

Ministry of Environment, Sustainable Development, and Disaster and Beach Management Republic of Mauritius

## National Disaster Risk Reduction and Management Centre (NDRRMC)

National Disasters Scheme (NDS)

**2015 Edition** 



Line Barracks, Port-Louis, Mauritius

### **Disclaimer**

This document serves as guidelines to concerned stakeholders. No liability, civil or criminal shall be attached to any person and/or organisations in the execution of their roles, responsibilities and actions associated with this scheme.

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#### **ABBREVIATIONS**

AHRIM		Association des Hôteliers et Restaurateurs de l'île Maurice
	-	
CCPL	-	City Council of Port-Louis
CDRT	-	Community Disaster Response Team
CEB	-	Central Electricity Board
CWA	-	Central Water Authority
DOCR	-	Disaster Operation and Coordination Room
ESD	-	Energy Services Division
EPA	-	Environmental Protection Act
FRP	-	Flood Response Plan
GIS	-	Government Information Service
GIPM	-	Groupement d'Intervention de la Police Mauricienne
HAZMAT	-	Hazardous Materials
JEC	-	Joint Economic Council
LDRRMC	-	Local Disaster Risk Reduction and Management Committee
LEU	-	Living Environment Unit
LEOC	-	Local Emergency Operations Command
LMU	-	Landslide Management Unit
MARCOS	-	Marine Commandos
MBC	-	Mauritius Broadcasting Corporation
MCML	-	Multi-Carrier Mauritius Limited
MEF	-	Mauritius Employers Federation
Metro (N)	-	Metropolitan North
Metro (S)	-	Metropolitan South
MFRS	-	Mauritius Fire and Rescue Service
MoE,SD,& D	&BM-	Ministry of Environment, Sustainable Development, and Disaster and
		Beach Management
MoHQL	-	Ministry of Health and Quality of Life
MOI	-	Mauritius Oceanography Institute
MMS	-	Mauritius Meteorological Services
MPA	-	Mauritius Port Authority
MPI	_	Ministry of Public Infrastructure and Land Transport
MTC	-	Mauritius Turf Club
-		

Mwp	-	Moment of Magnitude
NCG	-	National Coast Guard
NDRRMC	-	National Disaster Risk Reduction and Management Centre
NDS 2015	-	National Disaster Scheme 2015
NDU	-	National Development Unit
NGOs	-	Non-Governmental Organisations
NEOC	-	National Emergency Operations Command
NOSCP	-	National Oil Spill Contingency Plan
NTA	-	National Transport Authority
OPS Room	-	Operations Room
PHS	-	Police Helicopter Squadron
PIOR	-	Police Information and Operations Room
РМО	-	Prime Minister's Office
QRT	-	Quick Reaction Team
RDA	-	Road Development Authority
RDRRMC	-	Rodrigues Disaster Risk Reduction and Management Centre
Recce	-	Reconnaissance
RPA	-	Radiation Protection Authority
RTSP	-	Regional Tsunami Service Provider
SAMU	-	Service d'Aide Medicale d'Urgence
SAR	-	Search and Rescue
SCCC	-	Standing Cabinet Cyclone Committee
SDF	-	Sans Domicile Fixe
SILWF	-	Sugar Industry Labour Welfare Fund
SMF	-	Special Mobile Force
SMS	-	Short Message Service
SOPs	-	Standard Operating Procedures
SPDC	-	State Property Development Corporation
SSU	-	Special Support Unit
WRU	-	Water Resources Unit
WMA	-	Wastewater Management Authority

#### Preface

- 1. With a view to enhance our national effectiveness and efficiency in Disaster Risk Reduction and Management, a new system has been introduced as per **Annex I**. The system encompasses the whole spectrum of the disaster management cycle with emphasis on a coordinated multi-agency approach and a greater focus on disaster risk reduction based upon comprehensive multi-hazard mapping for the country.
- 2. In this perspective, following the Cabinet decision of the 30<sup>th</sup> August 2013, a National Disaster Risk Reduction and Management Council as per **Annex II** (hereafter called the Council) in lieu of the defunct Central Cyclone and other Natural Disasters Committee has been established. The Council is now under the chairmanship of the Minister of Environment, Sustainable Development, and Disaster and Beach Management and has the following objectives:-
  - (a) Be responsible for coordinating the implementation of:-
    - (i) The National Disaster Risk Reduction and Management Policies,

(ii) The National Disaster Risk Reduction and Management Strategic Framework and Plans developed by the National Disaster Risk Reduction and Management Centre,

- (b) Promote a culture of safety and resilience at all levels through the use of knowledge, innovation and education, and
- (c) Coordinate the implementation of the obligations of the State/Republic of Mauritius under disaster management treaties to which the State is a party, through its disaster risk management policies, frameworks, plans, programmes and projects.
- (d) Review or amend the National Disaster Scheme as and when required.
- 3. In the same context, the National Disaster Risk Reduction & Management Centre (NDRRMC) which has been administratively set up since 23<sup>rd</sup> October 2013 will continue to operate under the Ministry of Environment, Sustainable Development, and Disaster and Beach Management and inter alia:-

- (a) Acts as the focal institution for the State of Mauritius for the planning, organizing, coordinating and monitoring of disaster risk reduction and management activities at all levels,
- (b) Responsible to develop, in line with National Disaster Risk Reduction and Management Policy, a National Disaster Risk Reduction and Management Strategic Framework and Plan for approval by the Council and to ensure their implementation.

The NDRRMC has also strived to develop innovative approaches to disaster risk management for the country, as well as seeking improvements within existing systems.

- 4. The NDRRMC has been working closely with stakeholders in disaster risk management throughout the year, and considerable progress has been made. Local Disaster Risk Reduction & Management Committees (LDRRMC) have been established within all Municipal and District Councils along with the appointment of Local Disaster Management Coordinators. With the support of the NDRRMC, simulation exercises conducted at Municipal and District Councils levels as per an annual simulation calendar are significantly contributing to strengthen their arrangements in support of identifying, mitigating and responding to identified threats.
- 5. The establishment of the Rodrigues Disaster Risk Reduction & Management Centre is progressing with the support of the NDRRMC. Disaster Management Coordinators have been introduced for our outer islands St Brandon and Agalega, and are working closely with the NDRRMC. For Rodrigues and the outer islands, appropriate schemes relating to the disasters to which they are vulnerable, should be put into place by the office of the Chief Commissioner and Outer Islands Development Corporation (OIDC) respectively.
- 6. A National Emergency Operations Command (NEOC) is established within the NDRRMC and is activated whenever a disaster or any other major crisis becomes imminent. The NEOC is multi-agency, comprising representatives from Ministries/Departments, other emergency services, NGO's and Private Sectors. It is the main coordinating body during the preparedness, response and recovery phases of

any disaster or for any other major crisis falling within its purview. The Commissioner of Police, in the event of a disaster, leads disaster response operations jointly with the Ministry of Environment, Sustainable Development, and Disaster and Beach Management and such other agencies as may be appropriate in the circumstances. The NEOC is activated solely for the purpose of coordinating all activities during a disaster and makes use of the well-established command, control, coordination and communication system of the Police so as to avoid unnecessary duplication of resources. Depending upon the magnitude and severity or potential magnitude or severity of a crisis/disaster situation, the NEOC may be activated at three levels:

- Level I: Monitoring of situation by NDRRMC
- Level II: Monitoring by NDRRMC staff assisted by representatives from main first responders
- Level III: Full scale activation with designated NEOC Members

The National Emergency Operations Command (NEOC) is continuing to develop its work to support well-coordinated and integrated first phase response activities. Following a United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) training workshop in July 2014, the need for a reorganisation of the functions of the NEOC and development of specific Standard Operating Procedures (SOPs) has been identified based upon the principles of Incident Command System (ICS). The NEOC expects to shift to the ICS-based concepts as soon as the development of Standard Operating Procedures (SOPs) is completed. Since its inception, the NEOC has been activated as and when required including disasters and crisis affecting Rodrigues and outer islands.

7. Depending on the magnitude and severity of a disaster, the Crisis Committee or the Council shall be convened under the chairmanship of the Minister of Environment, Sustainable Development, and Disaster and Beach Management, which shall supervise the organisation of disaster response operations and take such other measures as may be appropriate in the circumstances. The Crisis Committee shall meet at the specific request of the Director General of the NDRRMC, after the latter would have assessed, in consultation with the concerned authorities, the magnitude and severity or potential magnitude or severity of a disaster.

- 8. The Crisis Committee shall include:-
  - (a) The Secretary to Cabinet and Head of the Civil Service;
  - (b) Secretary for Home Affairs;
  - (c) The Commissioner of Police;
  - (d) The Supervising Officer of the Ministry of Environment, Sustainable Development, and Disaster and Beach Management;
  - (e) The Director-General of the NDRRMC;
  - (f) Such other person as the chairperson of the Crisis Committee may determine; and
  - (g) A suitable officer from the NDRRMC to act as Secretary to the Crisis Committee.

The Crisis Committee shall:-

- (a) Take decisive actions to safeguard the life of persons in danger, including evacuation of persons at risk owing to age or some disability, women, children and persons detained in an institution;
- (b) Supervise the organisation of disaster response operations;
- (c) Take appropriate measures, after consultation with the Prime Minister, to provide effective relief assistance; and,
- (d) Take such other measures, after consultation with the Prime Minister, as may be appropriate in the circumstances.
- 9. With its proven track record of leadership and its robust command, control, coordination, communication and intelligence system, the Mauritius Police Force will continue to be the lead agency for most disaster's response operations.
- 10. At the level of Municipal/District Councils, a Local Emergency Operations Command (LEOC) has been established and is activated whenever a disaster or any other crisis

becomes imminent within the area of jurisdiction and reports to the NEOC. The LEOC is multi-agency and is headed by the Mayor/ President of District Council. The LEOC is activated solely for the purpose of coordinating all activities during a disaster and makes use of the well-established command, control, co-ordination and communication system of the Police so as to avoid unnecessary duplication of resources, as far as practicable.

- 11. The NEOC facilities will be made available to the Department of Environment when they have to activate the National Oil Spill Contingency Plan (NOSCP). As regards HAZMAT, the NDRRMC jointly with the MRFS will continue the work on the development of a contingency plan initiated by the Department of Environment.
- 12. The Ministry of Public Infrastructure and Land Transport (Public Infrastructure Division) will continue to lead the monitoring of Landslides.
- 13. As regards management of emergency shelters, an ahoc committee will have to be constituted to make recommendations to the government on ways and means to bring improvements in the medium and long term.
- 14. The Mauritius Fire and Rescue Service in line with the Mauritius Fire and Rescue Service Act 2013 will continue to build capacity in search and rescue operations for all types of disasters. With a view of engaging the local communities in disaster preparedness and response, they will work to develop a volunteer fire and rescue service jointly with the local authorities.
- 15. The National Disasters Scheme (NDS) has traditionally been used as the primary source of information for agencies and individuals working in preparation and response to identified threats. Following the use of the NDS, both in actual emergency situations as well as in simulated emergencies, the decision has been taken to reorganise the document to make it more user-friendly and accessible. The previous format divided information within threat headings according to each phase of the emergency (for example, Preparedness phase, Prior Action, Action During, and so on), with required actions for stakeholders organised within these. The new format collects together the required actions for each agency, incorporating all phases of emergency actions within each identified threat under specific agency headings. This

is intended to aid users in quickly identifying, understanding and implementing their respective roles.

