establishing and maintaining ward disaster risk management structures to deliver services
  in terms of all of the activities associated with disaster risk management to communities in
  the areas of the thirty-one (31) wards; and to integrate them into the disaster risk
  management arrangements for the municipality;
- Establishing and maintaining co-operative partnerships with multi-sectoral role players including the private sector in accordance with Chapter 3 of the Constitution and the Integrated Development Plan objectives;
- The establishment, management and maintenance of a unit of volunteers;
- Ensuring adequate capacity to deal with rapid, co-ordinated and effective disaster response and recovery by:
  - facilitating the development, implementation and maintenance of contingency plans for disasters which have been identified in the risk profile as priority risks for council's area;
  - facilitating the development and implementation of standard operating protocols and field operations guides for the various activities associated with disaster response and recovery based on joint standards of practice amongst all relevant role players to ensure rapid and effective responses;
  - developing and maintaining a disaster response and recovery plan incorporating the contingency plans, response and recovery protocols and field operations guides;
  - developing guidelines and the capacity to assess the magnitude and severity or the
    potential magnitude and severity when a disaster occurs or threatens to occur and
    determining whether the event should be classified as a local disaster;
  - developing guidelines and the capacity (including in communities known to be at risk to disasters) for conducting initial assessments of damage and adverse effects and the immediate humanitarian needs of those affected;
  - mobilising the necessary resources to provide immediate humanitarian assistance and to restore or make temporary arrangements to maintain critical lifeline services, mission critical systems and business continuity during and immediately after a disaster occurs or when a disaster is threatening to occur; and

- providing and co-ordinating physical support to communities and the mission critical systems on which they depend, in the event of those disasters which are classified as local disasters.
- Maintaining comprehensive records, documentation and reports of disaster response and recovery operations.

# 5.1.5 THE INTERNAL DEPARTMENTS (MUNICIPAL ORGANS OF STATE) AND OTHER MUNICIPAL ENTITIES WITHIN THE ADMINISTRATION OF THE MATJHABENG LM

Each department and other municipal entity within Council's administration must, in terms of section 2 of the Act, assess any national legislation applicable to its function and must advise the Matjhabeng LM DRMC on the state of such legislation.

Disaster risk management activities must be incorporated into the routine activities of each municipal department and of any other municipal entities and their substructures.

#### **5.1.5.1 ASSIGNMENT OF RESPONSIBILITIES**

The Disaster Manager and the heads of each department in council's organisational structure will serve as the assigned disaster risk management nodal/focal point for the department and as such will represent the department on the Matjhabeng LM Inter-Departmental Disaster Risk Management Committee (Matjhabeng LM IDRMC) and will be responsible for all aspects of planning and operations relevant to the functional area in that department or entity.

The responsibilities of heads of department in this regard include:

- facilitating and co-ordinating the relevant department or entity's disaster risk management planning and operational activities for risk reduction and for response and recovery;
- ensuring that the planning and operations are consistent with the requirements of the Act and Lejweleputswa District disaster risk management framework;
- ensuring the integration and alignment of the entity's planning and operations with that of the district, provincial and national organs of state and other institutional role players;
- ensuring the integration of the risk reduction and response and recovery planning and operations with councils Integrated Development Planning process, the Spatial Development Framework and Environmental Management Framework;

- ensuring the regular review of plans and that planning remains dynamic and relevant in accordance with developmental changes taking place within, or which may impact on council's area; and
- submitting a copy of the entity's disaster risk management plan and any amendments
  thereof to the disaster risk management centre for forwarding to the disaster risk
  management centre of the Lejweleputswa District, Northwest Province and to the National
  Disaster risk management Centre.

In terms of Sections 47 and 52 of the Act each municipal entity must establish its role and responsibilities in terms of the Act and must assess its capacity to fulfil those requirements. Where capacity is lacking it must be augmented by the sharing of resources between departments, organs of state in the other spheres of government and by entering into partnerships with the private sector, non-governmental organisations and community-based organisations. In this regard mutual assistance agreements and memoranda of understanding must be concluded in which the detail, extent and ramifications of such support are recorded.

#### 3. Action to be taken:

The Matjhabeng LM must provide clear guidelines as to the roles and responsibilities of municipal entities in disaster risk management and sign appropriate mutual assistance- or service level agreements for this purpose.

Entities must ensure that their disaster risk management plans are co-ordinated and aligned with those of other organs of state and institutional role players.

In order to give further effect to the requirements of Sections 47 and 52 of the Act, primary responsibility for the co-ordination and management of disaster risk management planning and operations for the following functional areas in the Matjhabeng LM is assigned as follows:

#### **5.1.5.1.1 THE MUNICIPAL MANAGER**

The Municipal Manager is responsible to ensure the effective implementation of the requirements of the Disaster risk management Act, 2002 within the departments and other municipal entities within the Matjhabeng LM and for the integration of disaster risk management plans with the IDP Process.

5.1.5.1.2 THE DIRECTORATE: COMMUNITY SERVICES

The Director: Community Services:

is the disaster risk management focal point for the department;

will serve on the Matjhabeng LM IDRMC; and

is responsible for the co-ordination of all relevant aspects of disaster risk management

planning and operations in respect of matters related to fire, traffic, licensing, community

service and security related matters.

is responsible for the co-ordination of all relevant aspects of disaster risk management

planning and operations in respect of health, and social related matters.

**5.1.5.1.3 THE DIRECTORATE: INFRASTRUCTURE** 

The Director: Infrastructure

is the disaster risk management focal point for the department;

will serve on the Matjhabeng LM IDRMC; and

is responsible for the co-ordination of all relevant aspects of disaster risk management

planning and operations in respect of matters related to civil works and infrastructure.

• is responsible for the co-ordination of all relevant aspects of disaster risk management

planning and operations in respect of matters related to emergency housing and

reconstruction.

5.1.5.1.4 THE DIRECTORATE LOCAL ECONOMIC DEVELOPMENT

The Director: Local Economic Development

is the disaster risk management focal point for the department;

will serve on the Matjhabeng LM IDRMC; and

• is responsible for the co-ordination of all relevant aspects of disaster risk management

planning and operations in respect of matters related to economic development.

5.1.5.1.5 THE DIRECTORATE CORPORATE SUPPORT SERVICES

The Director: Corporate Support Services:

is the disaster risk management focal point for the department;

will serve on the Matjhabeng LM IDRMC; and

37

• is responsible for the co-ordination of all relevant aspects of disaster risk management planning and operations in respect of matters related to business continuity, legal services, transport, and human resource management.

#### **5.1.5.1.6 THE DIRECTORATE FINANCE**

The Chief Financial Officer:

- is the disaster risk management focal point for the department?
- will serve on the Matjhabeng LM IDRMC.

is responsible for the co-ordination of all relevant aspects of disaster risk management planning and operations in respect of financial management and procurement

#### 4. Action to be taken:

The Municipal Manager in consultation with the Directors and Heads of all departments and other municipal entities must identify all other statutory functionaries in each of the relevant departments or entities who have disaster risk management responsibilities and the responsibilities in this regard must be recorded in the job descriptions of such functionaries together with key performance indicators. The functionaries so identified will serve as indicated on the Matjhabeng LM Interdepartmental Disaster risk management Centre (IDRMC).

# 5.1.6 THE MATJHABENG LOCAL MUNICIPALITY INTERDEPARTMENTAL DISASTER RISK MANAGEMENT COMMITTEE (MATJHABENG LM IDRMC)

## **5.1.6.1 PURPOSE OF THE IDRMC**

In order to promote interdepartmental relations and to achieve a co-ordinated, integrated and common approach to disaster risk management by the departments and other internal units in the administration of the municipality (Section 44(1)(b)(i) of the Act) in the development and implementation of appropriate disaster risk reduction methodologies, emergency preparedness and rapid and effective disaster response and recovery capabilities, the designated person for Disaster Risk Management Centre is responsible to establish and sustain an Interdepartmental Disaster Risk Management Committee (IDRMC).

In order to ensure that the DRMC implements disaster risk management in a manner consistent with the Act, as well as practical to involve all the necessary role players, the head of the DRMC will establish an IDRMC with the functionaries as identified.

The committee comprises heads of departments and key personnel with specific technical

expertise who have disaster risk management responsibilities. It facilitates integrated and co-

ordinated planning by providing the 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 52 of the Act. It acts in support of the

Matihabeng LM DRMC and assists with supervising the preparation, co-ordination, monitoring

and review of disaster plans and their integration with the IDP processes.

The committee is chaired by the Head of the DRMC and shall meet at least quarterly but is

not precluded from meeting more frequently according to current circumstances.

5.1.6.2 COMPOSITION OF THE IDRMC

The IDRMC comprises key personnel and relevant role players of the various departments

and other internal units in the administration of council who have disaster risk management

responsibilities in their functional area. The permanent members of the IDRMC are as follows:

Office of the Municipal Manager

Municipal Manager

Senior Manager: Administration

Manager Administration

**Directorate: Community Services** 

Director: Community Services

Senior Manager: Public Safety

Senior Manager: Parks and recreation

Manager: Traffic & Security

Manager: Fire & Rescue

Divisional Officer Disaster Management

Directorate: Infrastructure

Director: Infrastructure

Senior Manager: Human Settlements

Manager: Civil Engineering Services

Senior Manager: Electrical Engineering Service

Senior Manager: Project Management Unit

39

Directorate: Local Economic Development

Director: Local Economic Development

Senior Manager: LED

Directorate: Finance

Chief Financial Officer

Senior Manager: Budget

Senior Manager: Treasury

Senior Manager: Financial Services

Directorate: Corporate Support Services

Director: Corporate Support Services

Senior Managers: Human Resource

Senior Manager: Council Admin

Senior Manager: Legal Services

The composition of the committee does not preclude the co-option of additional key council personnel with disaster risk management responsibilities to the IDRMC if prevailing circumstances demand it. Nor does it preclude the ad hoc co-option of specialised expertise for specific purposes.

Each departmental head will serve as the Focal/Nodal Point for Disaster risk management for their department's functional area and accordingly is expected to attend meetings of the IDRMC (see section 2.1.6 above).

The job descriptions of the permanent members serving on the IDRMC must include a description of their disaster risk management responsibilities.

## **5.1.6.3 RESPONSIBILITIES OF THE IDRMC**

For the purposes of implementing the requirements of the Act and Sections 47 and 48 the responsibilities of the IDRMC include:

For disaster risk reduction planning and operations:

40

- monitoring, assessing, and co-ordinating council's disaster risk management planning and implementation, placing focus on risk reduction policies, practices and strategies;
- collaborating, co-ordinating and monitoring progress on joint projects and programmes and their integration into the IDP process;
- annually reviewing the council's disaster risk management framework, departmental disaster risk management plans, the plans of other internal units within council's administration and the plans of other municipal entities in council's area to ensure that the plans are integrated, current, and consistent with the disaster risk management framework;
- promoting joint standards of practice within and between the departments and other entities within council;
- monitoring progress on the implementation of priority projects aimed at risk reduction;
- participating in desk top exercises bi-annually to remain current on roles and responsibilities in the activation and operation of the Disaster Operations Centre to ensure rapid and efficient response and recovery in the event of a disaster occurring or threatening to occur in council's area; and
- making Action to be taken to council regarding disaster risk management policy and related disaster risk management matters.

## For contingency planning and disaster response and recovery:

- when a disastrous event occurs, or is threatening to occur around a municipality, on receipt
  of an activation alert from the Head of the DRMC (or designate), reporting immediately to
  the District Disaster risk management Centre Disaster Operations Centre (DOC);
- conducting initial and specialist post disaster assessments for the department's or entities' functional area;
- ensuring that departments respond rapidly to disasters;
- ensuring efficient and co-ordinated disaster response and recovery operations;
- monitoring progress with, and ensuring that, post disaster reconstruction and rehabilitation projects include measures to reduce risk to similar events in the future;
- ensuring that regular reports on progress with disaster recovery are continuously submitted to council as well as to the DRMC of the Free State Province and NDMC via the Lejweleputswa DRMC; and
- Ensuring that all documentation and records relating to the disaster are retained and placed in safe-keeping for the purposes of post disaster investigation, inquiry or review.

### 5.1.6.4 PROJECT TEAMS AND PLANING CLUSTERS

The IDRMC may convene project teams to address specific joint risk reduction priorities including post disaster projects. Teams so convened will act as sub-committees of the IDRMC for the duration of their task and will determine their terms of reference and outcomes in consultation with the Municipal Manager and the designated person of the Disaster Risk Management Centre and the IDRMC; will plan and manage such multi-disciplinary projects; and will report back to the IDRMC.

In the context of emergency preparedness, planning clusters will also be convened to address contingency plans for specific priority risks posed by hazards such as storms, floods, drought, fires, epidemics, transportation accidents, oil spills, hazardous material spills, Xenophobic attacks crowd related events. These contingency plans will include strategies and procedures to ensure the implementation of an incident management system, which will establish joint standards of practice and inter-disciplinary co-operation for rapid and effective disaster response capabilities. Such plans will also be subject to consultation within the Matjhabeng LM IDRMC.

## 5.1.7 INTEGRATION WITH THE IDP PROCESS

In order to facilitate the integration of disaster risk management into the IDP process, the Municipal Manager and the designated person of the DRMC must serve on both the IDP Steering Committee and IDP Representative Forum. All development projects must be referred to the Matjhabeng LM DRMC for comment and input before their submission to council for approval.

## **5.1.8 KEY PERFOMANCE INDICATORS**

- The IDRMC is established and is operating effectively.
- A job description and key performance indicators for the designated person of the office have been developed.
- The designated person of the Disaster Risk Management Unit is appointed in terms of a written contract, which includes key performance indicators.
- The Matjhabeng LM Disaster Risk Management Unit is fully established, and the structure is under review with the possibility to adequately appoint staff to get it operating optimally.
- Provision has been made for the necessary funding to give effect to the arrangements.
- Accurate records of correspondence, proceedings, meetings and plans are maintained.

## **5.1.9 MONITORING AND EVALUATION**

The Matjhabeng LM DRMC is responsible ensure that the Office; the departments and other entities within the administration of council and the IDRMC, and any other decentralised structures conduct self-assessments and peer reviews at least twice a year.

Assessment and review reports must be prepared in accordance with the reporting guideline to be developed by the Matjhabeng LM DRMC. Copies of the reports must be submitted to the Lejweleputswa District DRMC. Copies of the reports must be submitted to the DRMC of the Free State Province as well as the NDRMC.

# 5.2 ARRANGEMENTS FOR STAKEHOLDER PARTICIPATION AND TECHNICAL ADVICE

## **5.2.1 OBJECTIVE**

To establish and cooperative with mechanisms, which will provide for the active participation of all role players and stakeholders, including technical experts, the community and the private sector in disaster risk management planning and operations in the district.

# 5.2.2 THE LEJWELEPUTSWA DISTRICT MUNICIPALITY DISASTER RISK MANAGEMENT ADVISORY FORUM (LD DRMAF)

The disaster risk management focal point of the Matjhabeng LM must serve as an active member on the LD DRMAF. The focal point must report to the IDRMC on matters pertaining to the LD DRMAF.

## 5.2.3 COMMUNITY/WARD PARTICIPATION

In terms of risk reduction, the local sphere 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 Disaster Risk Management Centre is responsible to facilitate and co-ordinate the establishment of a disaster risk management structure such as a committee or forum in each municipal ward to serve as the leadership and co-ordinating element for the purposes of disaster risk management in the ward. This process is to be initiated and managed in consultation and co-operation with the disaster risk management co-ordinating structure of of Matjhabeng Local Municipality. Ward Disaster risk management structures will adopt a Ward Disaster Risk Management Constitution which will include terms of reference, the allocation of portfolios; operating protocols in terms of disaster risk reduction planning; early warnings; emergency preparedness; emergency communication; data collection; disaster response and recovery; and the recruitment and management of ward volunteers.

Ward DM structures will actively participate in and promote:

- awareness programmes amongst communities in the ward;
- to develop a culture of risk avoidance behaviour to commonly encountered hazards;
- the development of a disaster risk profile, a strategic risk reduction strategy, contingency
  plans for priority disaster risks and a response and recovery operational guide for their
  ward; and
- training and capacity building programmes for residents in the ward.

Ward disaster risk management structures must also be capacitated to conduct initial assessments in accordance with the assessment guidelines when disasters occur or are threatening to occur in their ward and to transmit such information to the Matjhabeng LM Disaster Risk Management Centre.

#### 5.2.4 DISASTER RISK MANAGEMENT VOLUNTEERS

In accordance with Sections 44(1)(g) and 58 of the Act, a local municipality might resolve to establish a unit of volunteers. The unit must be established in accordance with the regulations and the policy and procedures as set out in an operational guide pertaining to the recruitment, training and participation of volunteers.

#### 5.2.5 KEY PERFORMANCE INDICATORS

- Ward structures have been established in the wards and are operating effectively.
- Minutes, records and reports of Ward structures' activities are prepared, maintained and submitted to the Matjhabeng LM DRMC.
- The Unit of Volunteers has been established and is operating effectively.

- Provision has been made for the necessary funding to give effect to the arrangements.
- Minutes, records and reports of the activities of the volunteer reserve are prepared maintained and submitted to the Matjhabeng LM DRMC.

## 5.2.6 MONITORING AND EVALUATION

The Matjhabeng LM DRMC is responsible to ensure that any established structures (e.g. Ward Forums and the volunteer unit) conduct self-assessments and peer reviews at least twice a year. Assessment and review reports must be prepared in accordance with the reporting guideline to be developed by the Matjhabeng LM DRMC. Copies of the reports must be submitted to the Matjhabeng LM DRMC. Copies of the reports of the Matjhabeng LM DRMC must be submitted to the Free State PDRMC as well as the NDMC though the Lejweleputswa District DRMC.

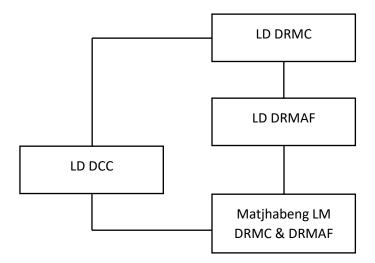
# 5.3 ARRANGEMENTS FOR LOCAL, PROVINCIAL, NATIONAL AND INTERNATIONAL CO-OPERATION

#### 5.3.1 OBJECTIVE

To establish mechanisms to give effect to the principles of co-operative governance and to ensure the alignment of council's approach to disaster risk management with that of the other spheres and with that of neighbouring authorities; and to establish international links for the purposes of joint standards of practice and keeping pace with global initiatives.

## 5.3.2 CO-OPERATION WITH THE LEJWELEPUTSWA DISTRICT MUNICIPALITY

The following diagrammatic representation indicates the mechanisms established to ensure that the provisions of the Act in terms of consultation and co-operation with the Lejweleputswa District Municipality are complied with.



The Matjhabeng LM DRMC will have representation on the LD DRMAF (see the LD DRMF) as well as the LD Disaster Risk Management Coordinating Committee (DCC).

# 5.3.3 CO-OPERATION WITH THE NATIONAL DISASTER MANAGEMENT CENTRE AND THE DISASTER RISK MANAGEMENT CENTRE OF THE FREE STATE PROVINCE AND THE LEJWELEPUTSWA DISTRICT DISASTER RISK MANAGEMENT CENTRE

In terms of the legislation, communication must be maintained at all times between council's disaster risk management centre, the National Centre, the Disaster Risk Management Centre of the Free State Province and the Lejweleputswa District DRMC.

Council's responsibilities in this regard will be to assist the District, National and Provincial centre to:

- identify and establish communication links with disaster risk management role players in the municipal area;
- develop and maintain an electronic database; and
- develop guidelines for the preparation of and regular review of disaster risk management plans and strategies including contingency plans and emergency procedures and the integration of the concepts and principles of disaster risk reduction with development plans and programmes

Submit to the Lejweleputswa District DRMC:

- a report at least annually containing the information as prescribed in Section 50 of the Act; and
- a copy of council's disaster plan and any amendment thereto.

 Immediately inform the Lejweleputswa District DRMC of any disaster which occurs or threatens to occur in council's area; provide information regarding the assessment of the disaster and make Action to be taken regarding the classification of the disaster as may be appropriate.

# 5.3.4 JOINT CO-OPERATION WITH NEIGHBOURING AUTHORITIES THROUGH THE DRMAF AND DCC

In order to facilitate joint co-operation between council and the neighbouring authorities of:

- Matjhabeng Local Municipality
- Masilonyana Local Municipality
- Nala Local Municipality
- Moqhaka Local municipality
- Setsoto Local Municipality

provision must be made for the representation on the Disaster Risk Management Advisory Forum as well as the DCC of the Lejweleputswa District for the purposes of:

- the identification of potential cross boundary threats;
- sharing information on disasters and important risk reduction issues;
- participative disaster risk planning;
- joint contingency planning;
- developing and establishing joint standards of practice;
- information sharing including disaster risk management plans and the dissemination of early warnings;
- clear identification of roles and responsibilities in the event of cross boundary disasters
  which occur as well as responsibilities for the issue of advisories or early warnings of the
  potential spread or progress of a significant event or disaster into one or more
  neighbouring jurisdictions;
- concluding mutual assistance agreements, bilateral and multilateral agreements with clearly defined protocols for the purposes of shared risk reduction initiatives, emergency preparedness and cross boundary response and recovery efforts;
- sharing expertise and the development of disaster assistance response teams;
- · establishing strategic communication links, procedures and protocols; and
- creating opportunities for conducting research.

### 5.3.5 MUTUAL ASSISTANCE AGREEMENTS

The Matjhabeng LM, District municipalities, Municipal organs of state, and any other entities operating within the administrations of municipalities must assess their capacity to meet their responsibilities for disaster risk reduction, emergency preparedness and response and recovery in terms of the Act. Where required they must enter into partnerships and conclude mutual assistance agreements with other organs of state, the private sector, communities and non-governmental organisations to augment their capacity. Such agreements must be in accordance with the national guidelines.

## 5.3.6 KEY PERFORMANCE INDICATORS

- Arrangements for giving effect to the principles of co-operative governance are established and functioning effectively.
- Provision has been made for the necessary funding to give effect to the arrangements.
- Correct procedures and protocols are followed in establishing the arrangements.
- Mutual assistance agreements and memoranda of understanding, which conform to the national guideline, have been concluded.
- Maintaining accurate records of correspondence, proceedings, meetings and plans.

## 5.3.7 MONITORING AND EVALUATION

The Matjhabeng LM DRMC must conduct self-assessments and peer reviews at least twice a year to establish whether the key performance indicators in respect of the arrangements for local, provincial, national and international co-operation are being met. Assessment and review reports must be prepared in accordance with the reporting guideline to be developed by the Matjhabeng LM DRMC. Copies of the reports must be submitted to the Lejweleputswa District DRMC.

# 6. KEY PERFORMANCE AREA 2: DISASTER RISK ASSESSMENT

## **6.1 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.

## 6.2. HAZARD AND RISK ANALYSIS

## 6.2.1 PURPOSE

- To identify what risks, present the greatest threat to provincial development planning.
- To develop an understanding of how best to manage existing, residual and future risks.
- To assign levels of risk

## 6.2.2 THE KEY STEPS

- Identify and assess significant hazards
- Analyse the disaster risk(s)
- Evaluate the disaster risk(s)
- Monitor disaster risk reduction initiatives and update and disseminate disaster risk assessment information.

## (i) Hazard identification

The following hazards have been identified:

- Drought
- Extreme cold
- Heat wave
- Hail
- Windstorm
- Tornado
- Floods
- Structural fires
- Veld fires
- Earthquake
- Sinkholes
- Human epidemic
- Animal epidemic
- Hazmat transportation
- Hazmat fixed facility
- Hazmat biological (Anthrax)
- Hazmat radioactive
- Fire and explosion
- Transport motor vehicles
- Transport rail
- Transport aircraft
- Dam failure
- Seismic movements
- Hostage/ hijack incidents
- Reservoir break
- Snow
- Mudslides

## Water contamination

## (ii) Risk Analysis

**Table 6.1– List of Major Hazards** 

Hazard	Potential Consequences
Animal Disease	Most animal disease emergencies present little direct threat to human health, however the cost in purely economic terms may be particularly significant. Many rural residents rely on their animals for subsistence, and there are a number of larger animal-based industries in the Province.
Fire (Veld/ Structural)	Loss of life, (loss of breadwinner), severe injury, loss of homes, loss of crops, stock losses, of grazing land, loss of income, disruption of economy. Stretching of the emergency response capability.
Flood/Severe Storm, Rainfall and Landslides	Loss of life, (loss of breadwinner), severe injury, loss of homes, loss of stock loss of income, increased risk of disease.
Hazardous Material	Loss of life, (loss of breadwinner), severe injury, evacuation of large areas, fires, explosions, ground and air pollution. Road and rail transport traveling through the province carrying dangerous chemicals and corrosive substances poses the threat of a significantly dangerous accident.
Human Epidemic	Loss of life, (loss of breadwinner), extended illness, loss of employment because of absenteeism, over-taxing of the medical response capability.
Major Infrastructure Failure	Loss of electrical power, causing: lack of heating; lack of refrigeration; limited fuel supplies; loss of employment through closures of industry.  Loss of communications, leading to severe impact on the Provincial disaster co-ordination ability. Loss of telephone, fax, computer (internet), automated teller machines, electronic sales.
Major Transportation	Loss of life, (loss of breadwinner), severe injury, loss of income, stretching of response and medical capability.  Transport could involve aircraft, trains, tour coaches, school buses, taxis or heavy transport vehicles.
Terrorist Activity	Loss of life, (loss of breadwinner), severe injury, loss of income. Combination of the consequences from all other hazards, dependent upon the type of terrorist activity employed.
Water Contamination	Increased disease, loss of life, loss of stock, pressure on health facilities.
Heat wave	Excessive drought, loss of crops, diseases, loss of life

Extreme cold	Loss of livestock, loss of crops, diseases,
Hostage/ hijack incidents	Loss of human life, economic loss
Snow	Economic loss, loss of human life, livestock and infrastructure.