- 16. The new format has now become flexible to easily incorporate any future improvements as and when required to ensure stakeholders feedback and suggestions. The NDRRMC remains committed to a cycle of continuous improvement in evaluating existing SOPs, functions and actions related to disaster risk management.
- 17. The NDS is intended to be a functional document to support agencies and stakeholders in understanding and undertaking their roles, responsibilities and actions in emergencies. It is understood that certain organisations or ministries do not presently have the capacities to meet their roles and responsibilities defined under the various schemes of the NDS. Such organisations or ministries will have to develop these capabilities in the years to come. The NDS therefore does not replace the requirement that all Ministries/Departments/Organisations should have their own Service Continuity Plans, Business Continuity Plans, Internal Contingency Plans, SOPs and crisis arrangements to address emergencies within their respective areas of jurisdiction. However, the NDS is meant to complement such contingency plans which should be shared with the NDRRMC to enable it to plan, coordinate, monitor and harmonise actions between numerous stakeholders in the event of a disaster. The ultimate aim of the NDS is to enhance safety of citizens.
- 18. Depending on resources available, all stakeholders should endeavour to the extent possible and to the best of their abilities, to fulfil their roles, responsibilities and actions referred to in the NDS. Thus, this document will be more of a guideline to stakeholders and no liability, civil or criminal, shall be attached to any person/organisation in the execution of their roles, responsibilities and actions associated with this scheme.
- This National Disasters Scheme (2015 Edition) supersedes the National Disasters Scheme 2014.

# Cyclone Emergency Scheme

# **National Disasters Scheme Edition 2015**

Réunion



National Disaster Risk Reduction and Management Centre (NDRRMC) Line Barracks, Port-Louis Cyclone Emergency Scheme

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#### **1.0 CYCLONE EMERGENCY SCHEME**

#### 1.1 Introduction

The Cyclonic Season in Mauritius covers the period between 1<sup>st</sup> of November to 15<sup>th</sup> of May. The approved list of names of Cyclones for Season 2014-2015 is at **Annex III**.

For Rodrigues and the Outer Islands, cyclone schemes should be put into place by the office of the Chief Commissioner and Outer Islands Development Corporation (OIDC) respectively.

#### 1.1.1 Classification of Cyclonic Disturbances

The following terminologies have been adopted in the South West Indian Ocean Region for classifying cyclonic disturbances and will be used in Cyclone Bulletins:-

	Terminology	Gusts (instantaneous) (km/h)
(i)	Tropical Storm	Under 89
(ii)	Moderate Tropical Storm	89 to 124
(iii)	Severe Tropical Storm	125 to 165
(iv)	Tropical Cyclone	166 to 233
(v)	Intense Tropical Cyclone	234 to 299
(vi)	Very Intense Tropical Cyclone	300 and above

#### 1.1.2 Classes of Cyclone Warnings

The Class System of Warnings is based primarily on the extent of the risk and secondly on the time factor. The coded Class System by itself can, in no way, indicate the intensity or size of the cyclone nor the extent to which gusts will exceed 120 km/h.

CLASS I	Issued 36-48 hours before Mauritius or Rodrigues is likely to be affected by gusts reaching 120 km/h.
<b>CLASS II</b> Issued to allow, as far as practicable 12 hours of daylight befor	
	occurrence of gusts of 120 km/h.
CLASS III	Issued to allow, as far as practicable, 6 hours of daylight before the
CLASS III	advent of 120 km/h gusts.
	Issued when gusts of 120 km/h have been recorded in some places and
CLASS IV	are expected to continue.
TERMINATION	Issued when there is no longer any risk of gusts exceeding 120 km/h.

The threshold of 120 km/h represents the speed at which significant damages may start to occur to trees and structures.

#### 1.1.3 Code Flags Flown on Certain Buildings are as Follows:-

Warning Class I	-	One red flag
Warning Class II	-	Two red flags
Warning Class III	-	Three red flags
Warning Class IV	-	Three red flags
Termination	-	One blue flag

#### 1.1.4 Cyclone Bulletins

- (i) Cyclone Bulletins are issued by the MMS and give the position, intensity and movement of a cyclone with a forecast of the expected changes in the conditions of the wind, rain and the sea, expected time of commencement of specified wind speed and gust conditions. Advice about precautions are given in general terms but all recipients must necessarily apply the contents of the forecast to their own situation because, for instance, a householder may be able to close his shutters in a few minutes during the night whereas the proper protection of fishing boats require a considerable period of daylight hours.
- (ii) Cyclone Bulletins numbering from a few to a dozen or more for each cyclone are issued at generally at 6-hourly intervals or more often. Each bulletin is labelled first, second, third, etc, and dated and timed. Each shall also state the time when the next bulletin will be issued.
- (iii) The bulletins will contain, as detailed above, a description of the cyclone and efforts will be made to keep them fairly concise and to avoid verbosity. They will normally be issued at twelve (12) hourly intervals for Cyclone Warning Class I and six (6) hourly intervals for Class II but when the cyclone is very near, the frequency will be increased to three (3) hourly intervals for Cyclone Warning Class. New observation sometimes necessitates a revision of the outlook or even of the past history. An upgrading or a downgrading of the warning status may have to be made unexpectedly. The MMS will issue warning appropriate to the prevailing meteorological situation and outlook without regard to any rules

#### which transport or business enterprises have laid down for their own conduct in a cyclone warning situation.

- (iv) Special attention need to be given for the issue of possible warnings to the public and tourist community to ensure that the calm period during the passing of the eye of the cyclone is not mistaken for an end of the cyclonic winds.
- (v) As far as possible, a line of communication between the MMS, the NDRRMC, the MBC and the private radios will be maintained at all times. The public should be made aware of the possibility of an interruption in the flow of information. It should be understood that precautions should have been taken prior to the advent of cyclonic conditions.
- (vi) At the beginning of holiday periods or week-ends, advance issue of a warning may be found necessary to allow preliminary precautions to be taken and making arrangements for personnel to be made available for more elaborate precautions.

#### 1.1.5 Distribution of Cyclone Warning Bulletins

- (i) When a cyclone warning Class III is in force, the MMS will issue cyclone warning bulletins to both print and broadcast media at the following times: 05h00, 08h00, 11h00, 14h00, 15h00, 20h00 and 23h00 or as such other times as deemed appropriate.
- (ii) Cyclone information is disseminated through the MBC, NDRRMC, Police, Public & Private Radio Stations, the Press and the Audiotex and Telmet Services. This scheme provides general responsibilities and actions of:
  - (a) All organisations;
  - (b) Alerting agency;
  - (c) Coordinating agencies at National and Municipal/Districts Council levels;
  - (d) Main response agencies, and
  - (e) Other stakeholders.
  - The scheme is divided under the following sections:
  - (a) General Preparedness before Cyclonic Season;
  - (b) Upon Approach of cyclone;
  - (c) During cyclone, and
  - (d) Aftermath.

#### 1.2 General Roles, Responsibilities and Actions

#### 1.2.1 All Organisations

#### (a) General Preparedness before Cyclonic Season

- (i) Ensure that all staff is familiar with the procedures of their SOPs/ Contingency Plans.
- (ii) Update their SOPs/ Contingency Plans and ensure that they are properly understood and implemented.
- (iii) Cyclone posters supplied by the GIS should be displayed in conspicuous places for the information of the staff and general public.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Ensure that all Cyclone Bulletins and Warnings received are properly distributed within their organisations.
- (ii) Be ready to activate SOPs and Contingency Plans.
- (c) <u>During Cyclone</u>
  - (i) Upon Class II or Class III warnings, Heads and occupants of Ministries/ Departments of Government buildings, to ensure that all security measures have been completed and all doors, windows and shutters are properly secured, utility supplies are shut down.
  - Upon Class III or Class IV warnings, Government Offices will be closed except essential services and organisations listed below:-
    - 1. Social Security Headquarters and Regional offices.
    - 2. Regional offices of Ministry of Gender Equality, Child Development and Family Welfare.
    - 3. Fisheries Posts and Crew of Research and Rescue Boats.
    - Customs Department, Mauritius Telecom, MCML, MPA, DCA, AML, CEB and CWA.
- (d) <u>Aftermath</u>
  - (i) Carry out a Post Disaster Damage Assessment pertaining to their respective organisation/area of responsibility and submit report to the NEOC.
  - (ii) Immediate steps taken by Heads of Ministries/Departments as applicable to:
    - 1. Clear roads.

- 2. Collect and cart away all post cyclonic wastes.
- 3. Restore public transport.
- 4. Restore water supplies.
- 5. Restore essential telephones.
- 6. Restore power and lighting.
- 7. Re-open the Port.
- 8. Re-open the Airport.
- 9. Assess damage to food stocks, livestock, agriculture & infrastructure.
- Obtain and provide funds for clearing of debris in the Local Disaster Committee areas.
- 11. Provide and maintain sanitary arrangements at Emergency Shelters and clean and disinfect these later.
- 12. Obtain and provide funds for emergency works to be carried out.
- (iii) Take steps to salvage damaged property and activate their Ministry/ Department/ Organization Service Continuity Plan.
- (iv) Forward regular situation reports to the NEOC accordingly.

#### **1.3 Warning/Alerting Agency**

#### **1.3.1** Mauritius Meteorological Services

The MMS is the warning/alerting agency for the Republic of Mauritius in the case of a cyclone.

#### (a) General Preparedness before Cyclonic Season.

 (i) Conduct wide sensitization programmes targeting the community, schools, elderly, and other identified as vulnerable to cyclones through MMS website, TV, radios and press in collaboration with the NDRRMC, GIS and MBC.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Activate protocol for Cyclone Warning System.
- (ii) Distribute Cyclone Bulletins to all concerned as per Annex IV.
- (iii) Issue special bulletins to General Manager OIDC, NCG and Disaster Management Coordinators in Agalega and St Brandon if concerned.

- (iv) Issue Maritime Bulletins to the Mauritius Radio Services (MRS) at Mauritius Telecom.
- (v) Issue regular bulletins of the situation informing the public of the evolution of the cyclone.

#### (c) During Cyclone

- (i) Continue to issue more regular bulletins of the situation informing the public of the evolution of the cyclone.
- (ii) Regularly intervene on TV and Radios to provide real time information to the general public in English, French, Creole and Hindustani.
- (iii) Continue to issue bulletins to the NEOC, of real time situation, general forecasts and precautionary measures.

#### (d) <u>Aftermath</u>

Issue termination bulletins as well as informing the public of the continuous risks and precautions to be taken in case of high gusts/heavy swells/ storm surges which may affect the islands.

#### **1.4** Coordinating Agencies

#### 1.4.1 National Level

#### Cabinet

Depending upon the forecasted magnitude and severity of the cyclone impact, the Cabinet may be convened at the discretion of the chairperson to take strategic decisions.

#### National Disaster Risk Reduction and Management Council/Crisis Committee

(a) General Preparedness before Cyclonic Season

The National Disaster Risk Reduction and Management Council shall be convened by the Minister of Environment, Sustainable Development, and Disaster and Beach Management, prior to the Cyclonic Season to review and, if necessary, to amend this National Disasters Scheme.

(b) Upon Approach of Cyclone

The Crisis Committee will monitor situation based upon updated situation report submitted by NEOC.

#### (c) During Cyclone

The Crisis Committee will monitor situation based upon updated situation reports submitted by NEOC.

#### (d) <u>Aftermath</u>

#### (i) Standing Cabinet Cyclone Committee (SCCC)

Immediately after a cyclone, the SCCC under the chairmanship of the Prime Minister will meet to decide upon the strategic orientation of emergency relief operations.

The SCCC will meet at the Government House, Port Louis, at the first opportunity after the termination of cyclone conditions. The Secretary to Cabinet & Head of the Civil Service or his representative will act as Secretary to the Standing Cabinet Cyclone Committee.

#### (ii) The **Crisis Committee**

#### Crisis Committee will ensure that:-

- 1. Adequate information is made available to the SCCC.
- 2. Immediate executive action is taken to carry out the decisions of the SCCC.
- 3. There is a flow of information and instructions to Head of Ministries/Departments primarily concerned with the work of relief and reconstruction.

The **Crisis Committee** will meet at the NEOC, Line Barracks, Port Louis, as soon as possible, after the termination of cyclone conditions. The main functions of the **Crisis Committee** will be:-

- (1) To collect and present to the SCCC information on:-
- (i) General situation throughout the island (obtained mainly from the Police, the NEOC and LEOCs).

- (ii) Condition of Government Departments (obtained from Permanent Secretaries and other heads of Ministries/ Departments/ Organisations).
- (iii) Damage of non-government property (obtained mainly from NEOC/LEOCs).
- (iv)General situation at the port and airport and updates on arrivals and departures.
- (2) To make recommendations on any relief measures immediately required.
- (3) To ensure that immediate executive action is taken on the decisions of the SCCC.
- (4) To provide an accessible reporting point for Heads of Ministries/Departments/ Organizations primarily concerned in the work of relief and reconstruction.