## Hazard mapping of the province

GIS-based mapping of possible flood levels	Identification of areas susceptible to landslides						
Satellite and aerial photography	Identification of areas susceptible to erosion						
Identification of areas most susceptible to fire	Updated population information (current information is from the 1996 census)						
Identification of flood plane areas susceptible to flooding as a result of a dam failure							

## (iii) Risk Evaluation

## Purpose

To rank the risks from highest to lowest so that a priority for treatment can be assigned.

## Key Steps

- Decide on risk acceptability utilizing the risk rating and risk
   Evaluation criteria
- Rank the risks in order of priority for treatment
- Document all unacceptable risk

## Table 6.2 Level of Risk – Qualitative Analysis Matrix

<b>Qualitative Anal</b>	vsis Matrix – l	Level of Risk
Quantative Illian	yolo iviatiin i	

Consequence	Insignificant	Minor	Moderate	Major	Catastrophic
Likelihood	1	2	3	4	5
A (almost certain)	Н	Н	E	E	E
B (likely) 1:10	M	Н	Н	E	E
C (possible) 1:50	L	M	Н	E	E
D (unlikely) 1:100	L	L	M	Н	E
E (rare) 1:500	L	L	M	Н	Н

E: extreme risk; immediate action required

H: high risk; senior management attention needed

Table 6.3: Level of Risk -

Hazard	Vulnerable Sector	Potential Risk	Likelihood	Consequence	Level of risk	Risk evaluation
All Hazards	All Sectors	<ul> <li>Inadequate (or unidentified) disaster management experience or expertise within the Province.</li> <li>Inadequate response capability within the Emergency Services agencies in the Province.</li> <li>Inadequate response times to rural areas of the Province.</li> </ul>		risks are not beer	_	

		<ul> <li>Lack of communication facilities in rural areas.</li> </ul>				
		<ul> <li>Lack of effective roads infrastructure in the more remote rural areas.</li> </ul>				
		<ul> <li>Misunderstanding by most agencies relative to the meaning of the term 'disaster management'.</li> </ul>				
		■ Traditional practices. (Traditional leaders allocating land for homes in areas devoid of infrastructure; non-use of sanitation facilities, leading to water pollution and disease; acceptance of the requirement to walk long distances to source water.)				
Structural/Veld Fires	People	<ul> <li>Informal settlements have an increased vulnerability to fire because of the close quarters and lack of access.</li> </ul>	В	4	E	
	Economy	<ul> <li>Loss of stock</li> </ul>	В	4	E	
	People	<ul> <li>Loss of roofing, rendering housing uninhabitable</li> </ul>	В	3	Н	
	People	<ul> <li>Pregnant women, young children the elderly and the disabled unable to evacuate in time</li> </ul>	В	3	н	
	Economy	<ul> <li>Loss of crops</li> </ul>	В	3	Н	
	Economy	<ul> <li>Loss of grazing land</li> </ul>	В	2	Н	
	Infrastructure	<ul> <li>Power transmission lines/poles may be damaged or destroyed.</li> </ul>	С	3	Н	
	People	<ul> <li>Air pollution causing extra people to seek medical care</li> </ul>	В	3	н	
	People	<ul> <li>Death / severe injury</li> </ul>	В	3	Н	
	Management	Loss of communication lines/poles, affecting	В	3	Н	

			disaster information and				
	lafa-staristica		co-ordination  Power sub-stations may	С	0		
	Infrastructure	-	be damaged or destroyed	C	3	Н	
		•	Psychological wellbeing				
	People		of the community will be	В	3	н	
			affected as a result of				
		•	the losses suffered.				
	People	-	Psychological wellbeing of the community will be	В	3	н	
	reopie		affected as a result of	Ь	3		
			the losses suffered.				
	Natural	-	Ground erosion due to	C	3	Н	
	Environment		loss of grass/vegetation	C	3	п	
		<u> </u>	Cover				
	Crime	•	Loss of power will see an increase in criminal	С	2	M	
			activity				
	Edwarf	•	Destruction of schools	_			
	Education		affecting continuing	С	2	M	
			education				
	Infrastructure	•	Smoke will block	С	1	L	
Flood Ot-			transport routes				
Flood, Storm Severe Rainfall,	Doonlo		People will not be able to	В	4	Е	
Landslide	People		evacuate the area	В	4		
Lanusinue							
		-	Areas will be cut off by				
	Management		washed out roads,	Α	3	E	
			preventing access by				
			response agencies. Informal settlement will				
	People		be destroyed, leaving	В	4	Ε	
			large numbers of people	_	·		
			homeless.				
	People	•	Sanitation and health	Α	3	Е	
			problems.				
			Moman laft to sore for				
	People	•	Women left to care for extended families with	Δ	4	F	
	People	•	Women left to care for extended families with no means of transport	Α	4	E	
	People	-	extended families with no means of transport out of the area.	A	4	E	
		•	extended families with no means of transport out of the area.  Death of breadwinner,				
	People People		extended families with no means of transport out of the area.  Death of breadwinner, causing long-term	A C	4	E	
			extended families with no means of transport out of the area.  Death of breadwinner, causing long-term financial problems for the				
			extended families with no means of transport out of the area.  Death of breadwinner, causing long-term financial problems for the family.				
	People	•	extended families with no means of transport out of the area.  Death of breadwinner, causing long-term financial problems for the family.  Significant stock losses.	С	4	E	
	People	•	extended families with no means of transport out of the area.  Death of breadwinner, causing long-term financial problems for the family.  Significant stock losses.  Loss of crops, affecting	С	4	E	
	People	•	extended families with no means of transport out of the area.  Death of breadwinner, causing long-term financial problems for the family.  Significant stock losses.	С	4	E	

	Economy	Significant crop losses.	С	4	E	
	People	<ul> <li>Psychological wellbeing of the community will be affected as a result of the losses suffered.</li> </ul>	A	3	E	
	Built Environment	<ul> <li>Buildings and facilities destroyed or damaged.</li> </ul>	В	3	Н	
	People	<ul> <li>Overcrowding of medical facilities will increase disease</li> </ul>	В	2	Н	
	People	<ul> <li>Overcrowding of people in evacuation centres may lead to further disease outbreaks</li> </ul>	В	2	н	
	People	<ul> <li>Loss of income and assets.</li> </ul>	С	3	Н	
	Infrastructure	<ul> <li>Loss of power</li> </ul>	В	2	Н	
	Natural Environment	<ul> <li>Environmental damage, including due to inappropriate agricultural practices.</li> </ul>	С	3	н	
	People	<ul> <li>Death or severe injury will occur from drowning, lightning strike, flying debris or structural collapse.</li> </ul>	С	2	M	
	Infrastructure	<ul> <li>Transport facility damage including road and rail bridges, roads, airfields and railways.</li> </ul>	С	2	М	
	Infrastructure	<ul> <li>Loss of communications.</li> </ul>	С	3	Н	
Snow	People	<ul> <li>People will not be able to evacuate the area</li> </ul>	В	4	E	
	Management	<ul> <li>Areas will be cut off snow, preventing access by response agencies.</li> </ul>	Α	3	E	
	Economy	Significant crop losses.	С	4	E	
	People	<ul> <li>Loss of crops, affecting sustainability of subsistence food supply production</li> </ul>	С	4	E	
	Economy	<ul> <li>Significant livestock/game losses</li> </ul>	С	4	E	
	People	<ul> <li>Psychological wellbeing of the community will be affected as a result of the losses suffered</li> </ul>	A	3	E	
	Infrastructure	<ul> <li>Loss of communications</li> </ul>	С	3	Н	

		•	Power failure				
Drought	People -	•	Sanitation and health problems	A	3	E	
	Economy	•	Significant stock losses	С	4	E	
	People	•	Loss of crops, affecting sustainability of subsistence food supply production	С	4	E	
	Economy	•	Significant crop losses	С	4	E	
	People	•	Psychological wellbeing of the community will be affected as a result of the losses suffered	A	3	E	
	People	•	Loss of income and assets	С	3	Н	
	Natural Environment	•	Environmental damage, including due to inappropriate agricultural practices	С	3	Н	
Major Infrastructure Failure	Water supply	•	Water supply pumping facilities will be rendered inoperable.	A	2	н	
	Management	•	Disaster communications facilities will be rendered inoperable.	Α	2	Н	
	People	•	Fuel supply facilities will be rendered inoperable.	Α	2	Н	
	Management	•	Telephone landline and cell communications will be rendered inoperable.	Α	2	Н	
	Management	•	Base radio transmitter stations relying on power will be rendered inoperable.	A	2	Н	
	Economy	•	Electronic banking facilities will be rendered inoperable.	Α	2	Н	
	Infrastructure	•	Business and industry refrigeration and cooling facilities will be rendered inoperable.	A	2	Н	
	People	•	Household refrigeration and cooling facilities will be rendered inoperable.	Α	2	н	
	Economy		Computer network facilities will be rendered inoperable.	Α	2	Н	

	Sewerage	•	Sewerage pumping facilities will be rendered inoperable.	Α	2	Н	
	People	•	Loss of power and communications facility will see an increase in crime.	С	2	M	
Human Epidemic	People	•	Substantial loss of life.	Α	4	E	
	People	•	Low immunization rates in the province will increase the likelihood of an epidemic occurring.	Α	4	E	
	People	•	Psychological effects on the community.	Α	4	E	
	Economy	•	Loss of income within the province	В	4	E	
	People	•	Vector/vermin contact will spread the epidemic throughout the Municipality and beyond.	В	3	Н	
	Economy	•	Stigma being attached to the province accompanied by a tourist and visitor downturn.	С	2	M	
Water Contamination	People	•	Contaminated water supplies will cause disease such as cholera and dysentery	A	4	E	
	People	•	Shortages of potable water supplies will aggravate the situation	Α	3	E	
	Management	•	Resultant epidemics will place a great strain on the District's health facilities	A	3	E	
Hazardous Material	Natural Environment	•	Pollution of the water table.	В	4	E	
	Natural Environment	-	Pollution of the soil.	В	4	E	
	People	•	Human exposure to toxic chemicals resulting in serious harm or death.	В	2	Н	
	Natural Environment	•	Pollution of the atmosphere will occur from the release of hazardous material.	A	2	н	

Major transportation Event	People	<ul> <li>Accidents involving aircraft, trains, coaches or taxi vehicles will result in death or serious injury to a large number of people.</li> </ul>	Α	3	E	
	People	<ul> <li>The bad mechanical condition of vehicles traversing Municipality roads will cause road accidents.</li> </ul>	В	2	Н	
	People	<ul> <li>Inappropriate driver behaviour will cause road accidents</li> </ul>	A	2	Н	
	People	<ul> <li>Deteriorating road conditions will cause road accidents.</li> </ul>	В	2	Н	
Animal Diseases	Economy	<ul> <li>Loss of export capability.</li> </ul>	С	4	E	
	Natural Fauna	<ul> <li>Cross contamination with indigenous wildlife will spread disease.</li> </ul>	C	3	Н	
	People	<ul> <li>Loss of production (income) will have a severe impact on the economic viability of the rural population.</li> </ul>	С	3	н	
	Economy	<ul> <li>Impact on the reputation of the area.</li> </ul>	С	3	Н	
	People	<ul> <li>Loss of production (income) will have a severe impact on the food supply of the rural population.</li> </ul>	С	2	M	

## (iv) Monitoring Disaster Risks

Disasters/ risks are not static; they change seasonally and over time. Risk monitoring system involves: -

 Hazard tracking: hazard-tracking systems monitor the physical phenomena that can trigger disaster events. They include systems that provide seasonal and early warning information on approaching adverse weather conditions.

- Vulnerability monitoring: this system tracks the ability of areas, communities, households, critical services and natural environments to resist and withstand external threats.
- Disaster event tracking: this system monitors changing patterns in disaster risk.

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- Vulnerability monitoring: this system tracks the ability of areas, communities, households, critical services and natural environments to resist and withstand external threats.
- Disaster event tracking: this system monitors changing patterns in disaster risk.

#### 6.2.3 KEY PERFORMANCE INDICATORS

- Provincial guidelines for the application of a uniform disaster risk assessment methodology have been developed by the PDMC
- Disaster risk assessments have been conducted and progressively integrated into the development plans of organs of state and other role players.
- Mechanisms to consolidate, document, map and make accessible information on the province's priority disaster risks have been established by the PDMC.
- Priority disaster risks of provincial significance have been identified and mapped by the PDMC.
- Sector 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 and for rapidly
  making this information available to the PDMC.

## **6.3 KPA 3: DISASTER RISK REDUCTION**

## **Objective**

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.

## **6.3.1 CORE DISASTER RISK REDUCTION PRINCIPLES**

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

## **6.3.1.1 DISASTER PREVENTION**

It refers to actions that provide outright avoidance of the adverse impact of hazards and related environmental, technological and biological disasters.

## **6.3.1.2 DISASTER MITIGATION**

It refers to structural and non-structural measures that are undertaken to the limit the adverse impact of natural hazards, environmental degradation and technological hazards on vulnerable areas, communities and households.

## HAZARD AND RISK REDUCTION STRATEGIES

HAZARD	POTENTIAL RISK	RISK REDUCTION STRATEGIES
Human epidemic	1. Substantial loss of life.	<ul> <li>Awareness programmes: types of diseases e.g. malaria, cholera, HIV/AIDS, Disease surveillance, health programmes, mobile clinics, Social Welfare programmes</li> <li>Ensure that service providers have contingency plans in place</li> </ul>
	Low immunization rates in the province will increase the likelihood of an epidemic occurring	<ul> <li>Health awareness, medical effects         of non-immunization e.g. polio,         measles</li> <li>Ensure that department of health         have contingency plans in place.</li> </ul>
	Psychological effects on the community	<ul> <li>Awareness programme: Sensitize communities on the effects of epidemics, counselling and rehabilitation.</li> <li>Department of health to ensure contingency plans are in place.</li> </ul>
	Loss of income within the province	<ul> <li>Identify potential industry /commercial risk</li> <li>Awareness programmes: address economic impact, train replacement employees. Promote good health practices Effects and treatment of epidemic outbreaks.</li> <li>Contingency planning e.g. Streamlining services to meet budgetary constraints.</li> </ul>
	Vector/vermin contact will spread the epidemic throughout the province and beyond.	Awareness programmes:     identification of diseases, Monitoring     and surveillance. Preventing     measures in respect of vermin, pest     control and good housekeeping:     clear breeding sites etc

Major	Stigma being attached to the municipality accompanied by a tourist and visitor downturn.  Water supply pumping facilities	<ul> <li>Awareness: People need to know the affects and facts. Good public relations and marketing programmes to be promoted.</li> <li>Awareness: Maximum use of</li> </ul>
infrastructure failure	will be rendered inoperable.	<ul> <li>available recourses, water sanitation, personal hygiene and health awareness</li> <li>Identify alternative safe water supplies e.g. bore holes, Farms dams, rivers and springs and ensure service providers have contingency plans in place.</li> <li>Encourage installation of backup power.</li> </ul>
	Disaster communication facilities will be rendered inoperable.	<ul> <li>Awareness programmes: Identify alternative means of communication</li> <li>Disaster Management and service providers to ensure that contingency plans are in place. (TELKOM, ESKOM, MTN, VODACOM AND CELL C)</li> <li>Encourage installation of backup power</li> <li>Identify vulnerable sectors high risk flood plain</li> </ul>
	Fuel supply facilities will be rendered inoperable	<ul> <li>Awareness programme: Maximize use of available fuel resources e.g. rationing, Encourage the use of public transport, rail etc</li> <li>Identify alternative suppliers</li> <li>Encourage strategic suppliers to provide emergency backup systems</li> </ul>
	Telephone land-line and cell communication will be rendered inoperable.	<ul> <li>Service providers to have contingency plans in place for e.g. radio, satellite phones.</li> </ul>
	Base radio transmitter stations relying on power will be rendered inoperable	<ul> <li>Awareness programmes: Identify alternative means of communication e.g. telephone and cell communication</li> <li>Service provider to have contingency plans</li> </ul>
	Electronic banking facilities will be rendered inoperable	Service provider to have contingency plans in place
	Business and industry refrigeration and cooling facilities will be rendered inoperable	<ul> <li>Awareness programmes:     contamination of foodstuffs</li> <li>Identify high risk areas e.g. meat storage, mortuary's</li> <li>Identify alternative refrigeration facilities e.g. mobile refrigeration</li> </ul>

		<ul> <li>Maintain and upgrading of infrastructure</li> </ul>
Major Transportation Incident	Accidents involving aircraft, trains, coaches or taxi vehicles will result in death or severe injury to a large number of people.	<ul> <li>Awareness/law enforcement e.g. regular safe inspections. Road and vehicle safety principles to be adopted by drivers and passengers.</li> <li>Local Municipalities and service providers to have contingency plans in place Regular interaction between role players to identify risks.</li> <li>Identify hospitals with the capacity and expertise to cope with such major incidents.</li> </ul>
	The bad mechanical condition of vehicles traversing Municipality roads will cause road accidents.	<ul> <li>Awareness programmes: Road and vehicle safety principles to be adopted by drivers and passengers.</li> <li>Co-ordination /Implementation of law enforcement Road and vehicle safety principles to be adopted by drivers and passengers.</li> </ul>
	Inappropriate driver behaviour will cause road accidents	<ul> <li>Awareness programmes: Road and vehicle safety principles to be adopted by drivers and passengers.</li> <li>Co-ordination /Implementation of law enforcement</li> </ul>
	Deteriorating road conditions will cause road accidents	<ul> <li>Awareness e.g. Signage</li> <li>Law enforcement to combat e.g. overloading</li> <li>Planned Maintenance</li> </ul>
Water Contamination	Contaminated water supplies will cause disease such as cholera and dysentery	<ul> <li>Awareness programmes: Proper industrial and commercial water management procedures, good hygiene and sanitation practices, household water treatment options e.g. bleach</li> <li>Responsible agencies DWAF department of environmental affairs, Health and water affairs to have contingency plans in place.</li> <li>Regular monitoring and surveillance</li> <li>Identify alternative of water.</li> </ul>
	Shortage of potable water supplies will aggravate the situation	<ul> <li>Awareness e.g. purification of alternatives water resources.         Encourage rain water harvesting.     </li> <li>Department of water affair/water authority to have contingency plans in place.</li> <li>Identify alternative potential water resources e.g. boreholes, dams (database) Spring protection.</li> </ul>

Animal Disease	Resultant epidemics will place a great strain on the District's health facilities  Loss of export capability.	Department of Health to have contingency plans in place e.g. identify district health facilities and call support from other agencies     Awareness programmes e.g. State
		<ul> <li>controlled diseases, symptoms of animal disease</li> <li>Ensure that Vetenary services have contingency plans in place.</li> <li>Identify disposal sites and guard disposal sites</li> </ul>
	Cross contamination with indigenous wildlife will spread disease.	<ul> <li>Awareness programmes e.g. Proper fencing, quarantine procedure</li> <li>Ensure that Vetenary services have contingency plans in place.</li> <li>Monitoring/Surveillance</li> </ul>
	Loss of production (income) will have a severe impact on the economic viability of the rural population	<ul> <li>Awareness programmes e.g. Type of service available Knowledge of symptoms</li> </ul>
	Impact on the reputation of the area.	<ul> <li>Awareness programmes e.g. Facts and Effects of the disease, avoid panic, Refer tourists to alternative resorts</li> <li>Positive marketing</li> </ul>
	Loss of production (income) will have severe impact on the food supply of the rural population.	<ul> <li>Ensure that Department of         Agriculture to have contingency         plans in place (Recruitment of         Vetenary personnel)</li> <li>Support from Department of         Welfare/Vetenary services</li> <li>Awareness Programmes:         Encourage insurance</li> <li>Ensure proper staffing provision of         Recruitment of enough staff</li> <li>Mutual assistance agreements with         other provinces.</li> </ul>
Drought	Reduction or loss of natural or reticulated water for human and stock consumption	<ul> <li>Awareness programmes e.g. Do not cultivate or drain wetlands and Vlei's. Control of alien vegetation i.e. bug weed, wattle, lantana and paraffin weed. Protect springs. Encourage rainwater harvesting and investment in water tanks</li> <li>Planning (IDP) for alternative reliable water sources e.g. Dams, covered reservoirs, boreholes and springs</li> <li>Continuous maintenance of natural and reticulated water sources</li> </ul>

	Loss of crops	<ul> <li>Departments of Agriculture and DWAF to have contingency plans in place</li> <li>Awareness programmes: Good farming practices, contour ploughing, minimum tillage, crop rotation. Encourage planting drought resistant varieties.</li> <li>Identify responsible agency and ensure to have contingency plans in</li> </ul>
	Loss of grazing	<ul> <li>Awareness programmes: Good farming practices e.g. Back burning, fire breaks, crop rotation and prevention of soil erosion. Identify alternative grazing.</li> <li>Proper clearing of encroaching alien vegetation e.g. Back burning</li> </ul>
	Loss of livestock	<ul> <li>Awareness programmes: e.g. Fire breaks, Good grazing practice e.g. Designated areas for grazing</li> <li>Make provision in IDP for designated communal holding areas to supplement feed and water</li> </ul>
Fire	Informal settlements have an increased vulnerability to fire because of the close quarters and lack of access.	<ul> <li>Establish fire services.</li> <li>Awareness programmes: Good House Keeping e.g. Encourage proper spacing, use of electrical equipment, use of cooking apparatus and storage of flammable liquid. Proper clearing of encroaching vegetation and disposal of refuse. Encourage specialized institution to present safety audits. Provide firefighting training for volunteers and basic equipment</li> <li>Proper policing to avoid further influx</li> <li>Plan alternative accommodation e.g. include development of housing as priority in the IDP</li> </ul>
	Loss of stock and game	<ul> <li>Awareness programmes: e.g.         Agriculture advice to be give fire breaks, Good grazing practice e.g. Designated areas for grazing     </li> <li>Training of firefighting volunteers</li> </ul>
	Loss of roofing., thatch, rendering housing uninhabitable	<ul> <li>Awareness programmes:         <ul> <li>Encourage good building practices</li> <li>e.g. use of proper roofing materials</li> </ul> </li> <li>Proper clearing encroaching vegetation e.g. Back burning.</li> </ul>