#### National Disaster Risk Reduction and Management Centre (NDRRMC)/National Emergency Operations Command (NEOC)

- (a) General Preparedness before Cyclonic Season
  - (i) Coordinate and monitor all preparedness actions.
  - (ii) Monitor with concerned authorities the implementation of appropriate risk reduction structural and non-structural measures.
  - (iii) Coordinate sensitization programmes targeting the community, schools, elderly, and other identified as vulnerable to cyclones through, TV, radios and press in collaboration with the relevant organisations.
- (b) Upon Approach of Cyclone
  - (i) Ensure all preparedness actions are in place.
  - (ii) Activate NEOC for centralized command and control of information, coordination and monitoring of all responsive operations with LEOC, DOCR's and other stakeholders.
  - (iii) Prepare Incident Action Plan at national level.

#### (c) During Cyclone

- (i) Monitor general situation in liaison with DOCR's, MFRS and MoHQL.
- (ii) Release communiqué and make press briefs.
- (iii) Provide regular situation report to Senior Officials and to the Council/Crisis Committee.

#### (d) <u>Aftermath</u>

- (i) Coordinate post disaster damage assessment at national level.
- (ii) Identify needs and coordinate relief and re-establishment of essential services.
- (iii) Continue issuing communiqués and making press briefs.
- (iv) Send regular situation report to Council/Crisis Committee and Senior Officials.

#### 1.4.2 Municipal/District Councils Levels

#### Local Disaster Risk Reduction & Management Committee/Local Emergency Operations Command (LEOC)

#### (a) General Preparedness before Cyclonic Season

- (i) Take all preparedness actions prior to the cyclonic season. These should include carrying out of surveys to identify vulnerable areas/communities and inadequate drainage system and take remedial actions. Ensure cleaning and maintenance of drains, and canals. Enforce measures against illegal dumping in rivers, canals and drains.
- (ii) Carry out sensitization campaigns for local communities in their respective areas of jurisdiction.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Ensure that Cyclone Bulletins are circulated to all members of the LDRRM Committees and they are informed to get ready to report at the LEOC.
- (ii) Activate LEOC for coordination and monitoring of all responsive operations with DOCR's and other stakeholders.
- (iii) Ensure that Cyclone Flags/ Lamps are displayed on the Council building for the information of the public.

- (iv) Monitor the situation in respective area of jurisdiction including opening of emergency shelters and counter-measures (e.g. sandbagging, consolidation of weak structures, etc.) taken against flooding, gusts, etc.
- (v) Provide regular Situation Report to the NEOC.
- (c) <u>During Cyclone</u>
  - (i) Temporary deactivation of LEOC.
  - (ii) Monitoring and coordination of actions of first responders to continue through DOCR's.
  - (iii) Inform NEOC on actions taken and keep watch on cyclone status.

#### (d) <u>Aftermath</u>

- (i) Reactivate LEOC,
- (ii) Create assessment teams to carry out post disaster damage assessment and report to NEOC with prompt and accurate information on casualties, damage to infrastructure and extent of immediate relief measures undertaken or required in their respective areas.
- (iii) Provide all possible supports and resources for SAR activities, cleaning and opening of roads, and removal of obstructions, collect and cart away all post cyclonic wastes to approved disposal sites, provide domestic supplies to affected communities, etc.
- (iv) These activities may carry on for a long period; hence ensure continuous support, coordination and monitoring of all relief operations.
- (v) Provide NEOC with regular Situation Report.

#### **1.5** Main Response Agencies

#### 1.5.1 Mauritius Police Force

#### (a) General Preparedness before Cyclonic Season

- (i) Public address/siren system of police vehicles to be in good order.
- (ii) Ensure that all disaster management kits and resources are operational and always in ready position.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Ensure that all police resources are in ready position and are operational.
- (ii) Police Divisional Operations Rooms converted into Divisional Disaster Operations and Coordination Rooms (DOCR's).
- (iii) PIOR to distribute Cyclone Bulletins to all Officials of Distribution List as per Annex IV.
- (iv) PIOR to maintain permanent contact between the President's Office, Le Reduit and the NEOC at hourly intervals by phone or by wireless.
- (v) Ensure that Cyclone Flags/Lamps are properly updated and displayed for public information.
- (vi) PIOR to provide regular Situation Report to NEOC.

#### (c) **During Cyclone**

- PIOR will coordinate and monitor all Police deployments through DOCRs and provide regular Situation Report to the NEOC.
- (ii) Give all possible warnings to the public by vehicles and other available means to ensure that the calm period during the passing of the eye of the cyclone is not mistaken for an end of the cyclonic winds.
- (iii) DOCR's to coordinate first responders deployments at division level.

#### (d) <u>Aftermath</u>

- Ensure that all main roads are cleared island-wide and in particular, those giving access to essential services.
- (ii) Police will submit to the Secretary to Cabinet and Head of Civil Service, Prime Minister's Office a general assessment of the damage to infrastructure, casualties and the situation throughout the island through post disaster damage (casualties, houses, roads, buildings, infrastructure, etc.) assessments performed by all Police Divisions/ Branches/ Units/ Stations/ Posts and helicopters surveys. Report to be also copied to the NEOC.
- (iii) With the assistance of MoSS NS & RI, MoSI & EE and other stakeholders, where required, identify the number of households that have been affected, number of people affected and displaced and carry out survey to assess extent of damage (loss of personal properties, loss of materials such as mattresses, furniture, etc). Report to be copied to the NEOC.

#### **1.5.2 Mauritius Fire and Rescue Service**

#### (a) General Preparedness before Cyclonic Season

- (i) The MFRS, in coordination with the NDRRMC, will carry out targeted community awareness campaigns to sensitise the community, schools, elderly, and other identified as vulnerable on precautions to be carried out before the arrival of cyclonic season.
- (ii) The MFRS will ensure that it has sufficient equipment to intervene during cyclones.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Mobilise personnel and resources.
- (ii) Activate Internal SOPs.

#### (c) <u>During Cyclone</u>

- (i) Attend to requests as long as it is safe and possible to do so.
- (ii) Keep DOCR's informed on deployments and operations.
- (iii) Send regular situation report to NEOC.

#### (d) <u>Aftermath</u>

- (i) Mobilise all personnel to provide assistance to affected areas.
- (ii) Carry out SAR operations in liaison with DOCR's.
- (iii) Ensure liaison with DOCR's informing of prevailing situation.

#### 1.5.3 Ministry of Health and Quality of Life

#### (a) General Preparedness before Cyclonic Season

- (i) To carry out sensitisation campaigns on public health issues.
- (ii) Ensure emergency plans are up to date.

#### (b) <u>Upon Approach of the Cyclone</u>

- (i) Activate Emergency Plan.
- (ii) Mobilise personnel and take all precautionary measures.

(iii) Provide special needs medical assistance to evacuees upon request from supervisors of Emergency Shelters, when required.

#### (c) During Cyclone

- (i) Continue to provide medical care and assistance to casualties.
- (ii) As far as possible, each Regional Hospital to be provided with a police armoured vehicle. Request to be made to the Commissioner of Police.
- (iii) Send situation report to NEOC.

#### (d) <u>Aftermath</u>

- Release communiqués regarding safe drinking water, removing stagnant water to avoid mosquito proliferation.
- (ii) Arrange for medical check for special needs evacuees, elderly and others.
- (iii) Maintain other appropriate public health messaging.

#### 1.6 Other Stakeholders

#### **1.6.1** Prime Minister's Office

#### Government Information Service (GIS)

(a) General Preparedness before Cyclonic Season

Carry out public sensitization programmes in coordination with NCDRRMC on sound building practices required to withstand cyclones, necessity for annual overhauling of roofs and removal of rotting or overgrown trees, in collaboration with the NDRRMC.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Prepare and issue communiqués to inform the population to complete all preparedness actions, in coordination with the NEOC.
- (ii) Arrange for the broadcasting of the names of the approved list of emergency shelters in consultation with the Ministry of Social Security, National Solidarity and Reform Institutions.

#### (c) During Cyclone

Together with the NEOC, MBC and Police prepare and issue cyclone communiqués to inform the population on precautions to be taken during the passage of a cyclone, in coordination with the NEOC.

#### (d) <u>Aftermath</u>

- (i) Prepare and issue communiqués on certain precautions to be taken immediately after the passage of a cyclone.
- (ii) Prepare press briefs to be released by the NEOC.

#### 1.6.2 Ministry of Tourism and External Communications

#### ✤ Tourism Authority

- (a) General Preparedness before Cyclonic Season
  - (i) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
  - (ii) All hotels, bungalows owners, tour operators and other relevant stakeholders to inform all guests of the Cyclone Bulletin.
  - (iii) Ensure emergency plans are developed and in place.
  - (iv) Tourism Authority to activate its protocol for Cyclones.
  - (v) Carry out sensitisation campaigns in collaboration with the NDRRMC.
  - (vi) Setting up of Crisis Cell at the Tourism Authority.
- (b) <u>Upon Approach of Cyclone</u>
  - (i) Activate internal emergency plan.
  - (ii) All hotels, bungalows owners, tour operators and other tourism enterprises and pleasure craft operators to assist in evacuation of guests and ensure safe transportation to safe zones, if required and to ensure:
  - coordination with relevant Embassies, Ministry of Foreign Affairs and NEOC in case of relocation of tourists; and
  - 2. alternate residences for relocation of tourists in safe zones.
  - (iii) Sensitise tourists to avoid venturing at seas.
  - (iv) Provide regular situation reports to Tourism Authority for onwards transmission to NEOC.

#### (c) During Cyclone

- (i) Strict compliance to emergency plans provision.
- (ii) Embassies, Ministry of Foreign Affairs and NEOC to be kept informed upon the status of tourists.

#### (d) <u>Aftermath</u>

- (i) Carry out an assessment on all Tourism enterprises.
- (ii) Hotels, bungalows owners, tour operators and other tourism enterprises and pleasure craft operators to return any displaced tourists and staff, if safe to do so.
- (iii) Sensitise tourists to avoid venturing at sea.

#### Department Civil Aviation (DCA)

(a) General Preparedness before Cyclonic Season

In line with provisions of DCA Cyclone Procedures.

#### (b) Upon Approach of Cyclone

- (i) Apply DCA Cyclone Procedures.
- (ii) Keep NEOC informed of the operational situation of airport.

#### (c) <u>During Cyclone</u>

- (i) DCA Cyclone Procedures in action, and
- (ii) Keep NEOC informed of the operational situation of airport.

#### (d) <u>Aftermath</u>

- (i) Carry out post disaster damage assessment on airport.
- (ii) Re-open airport, as soon as it is operationally safe to do so.
- (iii) Send situation report to NEOC.

#### 1.6.3 Ministry of Housing and Lands

- (a) General Preparedness before Cyclonic Season
  - (i) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.

- (ii) Identify possible suitable sites for setting up of temporary housing, if required.
- (iii) Be prepared to arrange for temporary shelters/housing.

#### (b) <u>Upon Approach of the Cyclone</u>

Be ready to assist NEOC, if required.

#### (c) <u>During Cyclone</u>

Assist NEOC in coordination at national level, when required.

#### (d) <u>Aftermath</u>

- (i) Intervene immediately to arrange for suitable sites to put up temporary shelters for victims, if required.
- (ii) Assist in the provision of temporary shelters to accommodate victims who have lost their houses during the cyclone.
- (iii) Assist in carrying out a post disaster damage assessment at national level and provide same to the NEOC.

#### **1.6.4** Ministry of Energy and Public Utilities

#### **Water Resources Unit (WRU)**

#### (a) General Preparedness before Cyclonic Season

- (i) Implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (ii) Measures as per internal plans.

#### (b) Upon Approach of Cyclone

- (i) Apply internal emergency plans.
- (ii) Keep NEOC informed of the status of reservoirs, dams and canals.

#### (c) <u>During Cyclone</u>

- (i) Internal emergency plans in action.
- (ii) Issue communiqué on state and capacity of reservoirs and dams.
- (iii) Keep NEOC informed of the status of reservoirs, dams and canals.