		Training of fire valuntaars
	Pregnant women, young children the elderly and the disable unable to evacuate in time.  Loss of crops	<ul> <li>Training of fire volunteers</li> <li>Awareness programmes: Fire behaviour e.g. Reading wind direction and evacuation procedures.</li> <li>Early warning systems e.g. Media broadcast, pamphlets and load halers</li> <li>Identification of places of safety.</li> <li>Identify alternative access routes</li> <li>Training of firefighting volunteers</li> <li>Awareness programmes: Good farming practices e.g. Back burning, fire breaks and crop rotation</li> </ul>
	Loss of grazing land	<ul> <li>Training of firefighting Volunteers</li> <li>Awareness programmes: Good farming practice e.g.</li> </ul>
	Destruction of industrial areas, industrial job losses, economic losses	<ul> <li>Establishment of FPAS (Fire Protection Associations)</li> <li>Maintenance of gas pipes, Awareness campaigns fire protection systems contingencies plans for industries</li> </ul>
Flood, Storm, Severe Rainfall, Landslip	People will not be able to evacuate the area	<ul> <li>Identify vulnerable sectors informal/formal</li> <li>Awareness programmes: Preidentified high ground shelter, leave unnecessary item. Take food etc.</li> <li>Consider relocation of informal temporary shelter</li> <li>Pro-active measures of mitigation (gabion baskets)</li> <li>Early warning systems Pre-identify alternative accommodation</li> <li>Include in IDP for future development</li> </ul>
	Areas will be cut off by washed out roads, bridges etc, preventing access by response agencies.	<ul> <li>Identify vulnerable sectors informal/formal</li> <li>Awareness programmes (proper drainage ext.)</li> <li>Identify alternative routes</li> <li>Planning, positioning and quality of roads</li> <li>Pre-identify alternative resources in terms of access (Rubber duck ext.) for floods only</li> <li>Include IMS protocol in conjunction with department of transport</li> <li>Include IDP</li> </ul>
	Building (Public and Private) and informal settlements will be	<ul> <li>Awareness in terms of building codes in rural areas. (Quality of</li> </ul>

	destroyed, leaving large number of people homeless.  Sanitation and health problems.	homes) and (management of household possessions)  Pre-identify alternative accommodation/Maintain database of resources. Exp (Food distribution plan)  Include re-housing in development programme. (IDP)  Awareness programmes: Promote the treatment of available water resources and good personal hygiene practices. Prevention of water born disease. e.g. (Malaria, Cholera and diarrhoea)  Identify responsible and ensure
	Women left to care extended families with no means of transportation out of the affected area	contingency plans in place  Identify vulnerable sectors informal/formal  Identify alternative routes  Resources in terms of access
Hazmat Incidents	Pollution of the water table	<ul> <li>Awareness programmes: the effect of various chemical and precautionary measures, identify specialized and alternative treatment facilities and places of safety</li> <li>Local Authority, Environmental affairs/DWAF to have contingency plans in place.</li> <li>Identify Hazmat Task Team</li> </ul>
	Pollution of the soil	<ul> <li>Awareness programmes: the effect of various chemical and precautionary measures, identify specialized and alternative treatment facilities and places of safety</li> <li>Local Authority, Environmental affairs/DWAF to have contingency plans in place.</li> <li>Identify Hazmat Task Team</li> </ul>
	Human exposure to toxic chemical resulting in serious harm or death.	<ul> <li>Awareness programmes: the effect of various chemical and precautionary measures, identify specialized and alternative treatment facilities and places of safety</li> <li>Local Authority, Environmental affairs/DWAF to have contingency plans in place.</li> <li>Identify Hazmat Task Team</li> </ul>

	Pollution of the atmosphere will occur from the release of hazardous material.	<ul> <li>Awareness programmes: the effect of various chemical and precautionary measures, identify specialized and alternative treatment facilities and places of safety</li> <li>Local Authority, Environmental affairs/DWAF to have contingency plans in place.</li> <li>Identify Hazmat Task Team</li> </ul>
Snow	People will not be able to evacuate the area	<ul> <li>Identify vulnerable sectors informal/formal</li> <li>Awareness programmes: Preidentified high ground shelter, leave unnecessary item. Take food etc.</li> <li>Consider relocation of informal temporary shelter</li> <li>Pro-active measures of mitigation (gabion baskets)</li> <li>Early warning systems Pre-identify alternative accommodation</li> <li>Include in IDP for future development</li> </ul>
	Areas will be cut off by washed out roads, bridges etc, preventing access by response agencies.	<ul> <li>Identify vulnerable sectors informal/formal</li> <li>Awareness programmes Identify alternative routes</li> <li>Planning, positioning and quality of roads</li> <li>Pre-identify alternative resources in terms of access Include IMS protocol in conjunction with department of transport</li> <li>Include IDP</li> </ul>

# 6.3.2 INTEGRATION OF DISASTER REDUCTION INTO DEVELOPMENT PLANNING

## 6.3.2.1 INTEGRATION OF DISASTER RISK REDUCTION WITH SPATIAL DEVELOPMENT PLANNING

Provincial and municipal disaster management centres must establish mechanisms in association with spatial planners in both spheres to ensure that relevant spatial information informs disaster risk reduction planning.

## 6.3.2.2 INCORPORATION OF DISASTER RISK REDUCTION PLANNING INTO INTEGRATED DEVELOPMENT PLANNING

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

## **KEY PERFORMANCE INDICATORS**

- Risk related information has been incorporated into spatial development frameworks.
- Projects and initiatives that include a focus on disaster risk reduction have been included in IDPs.

## 6.4. 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.

## 6.4.1 MAJOR ROLE PLAYERS IN INTEGRATED EARLY WARNING:

- South African Weather Services climate forecast, satellite information;
- Department of Water Affairs flood warnings, dam and river levels, water supplies;
- Department of Agriculture and Rural Developments crop forecasts, staple food quality, forage availability, water irrigation and livestock;
- Department of Health epidemics and diseases.

## **6.4.2 DISASTER ASSESSMENT**

On-site assessment includes establishing what resources are necessary to ensure the delivery of immediate, effective and appropriate response and relief measures to affected areas and communities and to facilitate business continuity.

## **RESPONSE AND RECOVERY**

The operational plans and guidelines of the various response agencies that contribute to field operations must be considered when allocating responsibilities for response and recovery. Primary and secondary responsibilities will be allocated for each of the operational activities associated with disaster response e.g. evacuation, shelter, search and rescue, emergency medical services and firefighting.

#### **RELIEF MEASURES**

Relief operations following significant and/or events classified as disasters will be coordinated. Relief assistance and donations will be equitably distributed.

#### REHABILITATION AND RECONSTRUCTION

The organ of state tasked with primary responsibility for known hazard will facilitate the establishment of project teams.

## **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 the NDMC.
- The provincial and municipal disaster management centres have established and documented clear procedures for accessing, interpreting and disseminating early warnings of both rapid and slow onset hazards.

# 6.5 ENABLER 1: INFORMATION MANAGEMENT AND COMMUNICATION OBJECTIVE

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

# ESTABLISHING AN INFORMATION MANAGEMENT AND COMMUNICATION SYSTEM

The information management and communication system will 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 role players and stakeholders involved in disaster risk management. The design of the system will 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 provincial emergency radio communication network.

# INTEGRATED INFORMATION MANAGEMENT AND COMMUNICATION MODEL

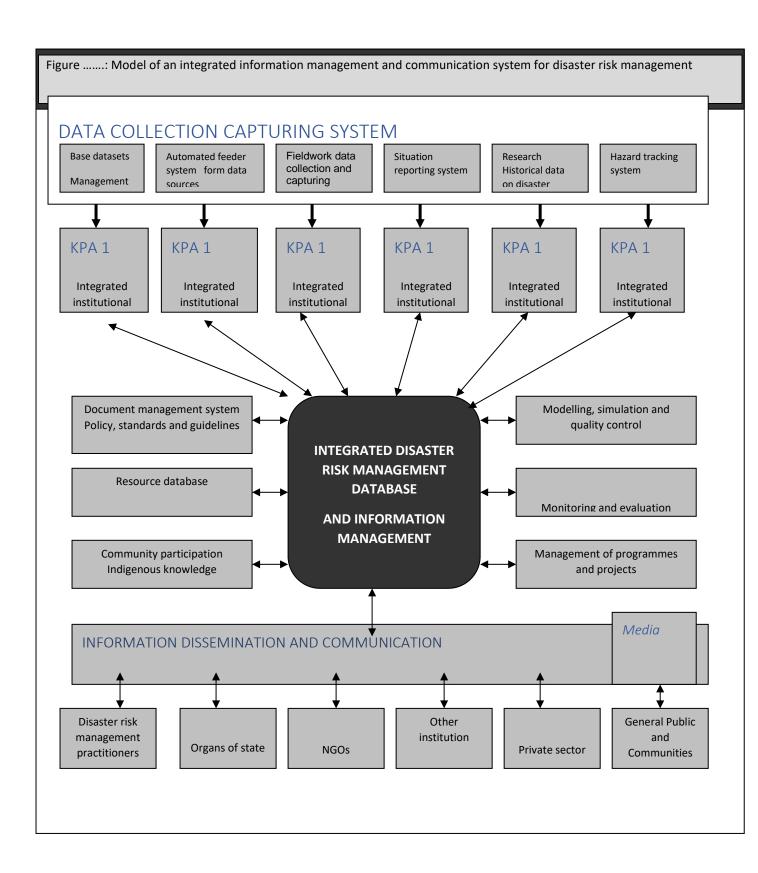
An integrated information management and communication system must be established to achieve the objectives of the KPA's and enablers outlined in the national disaster management framework.

## 6.5.1 DATA ACQUISITION (DATA COLLECTION AND CAPTURING)

The process will identify both the inputs and data sources (data custodians) 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 (e.g. topographical, census, land cover, infrastructure, deeds, environmental)
- Dynamic data (e.g. contact and other relevant details of all role players)
- Field data (e.g. features of buildings, infrastructure)
- Situational reporting system (e.g. incidents, local conditions)
- Hazard tracking (e.g. weather conditions, flood, fire hazard conditions, droughts)
- Early warnings



#### 6.5.2 KEY PERFORMANCE INDICATORS

- Data needs have been defined by the PDMC.
- Data sources have been identified by the PDMC.
- Data collection and capturing methodologies have been developed and implemented.
- The responsibilities of the respective data custodians have been defined and assigned.
- Agreements with identified data custodians have been negotiated to ensure availability, quality and reliability of data.

# 6.6 ENABLER 2: EDUCATION, TRAINING, PUBLIC AWARENESS & RESEARCH

## **Objective**

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.

## 6.6.1 EDUCATION AND TRAINING

## **6.6.1.1 SCHOOL PROGRAMMES**

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

#### 6.6.1.2 DISSEMINATION AND USE OF INDIGENOUS KNOWLEDGE

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

## 6.6.1.3 TRAINING PROGRAMMES FOR GOVERNMENT OFFICIALS AND POLICY MAKERS

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

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

## **6.6.1.4 COMMUNITY TRAINING PROGRAMMES**

Training programmes for communities will focus on disaster risk awareness, disaster risk reduction, volunteerism and preparedness. Communities will 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.

#### 6.7 PUBLIC AWARENESS

#### 6.7.1 PUBLIC AWARENESS STRATEGY

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

- Organized and planned awareness programmes
- Imbizo meetings
- Annual recognition and celebration of World Disaster Risk Reduction Day
- Rewards, incentives, competitions and recognition schemes to enhance awareness of and participation in risk reduction activities
- Dissemination of information to all role players

## 6.7.2 COMMUNICATION THROUGH THE MEDIA (COMMUNICATION UNIT)

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. The PDMC will establish and manage ongoing relations with relevant local and national media.

#### 6.7.3 RESEARCH

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

The PDMC will facilitate:

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

#### 6.7.4 KEY PERFORMANCE INDICATORS

- Training programmes have been developed and implemented.
- Approved service providers have been registered and are offering training services and products.
- Facilitators, instructors and presenters have become qualified and have been accredited.
- Widespread community-based disaster risk management training is taking place.
- Awareness of disaster risk management is promoted at schools and in communities known to be at risk.

- Disaster risk reduction is the focus of all disaster risk management awareness programmes.
- There is a widespread evidence of balanced media reports and coverage on hazards, disasters and disaster risk management issues.
- Disaster risk reduction is included as a standard agenda item for consideration at executive meetings of all role players and stakeholders.
- A strategic disaster risk research agenda linked between scientific research and policies, which is accessible to stakeholders, has been established.

## 6.8 ENABLER 3: FUNDING ARRANGEMENTS FOR DISASTER RISK MANAGEMENT

## **Objective**

To establish a mechanism for funding disaster risk management in the province.

## 6.8.1 RECOMMENDED FUNDING ARRANGEMENTS.

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

Activity	Funding source	Funding mechanism
Start-up activities	National government	Conditional grant for local government - district and
(KPA 1, Enabler		metropolitan municipalities, where necessary
1)		Conditional grant for provinces with counter-funding component1
		Budget of national departments
Disaster risk	National and provincial	Own departmental budgets
management	government	
ongoing	New assignment to local	Increase in the (Institutional) component of the equitable
operations (KPAs	government	share of local government
3 and 3)		
Disaster risk	National departments	Own budgets
reduction (KPAs	Provincial departments	Own budgets but can be augmented by application for
2 and 3)		funding to the NDMC for special national priority risk reduction projects

	District municipalities	Own budgets but can be augmented by application for
	District municipalities	, , , ,
		funding to the NDMC for special national priority risk
		reduction projects
	In the case of low-capacity,	Additional funding released from the NDMC targeted at
	resource-poor municipalites2	these categories of municipalities
Response,	National government	Own budget for those departments frequently affected by
recovery and		disasters
rehabilitation and		Access to Emergency Relief Fund, and
reconstruction		Central Contingency Funds
efforts (KPA 4)		Reprioritize within capital budgets for infrastructure
		reconstruction
	Provincial government	Own budget. Particularly for those departments frequently
		affected by disasters
		Conditional infrastructure grants
		Access Emergency Relief Fund, and
		Central Contingency Funds, once threshold is exceed on a
		matching basis
		Reprioritize within capital budget for infrastructure
		reconstruction.
	Local government	Access to Emergency Relief Fund, and
		Central Contingency Funds, once threshold is exceeded
		Conditional infrastructure grant, i.e. Municipal
		Infrastructure Grant (MIG)
Education,	All sphere of government	Own budgets and reimbursement through SETAs
training and		
capacity-building		Public awareness programmes and research activities can
programmes		also be funded through the private sector, research
(Enabler 2)		foundations, NGOs and donor funding
(Lilabici 2)		

## **6.8.2 KEY PERFORMANCE INDICATORS**

- The cost of disaster risk assessment is included in the budgets of Provincial organs of state.
- The costs of disaster risk assessments have been estimated and are included in the budgets of MDMCs.
- The minimum requirements for provincial and municipal disaster management centres have been costed.
- Capital budgets for the province and district municipalities clearly reflect the cost of disaster risk reduction.

- Response, recovery, rehabilitation and reconstruction efforts are funded through a combination of own budgets, reprioritization, budgeted threshold allocations and conditional grants.
- The conditions of the Municipal System Improvement Grant (MSIG) have been extended to cater for disaster risk management education and training programmes.
- Partnerships between municipal organ of state and the private sector, NGOs and CBOs exist for the purpose of funding public awareness programmes and projects.

## **6.8 MONITORING AND UPDATING OF PLAN**

Section 34 of Disaster Management Act (Act No. 57 of 2002) stipulates that: A provincial disaster management centre must:

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

#### 7. KEY PERFORMANCE AREA 3: DISASTER RISK REDUCTION

#### 7.1 A GUIDING FRAMEWORK FOR DISASTER RISK MANAGEMENT

Although the MLM Disaster Risk Assessment (MLMDRA) has identified a wide range of risks posing a potential threat to its area, it is not practical nor is it financially achievable to address all the risks simultaneously. Effective and focused disaster risk management planning by all municipal organs of state and other municipal entities can only be achieved through the identification of priority disaster risks and by the identification of the areas, communities and households most at risk to disasters in council's area. It is therefore necessary to adopt a carefully considered process, which will enable this prioritisation.

Part of the prioritisation process will also be to adopt a three-phased approach to disaster risk management planning over a period of two years from the date of implementation of the Act. This does not however imply that once the third phase is completed that the planning process is over. It must be clearly understood that disaster risk management planning is not a stop/start activity or project but a continuous process which of necessity must produce dynamic, real time plans, which remain current in a continuously changing environment. This is of particular relevance in respect of disaster risk reduction plans.

The process of prioritisation for disaster risk planning is also critically informed by the disaster risk assessment findings for the Leiweleputswa District Municipality.

The disaster management plan of the MLM must focus on the development of plans and the implementation of explicit programmes, projects and practices which give priority to building resilience and reducing the impact of a wide range of different disaster risks in areas, communities and households known to be prone to risk in its area of jurisdiction.

#### 7.1.1 THE DISASTER RISK MANAGEMENT PLANNING FRAMEWORK

This section aims to establish a structure for effective management of disasters in the MLM. All aspects of disaster risk management can be covered by the Disaster Management Planning Framework (DMPF), as in Figure 2: The Disaster Management Planning Framework: Future assessments and planning below. The DMPF includes Disaster Rick Reduction (DRR) planning as well as Contingency planning.

#### 7.1.1.1 DISASTER RISK REDUCTION PLANNING

On the left-hand side of the framework, 'Disaster Risk Reduction Planning', consist of Vulnerability Reduction Planning and Specific Risk Reduction Projects. Vulnerability Reduction Planning focuses on the general vulnerabilities that are present in the municipality as a whole. The Specific Risk Reduction Projects include on one hand future developments (planned for though the IDP) that should be assessed and on the other hand any area where a combination of vulnerabilities, hazards and/or a lack of capacities pose a specific (or combination of) high risk(s) to the population, infrastructure and environment.

#### 7.1.1.2 CONTINGENCY PLANNING

The right-hand side of the framework focuses on contingency planning. This type of planning has two components: for the most prevalent hazards, the municipality should have contingency plans in place that can be activated before or during the impact of a specific hazard ('Hazard Specific Contingency Plans').

As it is impossible to plan for every hazard, the contingency planning should also include generic plans. For the purpose of drawing up such plans, the most important issues have been listed in the framework (public health, command and control, shelter etc.)

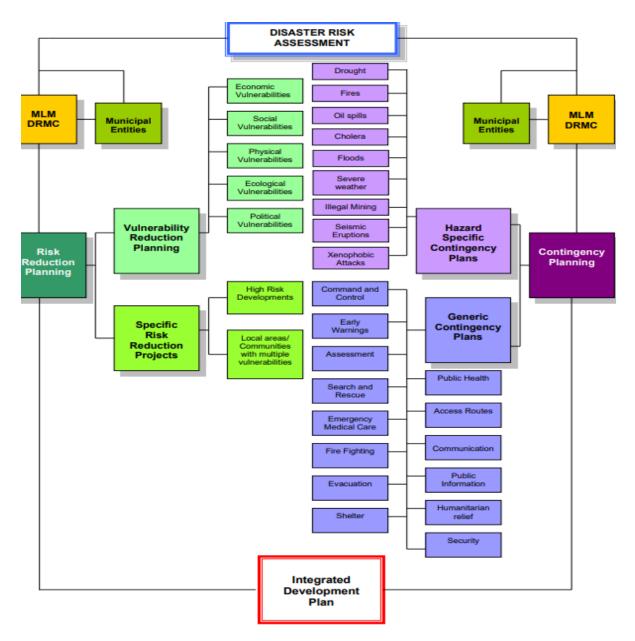


Figure 2: The Disaster Management Planning Framework: Future assessments and planning

Risk of a certain hazard can change over time. It is therefore necessary that all aspects of the framework are adapted accordingly. Continuous assessment is necessary for a sound and ground-truth disaster risk management planning.

The six most prevalent threats are listed in the contingency planning section (see Figure 3 above). When contingency plans are written, tested, and updated for these plans, the MLM should strive to also cover 'less prevalent risks' in the 'Hazard Specific Contingency Plans'. Contingency plans should also be tested and evaluated regularly and updated accordingly.

#### 5. Recommendation:

- a. Hazard specific contingency plans for all priority risks should be developed as a matter of urgency through a participatory process.
- b. Generic response and recovery plans should be identified and development.

#### 7.1.2 INTEGRATION WITH IDP

In accordance with the National Disaster Management Framework, the Disaster Management Act as well as the Municipal Systems Act, disaster risk management plans developed by municipalities must be incorporated into the IDP, funding and implementation processes.

At the same time, the IDP should take into account the findings of the municipal disaster management structures. All current and future IDP and development plans should be evaluated by the MLM DMO for the following purposes:

- To assess their consistency with the MLM Disaster Management Plan;
- To determine the disaster risk inherent to the project;
- To determine the possible risk and vulnerability reduction inherent to the project; and
- To assess their relevance as to the priorities of the disaster risk assessment.

No IDP project should be allowed to continue without the assessment and approval of the disaster risk management officer. Council should take into account the comments made by the disaster risk management officer, and has full accountability for any decisions not in line with the Action to be taken of the disaster risk management officer.

## 6. Recommendation:

The MLM Council should establish a mechanism for the assessment of all current and future development projects in terms of their disaster risk.

## 7.2 INPUTS TO THE PLANNING PROCESS

From the DMPF above, it becomes clear that a prerequisite to all planning is the Disaster Risk Assessment. Not mentioned in the DMPF – but equally important - are the other inputs to the planning process, such as:

 the Lejweleputswa District Disaster Management Framework and Disaster Management Plan,

- the Free State Provincial Disaster Management Framework and Disaster Management Plan,
- the National Disaster Management Framework and Disaster Management Plan;
- the Disaster Management Act, 57 of 2002; and
- The IDP of the MLM.

Memoranda of Agreement and Memoranda of Understanding with role-players;

- cooperation with other disaster management structures (such as the DMCs of neighbouring municipalities, the district, and the province); and
- any other relevant data and information pertaining to developmental initiatives.

Furthermore, disaster risk management should take into account people's needs and priority issues (in line with section 53.1 (b) of the Act): the perception of what people experience as 'disasters', 'hazards', 'vulnerabilities' or a 'lack of capacity' should be one of the major inputs to the planning process.

#### 7.3 PHASED APPROACH IN DM PLANNING

As mentioned above, it is impossible to cover all aspects of disaster risk management at once, therefore a three-phased (levels) approach is proposed.

#### 7.3.1 LEVELS OF PLANNING

The National Disaster Management Framework proposes three levels of Disaster Management Plans. The three phases/levels in the process are the following:

#### 7.3.1.1 LEVEL 1 DISASTER MANAGEMENT PLAN

A Level 1 Disaster Management Plan applies to national or provincial organs of state and municipal entities that have not previously developed a coherent disaster management plan. It focuses primarily on establishing foundation institutional arrangements for disaster risk management, putting in place contingency plans for responding to known priority threats, identifying key governmental and other stakeholders, and developing the capability to generate a Level 2 Disaster Management Plan.

#### 7.3.1.2 LEVEL 2 DISASTER MANAGEMENT PLAN

A Level 2 Disaster Management Plan applies to national, provincial, and municipal organs of state that have established the foundation institutional arrangements and are building the essential supportive capabilities needed to carry out comprehensive disaster risk management activities. It includes establishing processes for a comprehensive disaster risk assessment, identifying, and establishing formal consultative mechanisms for development of disaster risk reduction projects and introducing a supportive information system and emergency communications capabilities.

#### 7.3.1.3 LEVEL 3 DISASTER MANAGEMENT PLAN

A Level 3 Disaster Management Plan applies to national, provincial, and municipal organs of state that have established both the foundation institutional arrangements for disaster risk management and essential supportive capabilities. The plan must specify clear institutional arrangements for coordinating and aligning the plan with other governmental initiatives and plans of institutional role players. It must also show evidence of informed risk assessment and ongoing risk monitoring capabilities as well as relevant developmental measures that reduce the vulnerability of disaster-prone areas, communities, and households.

The visits in the Municipality by the PDMC have established the necessary capacity in the municipality; it is the responsibility of the MLM Council and the DRMC to sustain and expand this capacity, and to put it to use for the implementation of the next levels.

The Level 2, mainly focusing on the DRA, is discussed below in Key Performance Area 2. It should again be stressed that the DRA is a continuous process to be taken further by the DRMC and the relevant stakeholders. The Level 2 also comprehends the formalisation of the consultation of and cooperation with stakeholders and DMAF and IDMC.

The third level of the Disaster Management Planning includes all other processes and planning as mentioned in the framework.

#### 7.3.2 IMPLEMENTATION OF THE LEVELS OF DISASTER MANAGEMENT PLANS.

The National Disaster Management Framework foresees that within one year of the commencement of the Act (on 1 July 2004), all municipal organs of state will have submitted to the NDMC at a minimum, Level 1 Disaster Management Plans (by 1 July 2005). Within two years of the commencement of the Act (1 July 2006), all municipal organs of state will have submitted at a minimum, Level 2 Disaster Management Plans. Within four years of the commencement of the Act (1 July 2008), all municipal organs of state will have submitted Level 3 Disaster Management Plans.

The municipal organs of state must specify which one of the three specified Disaster Management Planning Levels is most appropriate for their respective capabilities, experience and functional responsibilities. They must also indicate proposed steps that will allow progress to more advanced planning levels.