#### (d) <u>Aftermath</u>

- (i) Carry out post disaster damage assessment on dams, rivers and canals.
- (ii) Send situation reports to the NEOC.

#### Waste Water Management Authority (WMA)

(a) <u>Aftermath</u>

Ensure that wastewater sewerage system is rendered fully operational and take immediate remedial actions to get restore all affected network.

#### Central Electricity Board (CEB)

(a) General Preparedness before Cyclonic Season

Lopping of branches protruding on overhead electrical network.

#### (b) Upon Approach of Cyclone

- (i) Mobilise and on stand-by.
- (ii) Issue communiqué on safety measures to public and subscribers through MBC and radios.
- (iii) Activate emergency plan.
- (iii) Be ready for any intervention required in case of faults reported.
- (iv) Send regular situation report to NEOC.

#### (c) <u>During Cyclone</u>

- (i) Cut off CEB power supply to ensure public safety where required.
- (ii) Monitor cyclone adverse effects on CEB critical facilities and power plants.

#### (d) <u>Aftermath</u>

- (i) Carry out a post disaster damage assessment.
- (ii) Restore power supplies and street lightings as soon as possible.

#### \* Central Water Authority

#### (a) General Preparedness before Cyclonic Season

- (i) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (ii) Measures as per internal plans.

#### (b) Upon Approach of Cyclone

- (i) Apply internal emergency plans.
- (ii) Keep NEOC informed of the status of reservoirs and water supply.

#### (c) <u>During Cyclone</u>

- (i) Internal emergency plans in action.
- (ii) Issue communiqué on supply and any precautions required with drinking water.
- (ii) Keep NEOC informed of the status of water supply.

#### (d) <u>Aftermath</u>

- (i) Carry out a post disaster damage assessment.
- (ii) Restore water supply as soon as possible.
- (iii) Inform the MBC, MCML, NEOC and the public in case water supply has been switched off or restored.

#### 1.6.5 Ministry of Finance and Economic Development

#### \* Mauritius Revenue Authority (MRA)

#### (a) General Preparedness before Cyclonic Season

- (i) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (ii) Take necessary measures for the rapid release of relief consignments and any goods needed during a disaster.

#### (b) <u>Upon Approach of the Cyclone</u>

Be ready to assist NEOC, if required.

#### (c) <u>During Cyclone</u>

Assist NEOC in coordination at national level, if required.

#### (d) <u>Aftermath</u>

Ensure that measures are being taken for the rapid release consignments and any goods needed during a disaster.

#### 1.6.6 Ministry of Technology, Communication and Innovation

#### (a) General Preparedness before Cyclonic Season

- (i) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (ii) Develop and carry out IT based Community Sensitization Programmes on preparedness before cyclonic season, in collaboration with the NDRRMC.
- (iii) Ensure SOPs are up to date and to be shared with the NDRRMC.

#### (b) <u>Upon Approach of Cyclone</u>

- Explore the possibility with all Mobile Service Operators to inform the public of cyclone bulletins and precautions to be taken, targeting specifically parents and students through e-Register system.
- (ii) Arrange for MT to operate Telmet Services (Tel. 8996 for fixed line telephones and Tel 171 for mobiles) by which any telephone enquirer may listen to a recorded version of the latest bulletin. If possible, arrange with other Service Providers to activate a similar system.

#### (c) <u>During Cyclone</u>

Ensure that Telmet Services are updated and available to continue informing the public.

#### (d) <u>Aftermath</u>

- (i) Ensure that all service providers give priority to restore communication system for essential services.
- (ii) In case international humanitarian support is required, ensure that all communication equipments are immediately cleared and operating bandwidth is made available within the frequency spectrum.

#### Mauritius Broadcasting Cooperation (MBC)

- (a) General Preparedness before Cyclonic Season
  - Ensure that the VHF communication radio between MBC and MMS Headquarters is maintained in good working conditions and regularly checked.
  - (ii) Ensure that the AM Repeater at Bigara Station is fully operational at all times.
  - (iii) Carry out sensitisation campaigns in collaboration with the NDRRMC.
- (b) <u>Upon Approach of Cyclone</u>
  - Broadcast cyclone bulletins and communiqués in English, French, Hindustani and Creole languages at hourly intervals on radio and television.
  - (ii) Inform the public of alternative arrangements for the broadcast of cyclone bulletins.
- (c) <u>During Cyclone</u>
  - (i) Give top priority to broadcasting of cyclone warning bulletins at all times.
  - (ii) Emphasize on dangers of high waves and storm surges for public not to venture at sea and coastal areas.
  - (iii) Warn the public not to attempt to remove or dismantle their television antennas.
  - (iv) Ensure cyclone related programmes are broadcasted simultaneously on both FM and AM channels.
- (d) <u>Aftermath</u>
  - Broadcast termination bulletins as soon as received and during the following three-hour period.
  - (ii) Ensure that electrical supply is readily established.
  - (iii) Ensure that repairs/ clearing of antenna are carried out immediately after the passage of the cyclone.
  - (iv) Inform public of the dangers of high waves and sea conditions.

#### 1.6.7 Ministry of Public Infrastructure and Land Transport

#### (a) General Preparedness before Cyclonic Season

- (i) Implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (ii) Carry out sensitisation campaigns in landslide prone areas, in collaboration with the NDRRMC.
- (iii) Overseeing the maintenance of drainage systems.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Activate Landslide Emergency scheme.
- Mobilize landslide monitoring team of the Landslide Management Unit to monitor all identified sites as per the Landslide Emergency Scheme.
- (iii) Collect data of the extensioneters where available with the assistance of Local Police/SMF. Relay information to NEOC on timely basis.

#### (c) <u>During Cyclone</u>

- (i) Activate evacuation stage of the Landslide Emergency Scheme.
- (ii) Monitor extensioneter readings with the assistance of Local Police/SMF where available and keep a line of communication with designated local inhabitants.

#### $(d) \underline{Aftermath}$

- (i) Carry out a post disaster damage assessment on infrastructures and provide same to the NEOC.
- (ii) Recall all available staff and conduct clearing of all roads which have been affected to provide access to essential services.
- (iii) Restore the road network and disseminate information about links which may be used or which are closed to traffic.
- (iv) Restore and secure emergency routes, such as, those leading to hospitals in liaison with municipal/district councils.
- (v) Advise the public in general, through the NDRRMC, about risks of flooding or rock fall along routes.

#### **\*** National Transport Authority (NTA)

- (a) General Preparedness before Cyclonic Season
  - (i) Hold regular meetings with bus companies/owners during the cyclonic season with a view to sensitizing them to react promptly in emergency situations.
  - (ii) Prepare a detailed plan laying down the responsibilities of its enforcement officers for making arrangements in the event that a cyclone Warning Class III is issued or lifted during working hours.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Indicate the hour of last departure or, of first resumption of public transport.
- (ii) Issue communiqué for the general public.

#### (c) <u>Aftermath</u>

- (i) Carry out an assessment of all the bus routes networks and inform the NEOC if any has been affected. Priority to be given to roads giving access to essential/emergency facilities.
- (ii) Restore public transport.
- (iii) Ensure that operational buses resume operations as soon as possible if the cyclone warning is waived during day light.
- (iv) Be prepared to extend transport assistance for relief operations, if required.

# 1.6.8 Ministry of Education & Human Resources, Tertiary Education, and Scientific Research

#### (a) General Preparedness before Cyclonic Season

- (i) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (ii) Include disaster preparedness programmes within the educational curriculum at different levels.
- (iii) Ensure cyclone posters issued by the GIS to be conspicuously displayed for the attention of all students and staff.
- (iv) Ensure all parents and students are well conversant with the cyclone scheme.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) If a Class II Warning is in force at the beginning of a school day, issued before classes begin, students and teaching staff should not report to school. The head of schools/ colleges and support staff should call at their respective school to ensure that all necessary precautions have been taken.
- (ii) If a Class II Warning is issued during school hours, classes will be dismissed without delay. Heads of schools/colleges and teaching staff should ensure that all pupils/students leave the school premises while support staff should ensure that all necessary precautions have been taken. As far as possible, the MMS will issue Class II warnings on school days either at 0410 hrs, 1310 hrs or 1410 hrs.
- (iii) Issue appropriate communiqués to inform the public of the closing and opening of educational institutions.
- (iv) Schools will be closed only when the last student has left the school premises,
- (v) Ensure that all educational institutions are properly closed and secured before leaving the premises.
- (vii) Send regular situation report to NEOC.

#### (c)<u>During Cyclone</u>

- (i) All educational institutions will remain closed.
- (ii) In extreme circumstances, schools may be used as temporary shelters.
- (d) <u>Aftermath</u>
  - (i) All educational institutions should be closed on the day following the night when a Cyclone Warning Class IV is in force and the announcement to that effect should be broadcast early in the morning and the public should be informed accordingly in advance.
  - (ii) Heads of educational institutions should ensure that a core team of personnel will report at the premises to carry out a post disaster infrastructural damage assessment and send a full report to the Ministries.
  - (iii) Ministries to compile and send the post disaster damage assessment to the NEOC within the shortest possible time.

 (iv) In extreme circumstances, the Ministry to make allowance for conversion of schools into emergency shelters.

#### **1.6.9** Ministry of Local Government

- (a) General Preparedness before Cyclonic Season
  - (i) Ensure preparedness actions prior to the cyclonic season are taken. These should include carrying out of surveys to identify vulnerable areas/communities and inadequate drainage system and take remedial actions. Ensure cleaning and maintenance of drains, and canals. Enforce measures against illegal dumping in rivers, canals and drains.
  - (ii) Jointly with other concerned ministries identify appropriate Emergency Shelters within areas of jurisdiction of local authorities (Municipal and District councils) based on the topography of the region and vulnerability of the community concerned.
  - (iii) Support municipal and district councils in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
  - (iv) Ensure a well-established coordination between the NDRRMC and Local Authorities (Municipal and District Councils).

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Be ready to assist NEOC, if required.
- (ii) Ensure that Local Authorities (Municipal and District Councils) activate LEOC for coordination and monitoring of all responsive operations with DOCR's and other stakeholders, if required.

#### (c) *During Cyclone*

- (i) Assist NEOC at national level, when required.
- (ii) Send regular situation report to NEOC.

#### (d) <u>Aftermath</u>

- (i) Carry out cleaning operations.
- (ii) Oversee and provide support where required.

(iii) Cause district and municipal councils to carry out post disaster damage assessment in their areas of jurisdiction. Report to Ministry and NEOC with observations relating to any weaknesses of drainages network system, damage to public infrastructure and extent of immediate relief measure to be undertaken.

#### 1.6.10 Ministry of Gender Equality, Child Development & Family Welfare

- (a) General Preparedness before Cyclonic Season
  - (i) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
  - (ii) Provide any assistance, if required, to the Ministry of Local Government and any other ministry in identifying appropriate Emergency Shelters which are not located in any danger zones.
  - (iii) Assist MoSS NS&RI in arranging for the training of supervisors of emergency shelters in first aid by the MRCS. It is understood that this is a long term process and it is not expected to be implemented in the near future.
  - (iv) Assist MoSS NS&RI in ensuring that necessary administrative arrangements are put in place for the provision of amenities as per entitlement such as water and biscuits, hurricane lamps, etc when emergency shelters are opened with special attention to disabled persons and children.
  - (v) Assist MoSS NS&RI in ensuring that administrative arrangements are made with the MRCS for the provision of a minimum number of camp beds at each emergency shelter.
  - (vi) Assist MoSS NS&RI in arranging for a communication system at the Emergency Shelters.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Assist MoSS NS&RI in opening and manning of all emergency shelters.
- (ii) Assist supervisor of Emergency Shelters to arrange with Ministry of Health and Quality of Life for special needs medical assistance, if required.
- (iii) Assist MoSS NS&RI in arranging with the Government Information Service
   (GIS) for the broadcast of the approved list of Emergency Shelters through Radios and TV.