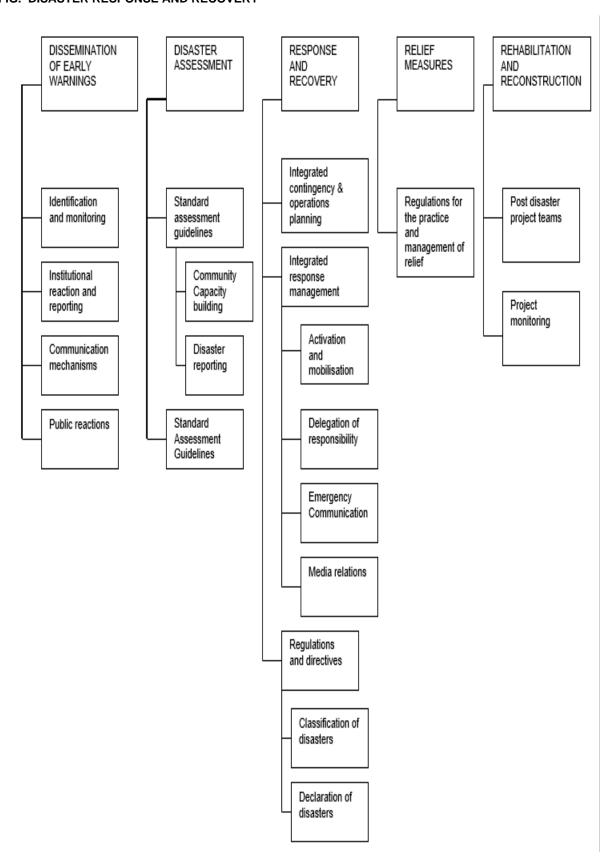
#### **KPA 4: RESPONSE AND RECOVERY**

## **Objective**

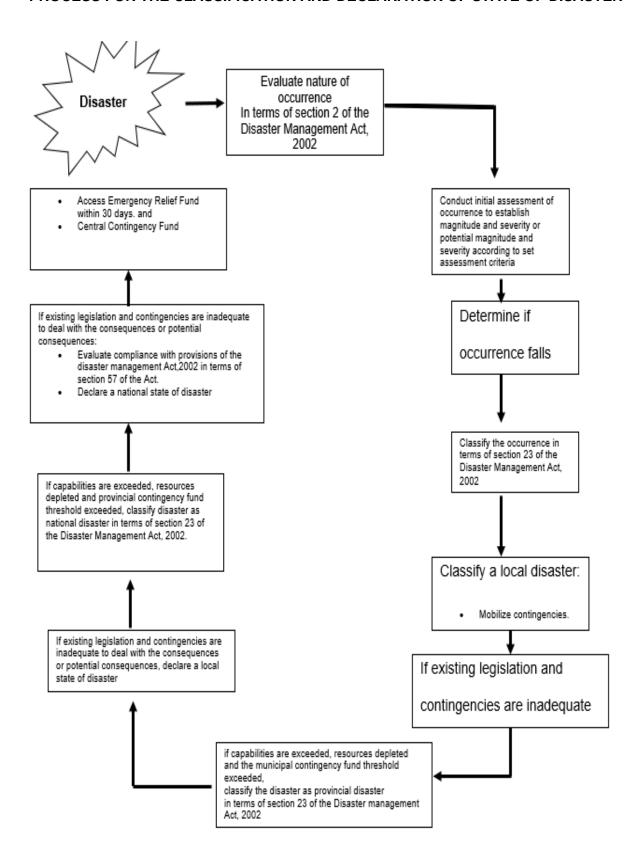
To ensure effective and appropriate disaster response and recovery by:

- 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, environment and government services;
- Implementing immediate integrated and appropriate response and relief measures when significant events or disasters occur or are threatening to occur;
- Implementing all rehabilitation and reconstruction strategies following a disaster in an integrated and developmental manner.

#### FIG. DISASTER RESPONSE AND RECOVERY



#### PROCESS FOR THE CLASSIFICATION AND DECLARATION OF STATE OF DISASTER



# 8. ENABLER 2: EDUCATION, TRAINING, PUBLIC AWARENESS AND RESEARCH

## 8.1 EDUCATION AND TRAINING

#### 8.1.1 OBJECTIVES

- To promote and facilitate non-accredited and accredited education and training opportunities for all disaster risk management stakeholders in the MLM.
- To identify and implement appropriate disaster risk management training programmes for schools in the area to increase knowledge and capacity.
- To identify and implement appropriate disaster risk management training programmes for the communities to increase knowledge and capacity.
- To ensure that traditional knowledge and coping strategies are included in the training programmes where appropriate.

#### 8.1.2 SCHOOLS PROGRAMMES

Efforts should be made to implement disaster risk management training programmes in schools, for the purposes of disseminating information on disaster risk management and risk avoidance. The creation of programmes in schools, focusing on relevant and appropriate aspects of disaster risk management, must be encouraged.

## 20. Recommendation

The MLM DRMC to approach the local Department of Education and relevant Schools Governing Bodies in order to jointly implement schools awareness programmes focussing on the most prevalent hazards in the particular areas.

## 8.1.3 DISSEMINATION AND USE OF TRADITIONAL KNOWLEDGE

All training and awareness programmes undertaken within the MLM must take into account indigenous knowledge relating to disaster risk management, as per section 7(2)(j).

#### 21. Recommendation

All traditional leaders in the MLM area of responsibility to be made aware of disaster risk management issues, co-opted to the DMAF (where applicable) and traditional knowledge must be incorporated into the MLM disaster risk management planning and awareness programmes.

#### 8.1.4 COMMUNITY TRAINING PROGRAMMES

Education and training programmes for communities must focus on risk awareness, risk reduction and preparedness. 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 disaster and disaster risk management. Cognisance of the risk assessment for the area must be taken when such programmes are developed.

#### 22. Recommendation

The MLM to utilise the envisaged ward disaster risk management structures to serve as a mechanism for community training.

## 8.1.5 GOVERNMENT OFFICIALS AND RELEVANT ROLE PLAYERS

Training programmes for government officials and policy makers must include modules on planning, hazards, prevention, risk reduction and preparedness.

#### 8.1.6 KEY PERFORMANCE INDICATORS

- An assessment of disaster risk management education and training needs is conducted annually.
- Appropriate courses have been identified for the relevant interest groups.
- A disaster risk management education and training programme is developed for each financial year and is implemented.
- Comprehensive reports on education and training conducted in the municipality are submitted annually to the District and Provincial DRMCs.

#### 8.1.7 MONITORING AND EVALUATION

The MLM DRMC must establish mechanisms for reporting progress with the disaster risk management education training programmes in the municipality and must submit reports annually to the District and Provincial DMCs.

#### 23. Recommendation

The MLM should develop a policy with regards to education and training in the field of disaster risk management, and that the necessary funding is made available.

#### 8.2 PUBLIC AWARENESS

## 8.2.1 Objective

• To develop and implement a public awareness programme which insures an alert, informed and self-reliant public in the MLM.

## 8.2.2 Public Awareness Policy

An integrated public awareness strategy to promote a culture of risk avoidance among all role players and across all departments must be developed and implemented. 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 municipality in all aspects of risk and vulnerability reduction.

The ability of the public to understand the nature of commonly encountered hazards in their communities to manage and reduce risks; to develop risk avoidance behaviour patterns; and to respond appropriately and timeously when disasters occur or are threatening to occur, is dependent on knowledge and access to reliable information.

In order to inculcate 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.

Public information should be disseminated through the media, schools, and public gatherings and through any other suitable network.

#### 8.2.3 Media involvement

The local print and radio media should be involved in efforts to increase community awareness and therefore should be included in the public awareness campaigns as far as possible.

## 8.2.4 Key Performance Indicators

- A public awareness policy with specific focus on risk reduction has been developed and implemented.
- Risk reduction is the focus of all disaster risk management awareness programmes.
- Awareness of disaster risk management is widespread and risk avoidance behaviour is an integral part of the daily lives and activities of the public of the MLM.

## 8.2.5 MONITORING AND EVALUATION

The MLM must conduct regular surveys and introduce other innovative mechanisms to evaluate the effectiveness of the public awareness programmes and must compile reports on the findings. The outcome of such initiatives must be used to inform future planning.

#### 24. Recommendation

That the MLM develop a policy with regards to a public awareness programme, and ensure that the necessary funding is available.

#### 8.3 RESEARCH

In order to stay abreast with a dynamic changing environment, the MLM must ensure a continued research agenda is developed in order to better disaster risk management practices and information.

#### 8.3.1 OBJECTIVE

• Promotion and facilitation of disaster risk management research.

## 8.3.2 RESEARCH PROGRAMMES

The MLM DRMC must establish mechanisms to promote and support disaster risk management research in the municipality. In this regard the MLM DRMC must enter into discussions with institutions of higher learning and other technical experts to identify appropriate research mechanisms.

All research programmes should firstly be focussed on the risk profile of the MLM and to address critical issues of vulnerability. In the light of the fact that scientific research is a specialised field, the MLM should engage institutions of research as partners to address identified issues.

#### 8.3.3 EVALUATIONS AND FEEDBACK

The MLM DRMC must ensure that relevant information identified through the research process is incorporated into the necessary planning and awareness processes of the MLM, with a view of reducing disaster risk.

## 8.3.4 KEY PERFORMANCE INDICATORS

• Mechanisms are established for promoting and facilitating disaster risk management research in the municipal area.

#### 8.3.5 MONITORING AND EVALUATION

The MLM DRMC must establish mechanisms for reporting progress with the disaster risk management research programmes in the municipality and must submit reports annually to the district and provincial disaster management centres.

## 25. Recommendation

That the MLM develop networks with institutions of higher learning and other roleplayers involved with research in the area, in order to pool information and to include relevant information in training, education and awareness programmes.

## 9. ENABLER 3: FUNDING ARRANGEMENTS FOR DISASTER RISK MANAGEMENT

Section 7(2)(k) of the DMA 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 MLM departments.

### **Objective**

The objective of Enabler 3 is to establish mechanisms for the funding of disaster risk management in the MLM.

## 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); and
- Municipal Systems Act, 2000 (Act No. 32 of 2000).

The Constitution assigns exclusive or concurrent functions to different spheres of government. Schedule 4 of the Constitution designates disaster risk management as a concurrent national and provincial competence. However, the Act places the responsibility for certain disaster risk management activities squarely within the local government sphere. For example, section

23(7) of the Act states that until a disaster is classified as either a national or a provincial disaster, it must be regarded as a local disaster.

In terms of section 10A of the Municipal Systems Act as amended, the disaster risk management function imposes new constitutional obligations on local government. These obligations are that the responsible Cabinet member, MEC or other organ of state must take appropriate steps to ensure sufficient funding and capacity-building initiatives as may be needed for the performance of the assigned function. Since disaster risk management at municipal level encompasses a wide range of activities (including disaster risk reduction, preparedness, response and recovery), funding mechanisms must be designed to allocate optimal resources to each of these activities.

Chapter 6 of the Disaster Management Act outlines two principles that should be applied to funding the cost of a disaster when such an event is declared. Firstly, section 56(2) of the Act states that in the event of a disaster, 'national, provincial and local organs of state may financially contribute to response efforts and post-disaster recovery and rehabilitation'. Secondly, the Act assigns the responsibility for repairing or replacing infrastructure to the organ of state responsible for the maintenance of such infrastructure. Section 57 of the Act, however, provides some leeway for a municipality government to request financial assistance for recovery and rehabilitation from provincial and/or national government.

The Act attempts to encourage budgeting for disaster recovery and rehabilitation through threshold funding. Section 56(3) allows the Minister to prescribe a percentage of the budget of a municipal department and entities as a threshold for accessing national funding for disaster response efforts. The extent to which an organ of state has implemented disaster risk reduction efforts will be taken into account when requests for disaster response and post-disaster rehabilitation funding are considered.

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. This principle reduces the risk of moral hazard behaviour on the part of municipal departments and entities by ensuring that they budget for all disaster risk

management activities. In this way, national government does not implicitly guarantee the provision of financial assistance to organs of state for disasters that could have been reasonably prevented or reduced in some way.

Apart from the Act, there are other legislative provisions that govern the release of funds for disaster recovery and rehabilitation. Sections 16 and 25 of the PFMA allow the Minister of Finance or relevant MEC to appropriate funds from their respective revenue funds for use in emergency situations. Funds released in terms of these provisions must be reported to the provincial legislature, and to the Auditor-General within 14 days of their authorisation. In addition, these funds must be attributed to a vote when the adjustments budget is passed.

Similarly, section 29 of the MFMA allows the Mayor of a municipality to authorise unforeseeable and unavoidable expenditure in an emergency. Such expenditure must be ratified by the council in an adjustments budget within 60 days of the expenditure having been incurred. Furthermore, section 29(2)(b) of the MFMA states that unforeseeable and unavoidable expenditure may not exceed a percentage of the budget. This restricts the amount of funds available to respond to emergencies. This percentage must be prescribed by National Treasury in regulations.

## 9.2 PRINCIPLES UNDERPINNING FUNDING ARRANGEMENTS

Any funding arrangement must be consistent with the principles set out in the DMA and any other related legislation. It should be borne in mind that disaster risk management has certain unique characteristics which differ markedly from public services such as education and street lighting. Disasters are by their very nature unpredictable and require an immediate and decisive response. It is vital, therefore, that a balance is struck in the financing framework between the need for financial controls and oversight and the need to ensure that rapid response and recovery are not compromised. Section 214(2)(j) of the Constitution explicitly mentions 'the need for flexibility in responding to emergencies or other temporary needs' as one of the criteria for the equitable division of nationally collected revenue among the three spheres of government.