- (iv) Assist MoSS NS&RI in providing amenities as per entitlement such as water and biscuits, hurricane lamps, etc when emergency shelters are opened with special attention to disabled persons and children.
- (v) Assist MoSS NS&RI in ensuring that camp beds from MRCS are made available.
- (vi) Assist MoSS NS&RI in keeping records of displaced families (specifying male, female, children, elderly, etc.) and share list with Police.
- (c) <u>During Cyclone</u>
  - Assist MoSS NS & RI officers, as long as it is safe to do so, employed on essential cyclone duties to do their utmost to maintain communication and services.
  - (ii) Assist MoSS NS & RI to communicate the names and details of persons who have evacuated their houses and elected domicile in the Emergency Shelters to the NEOC.
  - (iii) Assist MoSS NS & RI in providing evacuees with water and biscuits on the first day and food vouchers at approved rate on the following days, in the event, the natural calamity persists. Food vouchers are provided for up to all clear (no cyclone warning).
  - (iv) Provide regular situation reports to Police and NEOC.
- (d) <u>Aftermath</u>
  - (i) Assist Police, MoSS NS & RI and other stakeholders, where required, in identifying the number of households that have been affected, number of people affected and displaced and in carrying out survey to assess extent of damage (loss of personal properties, loss of materials such as mattresses, furniture, etc).
  - (ii) Assist in updating the NEOC with the status of evacuees, who are in the Emergency Shelters.
  - (iii) Assist MoSS NS & RI in ensuring that evacuees are provided with water and biscuits in the event the natural calamity persists. Food vouchers are provided for up to all clear (no cyclone warning).
  - (iv) Assist MoSS NS & RI to arrange for medical check for special needs, elderly and others by the Ministry of Health and Quality of Life.

- (v) Assist MoSS NS & RI in arranging for the cleaning and disinfection of the Emergency Shelters, where required.
- (vi) Assist in providing regular situation reports to NEOC and Police.

#### 1.6.11 Ministry of Social Security, National Solidarity & Reform Institutions

#### (a) General Preparedness before Cyclonic Season

- (i) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (ii) Provide any assistance, if required, to the Ministry of Local Government and any other ministry in identifying appropriate Emergency Shelters which are not located in any danger zones.
- (iii) Arrange for the training of supervisors of emergency shelters in first aid by the MRCS. It is understood that this is a long term process and it is not expected to be implemented in the near future.
- (iv) Ensure that necessary administrative arrangements are put in place for the provision of amenities as per entitlement such as water and biscuits, hurricane lamps, etc when emergency shelters are opened with special attention to disabled persons and children.
- (v) Ensure that administrative arrangements are made with the MRCS for the provision of a minimum number of camp beds at each emergency shelter.
- (vi) Arrange for a communication system at the Emergency Shelters.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Opening and manning of all emergency shelters.
- (ii) Supervisor of Emergency Shelters to arrange with Ministry of Health and Quality of Life for special needs medical assistance, if required.
- (iii) Arrange with the Government Information Service (GIS) for the broadcast of the approved list of Emergency Shelters through Radios and TV.
- (iv) Provide amenities as per entitlement such as water and biscuits, hurricane lamps, etc when emergency shelters are opened with special attention to disabled persons and children.
- (v) Ensure that camp beds from MRCS are made available.
- (vi) Keep records of displaced families (specifying male, female, children, elderly, etc.) and share list with Police.
- (vii) Provide regular situation report to NEOC.

#### (c) During Cyclone

- Movement outside and the maintenance of services may become very difficult but officers employed on essential cyclone duties will do their utmost to maintain communication and services.
- (ii) Communicate the names and details of persons who have evacuated their houses and elected domicile in the Emergency Shelters to the NEOC.
- (iii) Provide evacuees with water and biscuits on the first day and food vouchers at approved rate on the following days, in the event, the natural calamity persists. Food vouchers are provided for up to all clear (no cyclone warning).
- (iv) Send regular situation reports to Police and NEOC.

#### (d) <u>Aftermath</u>

- (i) Assist Police, Ministry of Social Integration and Economic Empowerment and other stakeholders, where required, in identifying the number of households that have been affected, number of people affected and displaced and in carrying out survey to assess extent of damage (loss of personal properties, loss of materials such as mattresses, furniture, etc).
- (ii) Update the NEOC with the status of evacuees, who are in the Emergency Shelters.
- (iii) Ensure that evacuees are provided with water and biscuits in the event the natural calamity persists. Food vouchers are provided for up to all clear (no cyclone warning).
- (iv) Arrange for medical check for special needs, elderly and others by the Ministry of Health and Quality of Life.
- (v) Arrange for the cleaning and disinfection of the Emergency Shelters, where required.
- (vi) Send situation reports to NEOC and Police.

## 1.6.12 Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Islands.

#### (a) General Preparedness before Cyclonic Season

- (i) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (ii) Sensitise fishermen associations/cooperatives in accordance with the list established in the Fisheries Cyclone Emergency Operations Plan.
- (iii) Carry out sensitisation campaign in collaboration with the NDRRMC.

#### (b) <u>Upon Approach of Cyclone</u>

- (i) Alert with the collaboration of NCG, all small fishing boats in the near shore areas lagoon to come ashore in the shortest delay.
- (ii) Inform fishing vessels with communication facilities and located in the open sea to stay away.

#### (c) <u>During Cyclone</u>

- (i) Each Fisheries Post to provide assistance if required.
- (ii) All information collected to be channelled to the Director of Fisheries for necessary action and in turn to NEOC.
- (iii) Provide regular situation reports to NEOC.

#### (d) <u>Aftermath</u>

- (i) Carry out post disaster damage assessment to identify the damage caused to the fisherman community and resources.
- (ii) Survey to be carried out by each Fisheries Post.
- (iii) Provide timely situation reports to Police and NEOC.

#### **\*** Mauritius Ports Authority (MPA)

(a) General Preparedness before Cyclonic Season

Set up a Cyclone Emergency Committee with all Departmental Heads of the MPA.

#### (b) <u>Upon Approach of Cyclone</u>

- Ensure that all Bunkering/commercial activities are completed/ stopped in the port waters at outer roads and inner port. All ships are ready to leave the Port area for high seas.
- (ii) Secure MCT gantry cranes.
- (ii) Communicate with all vessels in the territory likely to be affected by sea waves to remain in the high seas.
- (iii) Release non-essential staff.
- (iv) Assist in evacuation through Port Emergency Services.
- (v) Release visitors and non-essential personnel.
- (vi) Monitor movement of high waves.
- (vii) Secure all MPA crafts with additional moorings in a sheltered location.
- (viii) All personnel to evacuate before impact time.

#### (c) <u>During Cyclone</u>

Activate internal emergency plans.

- (d) <u>Aftermath</u>
  - (i) Activate internal emergency plans.
  - (ii) Carry out post disaster damage assessment.
  - (iii) Re-instate port normalcy on a priority basis.
  - (iv) Send situation report to NEOC.

### 1.6.13 Ministry of Environment, Sustainable Development, and Disaster and Beach Management (Solid Waste Management Division)

#### (a) General Preparedness before Cyclonic Season

- (i) Set up Cyclone Emergency Committee (CEC) with all Local Authorities and Operators of waste facilities landfill, transfer stations and temporary dump sites.
- (ii) Ensure arrangement is made to manage the carting away of all post cyclonic waste to the landfill or to composting facilities as appropriate.
- (b) Upon Approach of cyclone

To convene members of the CEC to ensure proper readiness.

#### (c) <u>Aftermath</u>

- (i) Opening of waste facilities within 3hrs after lifting of all cyclonic warning.
- (ii) Receipt of post cyclonic waste at Transfer Station, landfill and temporary dump sites.
- (iii) Ensure that post cyclonic wastes are carried away to landfill/composting sites.
- (iv) Send situation report to NEOC.

#### 1.6.14 Ministry of Civil Service and Administrative Reforms

#### (a) General Preparedness before Cyclonic Season

Issue Circulars giving clear instructions on the release of staff, and consider any staggering release, if need be, in case a Class III Warning is going to be issued during working hours, in order to avoid any bottleneck in the public transport system and whether or not public officers should attend duty after a cyclone warning is issued or lifted during the course of a working day and, if so, at what particular time.

#### (b) <u>Upon Approach of cyclone</u>

- (i) Heads of Ministries/Departments and occupants of Government property are responsible for ensuring that satisfactory state of general maintenance is attained before the cyclonic season and fittings of doors, windows and shutters are secured. As regards the lopping of branches, they should liaise with the authorities concerned.
- (ii) If the release of staff is contemplated, this should be carried out in a staggered manner to avoid bottleneck in the public transport system. Prior to release of staff and closing of the offices, all computers are to be shut down, main power supply to be put off where applicable, doors and windows to be properly secured, external antennas are to be lowered/removed, loose items are to be secured, vehicles to be parked in safe parking areas, main water supply to be closed, flags removed and flag poles lowered, ensure an adequate stock of fuel for generators is available, etc..

- (iii) In case, standby staff is maintained, a sufficient stock of dry food and drinking water to be catered for.
- (c) <u>During Cyclone</u>
  - (i) Check all emergency lighting and power systems at Government institutions at regular intervals by the Energy Services Division. A special check should be made on the receipt of the first cyclone bulletin.
  - (ii) Heads of Ministries/ Departments to ensure that regular contact is maintained with staff if any on duty during the cyclonic period.
  - (iii) Keep contact with NEOC.
- (d) <u>Aftermath</u>
  - (i) Immediately after the passage of the cyclone, the Heads of Ministries/ Department to ensure that a restricted team of identified personnel will report at the office to carry out a preliminary survey to identify if the building and infrastructure has been damaged/ affected and inform the Ministry of Public Infrastructure.
  - (ii) Carry out post disaster damage assessment.

#### 1.6.15 Mauritius Red Cross Society (MRCS)

- (a) General Preparedness before Cyclonic Season
  - (i) Collaborate and identify how the Society can support the Republic of Mauritius emergency response capacity and also cooperate with the relevant authorities in examining whether or how existing laws and procedures could be strengthened along the lines of the International Disaster Recovery Law Guidelines.
  - (ii) Coordinate with the International Red Cross and Red Crescent Movement to facilitate collaboration of the Society in response to disasters in Mauritius.
  - (iii) Training of supervisors of emergency shelters in first aid.
  - (iv) Assist the MoSS NS & RI in equipping each emergency shelter with a minimum number of camp beds.

- (b) <u>Upon Approach of cyclone</u>
  - (i) Act as per internal SOPs.
  - (ii) Ensure with MoSS NS & RI that camp beds are available at each emergency shelters.

#### (c) <u>During Cyclone</u>

Act as per internal SOPs.

#### (d) <u>Aftermath</u>

- (i) Provide emergency relief services at designated emergency shelters.
- (ii) Coordinate with the International Red Cross and Red Crescent Movement to facilitate collaboration of the Society in response to disasters in Mauritius.
- (iii) Assist in relief operations.

#### 1.6.16 Joint Economic Council/Mauritius Employers Federation

#### (a) General Preparedness before Cyclonic Season

- (i) Issue Circulars giving clear instructions on the release of staff, and consider any staggering release, if need be, in case a Class III Warning is going to be issued during working hours, in order to avoid any bottleneck in the public transport system; and communicate well in advance the measures in place for staff to be called or released in the event of the approach or of a cyclone warning being lifted during working hours.
- (ii) Sensitise employees.
- (iii) Ensure all organisations have developed their Business Continuity Plan (BCP).

#### (b) <u>Upon Approach of cyclone</u>

- Ensure a permanent communication with all organisations for distribution of warning bulletins.
- (ii) Ensure that all organisations have activated their respective cyclone emergency plans and completed the primary precautions.
- (iii) In case of staff release, arrange in collaboration with the NDRRMC for staggering release in order to avoid a huge crowd at the same time.

#### (c) <u>During Cyclone</u>

Keep a team of essential staff to ensure that all properties are well protected and secure before closing the organization.

#### (d) <u>Aftermath</u>

- (i) Activate BCP,
- (ii) Cause all organisations to carry out a post disaster damage assessment and provide same to the NEOC.
- (iii) Provide necessary resources as required for cleaning of roads and removal of obstructions after the passage of the cyclone.

\*\*\*\*\*\*\*\*End of Scheme\*\*\*\*\*\*

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# Heavy Raín/ Torrentíal Raín/ Floodíng Emergency Scheme

Heavy Rain/ Torrentia

Rain/ Flooding Emergency Scheme



National Disaster Risk Reduction and Management Centre (NDRRMC) Line Barracks, Port-Louis

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### 2.0 HEAVY RAINFALL/ TORRENTIAL RAIN/FLOODING EMERGENCY SCHEME

#### 2.1 Introduction

The Mauritius Meteorological Services monitors weather conditions and issues warnings of heavy rainfall, indicating as closely as possible when the event is likely to occur and its possible impacts. Messages will also be issued giving general advice on precautions to be taken to minimise the loss of life and damage to property, followed by supplementary information and advice as the situation develops.

During a potentially heavy rainfall day, the MMS will continuously assess the likelihood of significant rain so as to decide on the need to issue torrential rain bulletin and flooding/flash floods as well.

On the same breath, the Water Resources Unit will monitor and provide information on the water level in rivers, dams and reservoirs to MMS and the NDRRMC at regular intervals.

#### 2.1.1 Torrential Rain Conditions

Torrential rain conditions are said to exist when the prevailing weather in Mauritius or Rodrigues produces **100 millimetres** of widespread rains in **less than 12 hours** and that this heavy rain is likely to continue for several hours. Torrential rain may cause flash floods, urban floods or water accumulations in flood prone areas. It may also cause overflow of rivulets and streams or even major rivers leading to riverine flooding which may occur downstream where it may not be necessarily raining heavily.

#### 2.1.2 Flooding /Flash Floods Conditions

(a) In case heavy rain has fallen or is expected to fall generally and is likely to continue, the Mauritius Meteorological Services will provide flood warning of a general nature but with emphasis on risks of flooding in known low-lying and poorly drained areas. Such warning will be site specific as far as practicable.

- (b) In assessing conditions for the issue of flood warnings, the 100 mm criterion will continue to be valid for torrential rain but for flood warnings it is necessarily subject to the following, as appropriate:-
  - (i) nature of the preceding rainfall.
  - (ii) state of the rivers.
  - (iii) ground water level.
  - (iv) permeability of the soil.
  - (v) evacuation rate of accumulating water.
  - (vi) prevailing weather conditions in the vicinity of Mauritius.
  - (vii) any other such relevant factor.

#### 2.1.3 Purpose of heavy rainfall/torrential rain/flooding scheme

This scheme summarises the Government's alerting systems and organisational framework for responding to heavy rainfall/torrential rain/flooding situations. It provides general roles and responsibilities of:

- (a) All organisations.
- (b) Alerting agency.
- (c) Coordinating agencies at national and municipal/districts council levels.
- (d) Main response agencies.
- (e) Other stakeholders.

Under the following conditions:

- (a) General Preparedness before Rainy Season.
- (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding.
- (c) During Heavy Rainfall/Torrential Rain/Flooding Conditions.
- (d) Aftermath.

In addition to this scheme, each department will have its own detailed standard operating procedures.

### 2.1.4 Distribution of Heavy Rainfall/Torrential Rain/Flooding Bulletins

Heavy rainfall/torrential rain/flooding information is disseminated to the public by the MMS through the MBC, the Press, Private Radios the NDRRMC, the Police and the telephone system on Telmet on 8996 and Telmet mobile on 171 and Audiotex on 3026070.

The MMS is responsible for distribution of bulletins to the following organisations/Officials:-

- (a) The Minister of Environment, Sustainable Development, and Disaster and Beach Management
- (b) The Secretary to Cabinet & Head of the Civil Service, Prime Minister's Office
- (c) The Secretary for Home Affairs, Prime Minister's Office
- (d) All Ministries
- (e) Mauritius Police Force(PIOR)
- (f) The Government Information Service
- (g) The NDRRMC
- (h) The Mauritius Fire and Rescue Service
- (i) The Department of Civil Aviation
- (j) The MBC
- (k) The Mauritius Telecom Call Centre (Telmet)
- (l) The Mauritius Ports Authority
- (m) The Airports of Mauritius Ltd
- (n) The Central Electricity Board
- (o) The Central Water Authority
- (p) The Water Resources Unit
- (q) The Waste Water Management Authority
- (r) The Road Development Authority
- (s) The Rodrigues Regional Assembly
- (t) The Airport of Rodrigues Ltd
- (u) All Private Radios

#### 2.2 General Responsibilities and Actions

#### 2.2.1 All Organisations

- (a) General Preparedness before Rainy Season
  - (i) Ensure that all staff is familiar with the procedures of their Contingency Plans/SOP's for heavy rainfall, torrential rainfall and flooding situations.
  - (ii) Develop Service and/or Business Continuity Plans to ensure that organisations are able to operate during or resume full operations immediately after heavy rainfall and flooding.

- (iii) Ensure as far as possible that all appropriate risk reduction structural measures like drainage system, building design, waterproofing of building, etc are implemented within their respective organisations.
- (iv) Relevant torrential rains, heavy rainfall and flooding posters supplied by the GIS should be displayed in conspicuous places for the information of staff and the general public.
- (v) Maintenance & Construction of Drains:

Pending the setting up of a National Land Drainage Agency to take over responsibility for the construction, cleaning and maintenance of the drainage systems across the country, the Local Authorities (Municipal and District Councils) under the overall supervision of the Ministry of Local Government will continue to be responsible for the construction and maintenance of drains on non-classified roads whereas the Road Development Authority shall be responsible for drains along classified roads. These bodies should ensure that drains are constructed to the desired standard as far as possible.

The National Development Unit now under the Prime Minister's Office through the National Land Drainage Framework Committee will carry out the following:

- coordinate and monitor planning development and management of drain projects and associated infrastructure projects
- consult stakeholders, look into proper design, norms and standards in relation to appropriate drain systems to be put in areas subject to flooding, water accumulation
- elaborate a viable Land Drainage Programme and follow up on implementation of the Drain Programme
- consult stakeholders, facilitate proper maintenance and upkeep of drain systems
- > recommend preventive measures to mitigate flooding.

#### (b) Upon MMS forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Ensure that all MMS heavy rainfall/torrential rain/flooding forecasts and warnings received are properly distributed within their organisations.
- (ii) Keep watch upon evolution of weather situation.
- (iii) Activate service/business continuity plan, if the need arises.

#### (c) During Torrential Rain/Heavy Rainfall

During heavy rainfall which may be followed by issue of Torrential rain bulletins and/or flood warnings, Heads and occupants of Ministries/ Departments of Government buildings, to ensure that all preparedness measures have been completed, remain on the alert and adhere to all precautionary instructions.

#### (d) <u>Aftermath</u>

- (i) Carry out а post disaster damage assessment following heavy rainfall/torrential rain and flooding pertaining to their respective organisation/area of responsibility and submit same to the NEOC/NDRRMC.
- (ii) Where applicable, immediate steps would be taken by Heads of Ministries/Departments to:
  - (1) Clear roads.
  - (2) Restore public transport.
  - (3) Restore water supplies.
  - (4) Restore essential telephones.
  - (5) Restore power and lighting.
  - (6) Restore sewerage system.
  - (7) Re-open the Port.
  - (8) Re-open the Airport.
  - (9) Assess damage to food stocks, livestock, agriculture & infrastructure.
  - (10) Obtain and provide funds for clearing of debris for areas of jurisdiction of municipal and district councils
  - (11) Provide and maintain sanitary arrangements at Emergency Shelters and clean and disinfect these later.
  - (12) Obtain and provide funds for emergency works to be carried out.

- (13) Take appropriate steps to have any damaged infrastructure of Ministries/Departments/Organizations repaired within the shortest delay.
- (14) Take necessary steps to restore optimal operations.
- (15) Forward regular situation reports to the NEOC.

# 2.2.2 General precautions to be taken by public during heavy rainfall/torrential rain/flooding

- 1. Avoid venturing near flooded rivers and streams and overflowing bridges.
- 2. Avoid taking long trip in vehicles, especially in flood prone areas.
- 3. Do not cross flooded bridges or submerged areas either by foot or by vehicles.
- 4. In flood prone areas, secure your belongings and properties. If the water level continues to rise, move to safe place or evacuate the area if necessary.
- 5. Avoid going near hill or mountain slopes prone to landslide.
- 6. Avoid parking on drains.

#### 2.3 Warning/Alerting Agency

#### 2.3.1 Mauritius Meteorological Services

The MMS is the main warning/alerting agency of the Republic of Mauritius for heavy rainfall, torrential rain and flooding/flash floods.

#### (a) General Preparedness before Rainy Season.

- (i) Conduct sensitization programmes on heavy rainfall/torrential rain/flooding targeting the community, schools, elderly, and other vulnerable groups through MMS website, TV, radios and press in collaboration with the NDRRMC, GIS and MBC.
- (ii) Assist Municipal and District Councils in the planning, preparation and conduct of heavy rainfall/torrential rain/flooding simulation exercises as per the NDS Simulation Calendar.
- (iii) Setting up of automatic weather stations in major flood prone areas within a reasonable time frame.

- (b) Forecast of Heavy Rainfall/Torrential Rain/Flooding
  - (i) MMS will make 7-day probabilistic weather forecast for Mauritius and a 5day weather forecast for Port Louis with special consideration to heavy rainfall/torrential rain/flooding.
  - (ii) Issue bulletins on heavy rainfall/torrential rain and flood well in advance to allow for precautionary measures.
- (c) <u>During Heavy Rainfall/Torrential Rain/Flooding Condition</u>
  - (i) Issue regular bulletins of the situation informing the public of the evolution of the heavy rain conditions which may lead to torrential rain and flooding/flash floods/urban floods.
  - (ii) In case torrential rain conditions occur during school days, the NDRRMC, the Ministry of Education and Human Resources, Tertiary Education and Scientific Research will be advised accordingly.
  - (iii) Issue torrential rains bulletins giving the intensity and estimated duration of the rain event at regular intervals.
  - (iv) Regularly intervene on TV and Radio to provide real time information to the general public in English, French and Creole.
  - (v) Special attention to be given to the region of Port Louis with bulletins of heavy rains, torrential rains, flooding, heavy swells, high waves, tidal waves and sea tide. Rainfall data of the automatic weather stations at Line Barracks, Champs de Mars and Domaine des Pailles to be transmitted to NEOC, PIOR and MBC at the shortest possible intervals.
  - (vi) Continue to issue bulletins to the NEOC, of real time situation, general forecasts on the heavy rainfall/torrential rain/flooding situation together with precautionary measures.
  - (vii) Provide rainfall data to NDRRMC/NEOC at shortest possible time intervals.

#### (d) <u>Aftermath</u>

Issue termination bulletins and as well as informing the public of the continuous risks and precautions to be taken against water accumulation and other adverse weather conditions which may still affect the islands.

#### 2.4 Coordinating Bodies

#### 2.4.1 National Level

#### Cabinet

Depending upon the heavy rainfall/torrential rain/flooding situation, the Cabinet may be convened at the discretion of the chairperson to take strategic decisions.

#### National Disaster Risk Reduction and Management Council

#### (a) General Preparedness before Rainy Season

The National Disaster Risk Reduction and Management Council may be convened by the Minister of Environment, Sustainable Development, and Disaster and Beach Management, prior to the rainy season to review and, if necessary, to amend this National Disasters Scheme.

#### **Crisis Committee**

#### (a) <u>Upon MMS forecast of Heavy Rainfall/Torrential Rain/Flooding</u>

Depending upon the magnitude and severity of forecasts of heavy rainfall/torrential rain/flooding, the Crisis Committee may, at the discretion of the Minister of Environment, Sustainable Development, and Disaster and Beach Management, meet at the NDRRMC, Line-Barracks, Port Louis or the alternate NEOC at SMF Headquarters, Vacoas to take stock of:

- 1. the general situation throughout the island (obtained mainly from the NEOC/NDRRMC and Police).
- 2. the general situation at the port and airport and updates on arrivals and departures.

#### (b) <u>During Heavy Rainfall/Torrential Rain/Flooding Situation</u>

Depending upon the magnitude and severity of forecasts of heavy rainfall/torrential rain/flooding, the Crisis Committee may, at the discretion of the Minister of Environment, Sustainable Development, and Disaster and Beach Management, meet at the NDRRMC, Line-Barracks, Port Louis or the alternate NEOC at SMF Headquarters, Vacoas to monitor :

1. general situation throughout the island (obtained mainly from the NEOC/NDRRMC and Police).