#### 9.3 OVERVIEW OF FUNDING ARRANGEMENTS

Funding arrangements for disaster risk management must be based on the legislative framework outlined in section 10.1 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 municipal departments and entities require substantial start-up costs, including both investments in infrastructure for municipal disaster risk management centres as well as funding for capacity building. The start-up costs associated with the MDRMC must therefore be covered by the normal budgeting process of the MLM. The incorporation of disaster risk management within other MLM departments should also enjoy attention and provision should be made for any costs incurred in this institutional capacity building exercise.

The DMA assigns responsibility for the management of local disasters to municipalities. If municipalities are unable to perform this function because of a lack of institutional capacity, then responsibility for managing the disaster is escalated to provincial level. However, the relevant municipality is generally the organ of state closest to the disaster, and can often therefore respond the fastest. The option of providing no funding will thus create inefficiencies in the system by limiting the ability of municipal departments and entities to engage in disaster risk reduction activities and also respond effectively to disasters.

#### 9.3.2 FUNDING ARRANGEMENTS IN MATJHABENG LOCAL MUNICIPALITY

Each municipality department must include disaster risk management activities as part of their annual budget. All aspects and responsibilities described in this plan must be taken into consideration when budgeting for disaster risk management. Each department and division should ensure that their budgets for disaster risk management are aligned with the strategic objectives of the MLM. Such alignment must also aim towards the reduction of duplication and/or address the lack of appropriate budgeting for disaster risk management.

# 9.4 KEY PERFORMANCE AREA 1: INTEGRATED INSTITUTIONAL CAPACITY FOR DISASTER RISK MANAGEMENT AND ENABLER 1: INFORMATION MANAGEMENT AND COMMUNICATION

KPA 1 focuses on creating the institutional capacity within all MLM departments for the purpose of disaster risk management. It describes the various intergovernmental structures that facilitate consultation on issues relating to disaster risk management; key responsibilities of the MDRMC and the minimum infrastructural requirements for the establishment of the MDRMC.

Enabler 1 focuses on the establishment of a comprehensive information management and communication system to ensure that all role-players have access to reliable hazard and disaster risk information for the purposes of effective disaster risk management and risk reduction planning. The NDMF requires that the cost of developing an information management and communication system is included in the start-up costs for disaster risk management centres.

#### 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 ongoing operations of the MDRMC. This will be budgeted for through the normal municipal budgeting process.

## 9.4.2 KEY PERFORMANCE INDICATORS

• The MDRMC has an adequate allocated budget for ongoing disaster risk management activities in the MLM according to legislative requirements and municipal policies.

## 9.5 KEY PERFORMANCE AREA 2: DISASTER RISK ASSESSMENT

#### 9.5.1 FUNDING OPTIONS

Disaster risk assessments should be funded through the budgets of the relevant municipal department and entity. Section 20 of the Act requires the NDMC to provide guidance to organs of state on ways of determining levels of risk and vulnerability. Similarly, section 33 enjoins the PDMC to provide guidance to organs of state on disaster risk assessments. In the same manner the MDRMC must provide guidance to municipal departments and entities on conducting disaster risk assessments. The use of a standard format for disaster risk assessments will contribute towards reducing the variability of costs across the various municipal departments and entities. Costs involved in updating disaster risk assessments must be budgeted for on a regular basis.

Expenditure incurred in monitoring disaster risk must be part of the routine operation of the relevant municipal department and entity and the MDRMC, and must be budgeted for accordingly.

## 9.5.2 IMPERATIVES

Disaster risk assessments must be funded through the recurrent budgets of municipal departments and entities. The costs of initial disaster risk assessments undertaken by municipal departments and entities must be included in the start-up costs and funded through the local government conditional grant.

#### 9.5.3 KEY PERFORMANCE INDICATORS

• Disaster risk assessment is a budgeted for and is a cost item on the budget of each municipal department and entity.

## 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 plan and implement disaster risk reduction projects and programmes in line with the IDP of the municipality.

## 9.6.1 FUNDING OPTIONS

Disaster risk management planning must be included in the IDP of the MLM. Sectoral plans must also include specific disaster risk management plans for the relevant departments within the municipality. These planning processes must be funded through the budgets of the relevant municipal departments and entities. 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.

Municipal departments and entities 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 municipal departments and entities and must be reflected in their plans and budgets. Any new infrastructure developments should include the costs of structural mitigation measures.

When additional expenditure is required to develop structural mitigation infrastructure, municipal departments and entities 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. The MLM must prioritise these projects in its IDP.

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 disaster risk assessment findings and Action to be taken 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.

In the case of activities or projects aimed at preventing or reducing a national priority disaster risk, municipal departments and entities may apply for additional funding from the NDMC. The NDMC may choose to place a limit on the funding available per project.

#### 9.6.2 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 departments and entities. 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.

#### 9.6.3 IMPERATIVES

Cost expenditure on routine disaster risk management activities must be funded through the budgets of the relevant municipal department or entity.

Preparedness must be funded through the budgets of municipal departments and entities as part of their routine disaster risk management activities.

Additional structural mitigation infrastructure must be funded through local government conditional infrastructure grants.

#### 9.6.4 KEY PERFORMANCE INDICATORS

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

## 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; and
- Rehabilitation and reconstruction.

## 9.7.1.1 EARLY WARNING

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

#### 9.7.1.2 DISASTER RESPONSE AND RECOVERY OPERATIONS

The importance of rapid response in the event of a disaster cannot be underestimated. Funds need to flow quickly to support response and recovery efforts. Rescue efforts, provision of immediate basic services, emergency health services and critical infrastructure repair all form part of response and recovery.

Currently there are no dedicated funding mechanisms for disaster response and recovery operations, and resources are not released quickly enough to maximise the effectiveness of response activities. The use of section 16 of the PFMA as a mechanism to release emergency funds from the central contingency fund is problematic as it requires ministerial authorisation, which increases the lead time between the declaration of a disaster and access to emergency funds.

## Funding response and recovery

The fundamental principle underpinning provisions relating to funding in the Act is that all municipal departments and entities must budget for costs involved in disaster response and recovery. This principle places the onus for funding the initial costs associated with a disaster on the municipal departments and entities involved in response and recovery operations. Once budgets for response and recovery activities have been exhausted, the relevant municipal departments and entities may request financial assistance from provincial and/or 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.

The Act entrenches this principle of self-funding by allowing the Minister designated to administer the Act to prescribe a percentage of the budget of a municipal department and entity that will act as a threshold for accessing future funds from the central contingency fund.

The National Disaster Management Framework suggests that of Matjhabeng Local Municipality allocates a threshold of 1% of its own revenue to funding response and recovery (see Table 7.2 in the National Disaster Management Framework).

This threshold must be viewed within the context of the magnitude and extent of a disaster. The threshold must be reviewed at least two years after the publication of the framework, once information on the costs of different disasters are available.

Once the MLM has exhausted its thresholds, it should then request financial assistance from the Northwest Provincial Government. If the equitable share increases, then the basis for determination of the threshold percentages can be changed to the total revenue received by the municipality.

The department must ensure mechanisms are put in place by which funding can be accessed from the MLM central contingency reserve. Such mechanisms must be linked to strict guidelines and should only be accessible once a disaster has been declared in terms of the DMA.

#### 9.7.1.3 RELIEF MEASURES

The aim of relief measures is to provide immediate access to basic necessities for those severely affected by disasters. The National Disaster Fund, disburses funds for emergency relief to communities.

These funds are budgeted for in the Department of Social Development's vote. Provincial departments of social services and poverty alleviation also provide relief to affected communities. The MLM must establish a mayoral discretionary fund aimed at providing relief to local communities (need to check if this is viable in the LM).

#### 9.7.1.4 REHABILITATION AND RECONSTRUCTION

The Act places the onus for rehabilitation and reconstruction of infrastructure on the municipal departments and entities 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;
- Reprioritisation within existing capital budgets; and
- Access to the central contingency fund.

The methods of funding rehabilitation and reconstruction are complementary rather than competing. Ideally, municipal departments and entities should fund their expenditure on rehabilitation and reconstruction from their budgets up to the threshold. The next alternative should be to reprioritise within their capital budgets. The use of funds from the contingency reserve should be considered only as a last resort.

## Own budgets

Thresholds are applicable not only to response and recovery operations but also to rehabilitation and reconstruction. Depending on the extent of infrastructural damage, municipal departments and entities may be able to fund rehabilitation and reconstruction costs from their own budgets up to the threshold. Rehabilitation and reconstruction costs are generally high, so municipal departments and entities may need to fund these costs from a combination of sources, including own budgets, reprioritisation and the central contingency fund.

#### **Conditional grants**

Municipalities can access funding through the Municipal Infrastructure Grant (MIG). The MIG formula differentiates between new and rehabilitated infrastructure in a ratio of 80:20. Since the MIG augments the capital budget as a whole and is not a project-by-project grant, it is possible for municipalities to use part of the allocation for post-disaster rehabilitation purposes.

#### 9.7.2 IMPERATIVES

The dissemination of early warnings must be funded through the budgets of municipal departments and entities as part of their routine disaster risk management activities.

Measures need to be implemented to ensure that disaster response and recovery operations are funded through the budgets of municipal departments and entities up to the prescribed threshold. Once the threshold is reached, additional funding would be needed to be accessed through the central contingency fund.

Funding mechanisms for relief measures need to be reviewed in order to reduce the time it takes victims of disasters to gain access to relief assistance.

As far as possible municipal departments and entities must fund rehabilitation and reconstruction projects from their own budgets and conditional grants.

Mechanisms for the rapid release of funds from the central contingency reserve for the reconstruction of basic service infrastructure where infrastructure is needed to safeguard lives and livelihoods must be developed.

#### 9.7.3 KEY PERFORMANCE INDICATORS

- The development, implementation and dissemination of early warnings are funded through the recurrent budgets of the relevant municipal department and entities.
- The percentage of the budget of a municipal department and entity as a threshold for accessing additional funding from provincial and 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.
- Municipal departments and entities have budgeted for threshold allocations.

- People, households and communities affected by a disaster have immediate access to relief measures.
- Financial thresholds for rehabilitation and reconstruction funding have been set.
- Rehabilitation and reconstruction efforts are funded through a combination of own budgets, reprioritisation, budgeted threshold allocations and conditional grants.

## 9.8 ENABLER 2: EDUCATION, TRAINING, PUBLIC AWARENESS AND RESEARCH

Education, training, public awareness and research are crucial to the success of disaster risk management and disaster risk reduction strategies. It is envisaged that education, training and research initiatives as well as broad-based public awareness programmes will be undertaken by a range of municipal departments and entities and other institutions.

#### 9.8.1 FUNDING OPTIONS

The various initiatives within the scope of this enabler are broadly grouped as follows:

- Education and training;
- Integrated public awareness; and
- Research programme and information and advisory services.

## **Education and training**

The MDRMC must make budgetary provision for the implementation of a national 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 in the MLM.

## Integrated public awareness strategy

The MDRMC is responsible for developing an integrated public awareness strategy to encourage a culture of risk avoidance in all municipal departments and entities and in communities. In addition, municipal departments and entities are required to formulate appropriate public awareness campaigns within the framework of the integrated public

awareness strategy. The MDRMC must budget for the development and implementation of such a strategy.

Line departments involved in public awareness programmes must budget for the development and implementation of programmes relevant to their functional areas. In addition, they must be able to access funds for specific programmes aimed at creating awareness around municipal priority disaster risks from the MDRMC. The MLM must include public awareness campaigns in community participation processes. In this way, they will not require additional funds for these programmes.

The MLM should also forge links with CBOs, NGOs and the private sector in order to share costs for dedicated public awareness programmes that focus on priority risks.

Research programme and information and advisory services

Once the MDRMC has developed its research agenda, it should approach various other government departments, international donor organisations, private companies, research foundations and NGOs to fund disaster risk management research. The MDRMC 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 MDRMC awareness programmes that focus on priority risks.

#### 9.8.2 IMPERATIVES

The costs associated with accredited education and training must be recovered through SETAs. This should be seen as the funding mechanism of choice. The costs associated with

education and training programmes that are not accredited must be funded through the budgets of the relevant municipal department and entity.

The cost of research must be funded through the budgets of the MDRMC and by the private sector, research foundations, NGOs and donors.

#### 9.8.3 KEY PERFORMANCE INDICATORS

- There is documented evidence of an increase in expenditure on accredited education and training programmes.
- Municipal departments and entities recover their expenditure on accredited education and training from the relevant SETAs.
- The conditions of the MSIG have been extended to cater for disaster risk management education and training programmes.
- All municipal departments and entities involved in public awareness budget for integrated public awareness programmes.
- Partnerships between municipal departments and entities and the private sector,
   NGOs and CBOs, 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 NGOs for research programmes.