- 2. general situation at the port and airport and updates on arrivals and departures.
- 3. measures taken to save life and protect property.
- (c) <u>Aftermath</u>

(i) The Crisis Committee may at the discretion of the Minister of Environment, Sustainable Development, and Disaster and Beach Management, meet at the NDRRMC, Line-Barracks, Port Louis or the alternate NEOC at SMF Headquarters, Vacoas as soon as possible, after the termination of heavy rainfall/torrential rain/flooding conditions. The main functions of the Crisis Committee will be:-

- 1. To collect and present to the Cabinet information on:-
  - (1) general situation throughout the island (obtained mainly from the NEOC/NDRRMC and Police).
  - (2) conditions of Government Departments (obtained from Permanent Secretaries and other heads of Ministries/ Departments/ Organisations).
  - (3) damage of non-government property (obtained mainly from LEOC/LDRRMC).
  - (4) general situation at the port and airport and updates on arrivals and departures.
- 2. To make recommendations on any relief measures immediately required.
- 3. To ensure that immediate executive action is taken on the decisions of the Cabinet.
- To provide an accessible reporting point for Heads of Ministries/Departments/ Organizations primarily concerned in the work of cleaning up, relief and reconstruction.
- (ii) Crisis Committee will ensure with concerned ministries and departments that:-
  - 1. adequate information is made available to the Cabinet.
  - 2. immediate executive action is taken to carry out the decisions of the Cabinet.
  - there is a flow of information and instructions to Head of Ministries/Departments primarily concerned with the work of cleaning up, relief and reconstruction.

# National Disaster Risk Reduction and Management Centre (NDRRMC)/ National Emergency Operations Command (NEOC)

Upon confirmation of the occurrence of heavy rainfall/torrential rain/flooding, the NDRRMC will take the following actions:-

- The NEOC will be activated and will become operational. NEOC will be responsible for taking charge of the management of the situation in coordination with concerned LEOC's and DOCR's.
- 2. Depending on the gravity of the situation NEOC will be activated at Level I, II or III.
- 3. In case the NEOC, Line Barracks is at risk, the alternate NEOC at SMF Headquarters, Vacoas, will be activated.

#### (a) General Preparedness before Rainy Season

- (i) Coordinate and monitor preparedness actions at national level by responsible organisations.
- (ii) Coordinate the implementation of appropriate risk reduction structural and non-structural measures against flooding by responsible ministries and departments.
- (iii) Coordinate with local authorities to establish an annual simulation calendar.
- (iv) Ensure that heavy rainfall/torrential rain/flooding simulation exercises are planned and conducted by the Local Disaster Risk Reduction and Management Committee in different regions as per the annual simulation calendar. The exercises will involve all relevant Ministries and Departments and include the testing of the right means of communication for warning people at risk. Strengths and weaknesses should be identified and corrective measures should be taken as required.
- (v) Coordinate sensitization programmes by the relevant organisations, targeting the community, schools, elderly, and other identified as vulnerable to heavy rainfall/torrential rain/flooding through, TV, radios and press.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Activate the NEOC and convene its members, depending upon the situation.
- (ii) Inform the chairperson of the crisis committee and other Senior Officials.
- (iii) Activate Incident Action Plan at national level.
- (iv) Issue of communiqué to advise public on general safety precautions.

- (v) Ensure that concerned LEOCs are activated.
- (vi) Activate alternate NEOC in Vacoas, in case NEOC Port Louis cannot be activated for technical, operational or any other reason.
- (vii) Issue situation report to Senior Officials and members of the Council/Crisis Committee.

#### (c) During Heavy Rainfall/Torrential Rain/Flooding Conditions

NEOC will coordinate actions with other stakeholders for the following:

- (i) Deployments of first responders and concerned stakeholders on ground.
- (ii) Water level rise in rivers, canals, drains, reservoirs by Police, NDU & WRU.
- (iii) Landslide monitoring in landslide prone areas by MPI/LMU.
- (iv) Activation of traffic diversion plans by police and keep road users informed through 'Info Route'.
- (v) Evacuation of those at risk in flood prone areas and prevent access to these areas by first responders.
- (vi) Opening of emergency shelters if required.
- (vii) Execution of emergency plans for below ground level facilities (parking, subway, underpass, stores, etc.).
- (viii) Securing of hazardous materials through Department of Environment, MoHQL and Radiation Protection Authority (RPA) as applicable.
- (ix) Activation of emergency plans to secure radiological facilities by RPA.
- (x) Taking of appropriate measures (sandbagging, consolidation, reinforcement, etc.) against flooding at key government facilities and buildings.
- (xi) Alerting the public on impending danger through radio, TV, communiqués, mobile service providers.
- (xii) SAR, response interventions of emergency services and support to agencies as may be required on ground.
- (xiii) Liaison with LEOC's, PIOR, DOCR's, MRFS and MoHQL for general situation overview.
- (xiv) Issue communiqués jointly with Government Information Services (GIS), through MBC TV and private radios to alert the public on general public safety precautionary measures to be taken.

- (xv) Send regular situation reports to Senior Officials, members of Council/Crisis Committee, Embassies/High Commission and International Organisations represented locally.
- (*d*) <u>Aftermath</u>
  - (i) Continue coordination and monitoring SAR, response interventions of emergency services and supporting agencies that may be required on ground.
  - (ii) Ensure that the affected population safely return back to their places of residences.
  - (iii) Ensure that a Post Disaster Damage Assessment is carried out at national level through departments and ministries and prepare consolidated report for the Crisis Committee and other senior officials.
  - (iv) Identify needs and coordinate cleaning up, relief and re-establishment of essential services.
  - (v) Issue communiqués and make press briefs.
  - (vi) Prepare and send regular situation reports to the members of the Council/Crisis Committee, Senior Officials and Embassies/High Commission and International organisations represented locally.

#### 2.4.2 Municipal/District Councils Level

### Local Disaster Risk Reduction & Management Committee/Local Emergency Operations Command (LEOC)

- (a) General Preparedness before Rainy Season
  - (i) Implementation of appropriate risk reduction structural and non-structural measures in coordination with responsible ministries and departments.
  - (ii) Cleaning and maintenance of all drains, canals, beds and banks of lakes, rivulets and streams.
  - (iii) Responsible for the construction of drains along non-classified roads.
  - (iv) Prior the issue of building and land use permit, carry out audit and mapping of flood prone areas, inadequate drainage system and vulnerable groups. Share the information with NDRRMC, and if required to Police, MFRS and the MMS.

- (v) Survey of rock fall prone sites with concerned authorities followed by appropriate remedial actions such as 'purging', counter measures, etc...
- (vi) Carry out public awareness campaigns jointly with NDRRMC, Police, NDU and RDA on risks associated with flooding, rock fall and landslide.
- (vii) Sensitisation followed by enforcement of legislation against illegal dumping in rivers, canals and drains in collaboration with Police de L'Environnement.
- (viii) Enlist local communities support through adequate sensitization, information, exposure and training so that they are pro-actively involved in the preventive, remedial, rescue and relief operations put in place by the authorities.(e.g. CDRT of Grand Sables).
- (ix) Review urban and rural development building plans taking into consideration the need for the provision of adequate drainage.
- (x) Compile appropriate documentation (audio-visual aids, photographs, handouts etc.) of flood events to promote public awareness.
- (xi) Promote the concept of self-help and mutual help through training of the local communities at risk.
- (xii) Plan, prepare and conduct heavy rainfall/torrential rain/flooding simulation exercises as per the NDS Simulation Calendar.
- (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding
  - (i) Keep watch of weather bulletins, ensure that bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated to members of the LDRRM Committees who have to be informed to get ready to report at the LEOC, if required.
  - (ii) Activate LEOC, in consultation with NDRRMC/NEOC for coordination and monitoring of all operations with DOCR's and other stakeholders depending upon forecasted weather conditions.
  - (iii) Ensure opening of emergency shelters where required.
  - (iv) Ensure emergency plans are executed for below ground level facilities (parking, subway, underpasses, stores ....) within their area of jurisdiction.
  - (v) Ensure that the MoE, SD, and D&BM with the collaboration of MoHQL, the Ministry of Local Government and Outer Islands, the Ministry of

Labour and Industrial Relations and The Radiation Protection Authority, have taken necessary actions to secure Hazardous materials.

- (vi) Ensure that countermeasures (e.g. sandbagging, consolidation of weak structures, etc) are taken against flooding.
- (vii) Issue of communiqué to advise local communities within their area of jurisdiction on general safety precautions, if required.
- (viii) Provide regular situation report to the NEOC.

#### (c) During Heavy Rainfall/Torrential Rain/Flooding Conditions

- (i) Monitor and coordinate actions of first responders and other stakeholders.
- (ii) Mobilise resources and equipment, as far as practicable, to support operations on grounds.
- (iii) Deploy all necessary materials, as far as practicable, to assist in evacuation and SAR operations jointly with relevant stakeholders.
- (iv) Provide regular situation report to the NEOC.
- (d) <u>Aftermath</u>
  - (i) Support SAR activities, cleaning/opening of roads, and removal of obstruction.
  - (ii) Ensure restoration of basic domestic utilities (power, water and telecommunication).
  - (iii) Ensure continuous support, coordination and monitoring of all relief operations.
  - (iv) Ensure emergency shelters are available, where required.
  - (v) Carry out post disaster damage assessment.
  - (vi) Provide NEOC with timely consolidated report.

#### 2.5 Main Response Agencies

#### 2.5.1 Mauritius Police Force

- (a) General Preparedness before Rainy Season
  - (i) Ensure that all Police vehicles are equipped with siren and loud hailers and these are regularly checked and maintained in good working order.

- (ii) Ensure that all disaster management equipment, kits and resources are fully operational and always in ready position.
- (iii) Ensure that personnel are trained for emergency response and relief operations.
- (iv) Assist Municipal and District Councils in the planning, preparation, conduct and participate in heavy rainfall/torrential rains/flooding simulation exercises as per the NDS Simulation Calendar.
- (v) Sensitise the local community in disaster management through community policing forums.
- (vi) Carry out public safety awareness campaigns and sensitisation programmes.
- (vii) Develop emergency response plans which will include evacuation from flood prone areas and Traffic Plans.
- (viii) Sensitisation and enforcement of Environment Protection Act (EPA) jointly with MoE, SD, and D&BM/Police de L'Environnement against illegal dumping in rivers, canals, drains and flood prone areas.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Be ready to activate internal emergency response plans for torrential rain and inform all officials as per **Annex III**.
- (ii) Pay special attention to situation in Port Louis region.
- (iii) Keep watch of weather situation and monitor water levels in flood prone areas, rivers, canals, drains through patrols, CCTV where available, etc.
- (iv) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated to all police divisions and branches.
- (v) Advise organisations within respective police divisional areas having below ground level facilities (parking, subways, storage, etc.) to remain on alert and be ready to execute emergency plans.

#### (c) During Heavy Rainfall/Torrential Rain/Flooding Conditions

- (i) Keep officials as per **Annex III** informed upon bulletins issued by MMS.
- (ii) Coordinate and monitor all Police deployments through police divisional Ops Rooms (which will be converted to Divisional Disaster Operations and Coordination Rooms/DOCRs) and regularly report to the NEOC.

- (iii) Monitor through CCTV, where applicable, the general situation in known flood prone areas.
- (iv) DOCR's to coordinate first responders deployments at division level.
- (v) Execute tasks as per Port Louis flood response plan (section 8.0 of NDS 2015 Edition).
- (vi) Organise and provide resources for evacuation and search and rescue.
- (vii) Arrange for a survey on conditions of roads throughout the island and relay information to NEOC, MBC and private radios.
- (viii) Arrange for survey near schools, colleges and other educational institutions and share information with NEOC.
- (ix) Mobilise and pre-position Police/SMF/GIPM/MARCOS/NCG divers and lifesavers so as to be ready for quick deployment.
- (x) Organise with assistance of the relevant authorities and Mauritius Employers' Federation, an orderly system for commuting of employees from work-place to their residence through:
  - 1. Release from work in a staggered manner or
  - 2. Diversion of traffic to avoid flooded areas.
- (xi) Central messaging or communication service shall ensure exchange of information between family members of the public, through radio and other communication or messaging services.
- (xii) Assist in the transmission of regular MMS rainfall data from weather stations, including those based at Line Barracks and at National Coast Guard, Fort William.
- (xiii) Sanitising/evacuate/close below ground level facilities. Prohibit access until the situation is normalised and is normalise and rendered safe.
- (xiv) Ensure underpasses are evacuated before getting flooded and are closed to public. Arrange for pedestrians to cross the motorways safely where underpasses are closed.
- (xv) Activate traffic diversion plan. Advise public on precautions and safety.
- (xvi) Send regular situation report to NEOC.
- (d) Aftermath
  - Ensure that all main roads are cleared island-wide and in particular, those giving access to emergency services.

- (ii) Arrange for a general post disaster damage assessments throughout the island by Police Divisions/Branches/Units/Stations/Posts and helicopters surveys.
- (iii) With the assistance of MoSS NS & RI, MoSI & EE and other stakeholders, where required, identify the number of households that have been affected, number of flood victims/people affected and displaced and carry out survey to assess extent of damage (loss of personal properties, loss of materials such as mattresses, furniture, etc). Report to be copied to the NEOC.
- (iv) Deploy police to prevent looting and pilferage

#### 2.5.2 Mauritius Fire and Rescue Service

#### (a) General Preparedness before Rainy Season

- (i) Carry out in coordination with the NDRRMC, targeted community awareness campaigns to sensitise the community, schools, elderly, and those identified as vulnerable to heavy rainfall/torrential rains/flooding situations on safety precautions and measures need to be taken.
- (ii) Ensure that sufficient resources and equipment are available for intervention during heavy rainfall/torrential rain/flooding.
- (iii) Assist Municipal and District Councils in the planning and preparation of simulation exercises and participate in the exercise.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of prevailing weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated to all fire stations.
- (iii) Activate internal SOPs.
- (iv) Special attention is to be given to Port Louis region.

- (i) Mobilise available resources.
- (ii) Attend to requests as long as it is safe and possible to do so.
- (iii) Carry out search, rescue and evacuation.

- (iv) Carry out pumping activities in flooded areas, buildings, etc... where required.
- (v) Execution of tasks as per Port Louis flood response plan (section 8.0 of NDS 2015 Edition).
- (vi) Keep LEOC, DOCR's and NEOC informed on deployments and operations.
- (viii) Send regular situation report to NEOC.

#### (d) <u>Aftermath</u>

- (i) Mobilise all personnel to provide assistance, SAR and pumping activities to affected areas.
- (ii) Keep LEOC, DOCR's and NEOC informed on deployments and operations.
- (iii) Carry out Post Disaster Damage Assessment and report to NEOC.

#### 2.5.3 Ministry of Health and Quality of Life

- (a) General Preparedness before Rainy Season
  - Participate in the planning, preparation and conduct of flood simulation exercise at Municipal and District Councils levels as per the NDS Simulation Calendar.
  - (ii) Carry out sensitisation campaigns on public health issues.
  - (iii) Ensure Service Continuity Plans and emergency plans are up to date.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of prevailing weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated to all MoHQL departments.
- (iii) Activate Hospital Emergency Preparedness, Response and Communication Plans and service continuity plans.
- (iv) Special attention is to be given to situation in Port Louis region.

- (i) Provide emergency medical assistance at the nearest safest point for search and rescue operations.
- (ii) Protect key facilities of hospital and apply emergency plans.

- (iii) Keep watch on level of rain water rise/accumulation within hospital premises.
- (iv) Monitor rain water level in below ground level facilities. Sanitise/evacuate and close below ground facilities. Prohibit access until situations is safe again.
- (v) Execution of tasks as per Port Louis flood response plan (section 8.0 of NDS 2015 Edition).
- (vi) In case of hospital ground floor flooding, arrange for evacuation of outpatients and in-patients to safe location.
- (vii) Arrange for availability of alternate medical facilities if any hospital experiences severe flooding situation.
- (viii) Ensure that Hospital medical facilities remain available as per service continuity plan.
- (ix) Provide special needs medical assistance to evacuees upon request from supervisors of Emergency Shelters, when required.
- (x) Communicate to public alternate medical facilities available at nearby unaffected hospitals/area health centres.
- (xi) Issue communiqué on public health and other related matters to the attention of general public.
- (xii) Pre-positioning of maximum number of ambulances at strategic locations for quick casualty evacuation.
- (xiii) Requisition for the Police armoured vehicles for casualty evacuation in flooded environment,
- (xiv) Send regular situation report to NEOC.
- (d) <u>Aftermath</u>
  - (i) Provide all possible medical support.
  - (ii) Provide psychological and psychosocial support to victims.
  - (iii) Release communiqués regarding safe drinking water, removing stagnant water to avoid mosquito proliferation and other public health messaging.
  - (iv) Carry out post disaster damage assessment and report to NEOC with prompt and accurate information on number of casualty evacuated, damage to medical infrastructure and extent of immediate relief measures undertaken.

#### 2.6 Other Stakeholders

#### 2.6.1 Prime Minister's Office

#### ✤ National Development Unit

#### (a) General Preparedness before Rainy Season

- (i) To ensure the following through the Land Drainage Framework Committee:
- 1. coordinate and monitor planning, development and management of drains and associated infrastructure projects.
- 2. carry out consultation with stakeholders, to look into the proper design, norms and standards in relation to the drainage systems in areas subject to flooding, water accumulation.
- 3. produce a viable and elaborate Land Drainage Programme and follow up on implementation.
- 4. carry out consultation with stakeholders to facilitate proper maintenance and upkeep of drainage systems.
- (ii) Construct drains to mitigate flooding.
- (iii) Ensure that drains constructed under its purview meet the required standard.
- (iv) Ensure that monthly coordination meetings are held to monitor progress in construction and maintenance of drains.
- (v) Carry out survey of existing drains at regular intervals for the benefit of the Drains Management Committee (under the Ministry of Local Government).

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of prevailing weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated to all NDU departments.
- (iii) Be available to support the NEOC in case required.

- (i) Mobilise and remain on standby.
- (ii) Execution of tasks as per Port Louis flood response plan (section 8.0 of NDS 2015 Edition), if required.

- (iii) Advise and arrange for emergency remedial actions, as long as it is safe to do so.
- (iv) Send regular situation report to NEOC.

#### (d) <u>Aftermath</u>

NDU to carry out post disaster damage assessment and report to parent Ministry and NEOC with observations relating to any weaknesses of drainages network system, damage to public infrastructure and extent of immediate relief measures to be undertaken.

#### Government Information Services (GIS)

#### (a) General Preparedness before Rainy Season

Produce and distribute in collaboration with MMS, NDRRMC, MBC and Ministry of Education and Human Resources, Tertiary Education and Scientific Research, at regular intervals, posters and other sensitization materials, reminding the population of the potential threat during heavy rainfall/torrential rain/flooding and precautions to be taken.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of prevailing weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the department.
- (iii) Special attention to be given to situation in Port Louis region.
- (iv) Assist NEOC as required.

- (i) Assist NEOC at national level.
- (ii) Prepare and issue in liaison with NEOC, MBC and Police heavy rainfall/torrential rain/flooding communiqués to inform the population on safety precautions to be taken.
- (iii) Prepare press briefs.

(d) <u>Aftermath</u>

- (i) Prepare and issue Communiqués on precautions to be taken immediately after heavy rainfall/torrential rain/flooding conditions.
- (ii) Prepare Press Communiqués to be released by the NEOC.
- (iii) Prepare press briefs to be released by the NEOC, if required.

#### 2.6.2 Ministry of Tourism and External Communications

#### **\*** Tourism Authority

#### (a) General Preparedness before Rainy Season

- (i) Sensitize tourists on safety precautions to be taken during heavy rainfall/torrential rain/flooding conditions.
- (ii) Participate in mock drills during awareness campaigns.
- (iii) Ensure that contingency plan/emergency plan/SOP's for heavy rainfall/torrential rain/flooding are in place and shared with all stakeholders including tourism enterprises and pleasure crafts operators.
- (iv) Implement appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (v) Promote development of Service/Business Continuity Plans by all tourism sector stakeholders.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Activate Crisis Cell.
- (ii) Keep watch of prevailing weather situation.
- (iii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated (with all the Ministry/Department, tourism enterprises, Tourism Authority, AHRIM, etc) with all stakeholders of the tourism industry.
- (iv) Advise hotels, bungalows owners, tour operators, restaurant owners and other tourism enterprises and pleasure craft operators to sensitize tourists on safety precautions to be taken during heavy rainfall/torrential rain/flooding prevailing conditions.
- (v) Special attention is to be given to situation in Port Louis region.
- (vi) Assist NEOC at national level.

#### (c) During Heavy Rainfall/Torrential Rain/Flooding Conditions

- (i) Assist NEOC at national level.
- (ii) Activate contingency plans and SOP's depending upon situations.
- (iii) Ensure that pleasure crafts operators activate their contingency plans and SOP's depending upon situation and inform tourists/guests of the prevailing weather situations.
- (iv) Advise all hotels, bungalows owners, tour operators and other relevant stakeholders to inform tourist/guests of the rainfall/torrential rain/flooding prevailing conditions.
- (v) Advise relevant stakeholders (Tourism Authority, AHRIM) to ensure safety of Tourists, Tour Operators, Pleasure Crafts Operators and Tourism Enterprises.
- (vi) Issue communiqué for the safety of tourists, tour operators, tourism enterprises, restaurants.
- (vii) Depending upon situation, hotels, bungalows owners, tour operators, restaurant owners and other tourism enterprises and pleasure craft operators to:
- 1. assist in evacuation of guests and ensure safe transportation to safe zones, if required.
- 2. inform relevant authorities including the Tourism Authority and relevant embassies in case of relocation of tourists.
- 3. arrange for alternate residences to be arranged for relocation of tourists in safe zones.
- (viii) Execute of tasks as per Port Louis flood response plan (section 8.0 of NDS 2015 Edition), if required.
- (ix) Send regular situation report to NEOC.

#### (d) <u>Aftermath</u>

Send post disaster damage assessment to Ministry and NEOC.

#### Department Civil Aviation (DCA)

(a) <u>General Preparedness before Rainy Season</u>

In line with provisions of DCA Cyclone Procedures.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- Examine the report from the Mauritius Meteorological Services and keep the aeronautical community informed of any significant weather and its effect on the runway and facilities at the Airport.
- (ii) Apply DCA procedures as applicable.
- (ii) Keep NEOC informed of the operational situation of airport.

#### (c) <u>During Heavy Rainfall/Torrential Rain/Flooding Conditions</u>

- To liaise with airport stakeholders and inform the NEOC of any disruption to traffic as result of heavy rains or inundations of any parts of the movement area
- (ii) Apply DCA procedures as applicable.
- (iii) Obtain from the NEOC pertinent information about accessibility of airport from various regions of the island and inform relevant stakeholders accordingly.
- (iv) In case of any disruption of services implement contingency plan and arrange for resumption of services as soon as possible.
- (v) Keep NEOC informed of the operational situation of airport.

#### (d) <u>Aftermath</u>

- (i) Carry out post disaster damage assessment on airport.
- (ii) Obtain from the NEOC pertinent information about accessibility of airport from various regions of the island and inform relevant stakeholders accordingly.
- (iii) Re-open airport, as soon as it is operationally safe to do so.
- (iv) Send situation report to NEOC.

#### 2.6.3 Ministry of Housing and Lands

- (a) General Preparedness before Rainy Season
  - (i) Implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
  - (ii) Jointly with concerned LDRRMC identify possible suitable sites for setting up of temporary housing at different locations island wide.

- (iii) Identify possible alternate sites for relocation of those vulnerable to flooding.
- (iv) Carry out risk and vulnerability assessment around Mauritius, Rodrigues and outer islands to review and update flooding hazard maps.
- (v) Jointly with the concerned LDRRMC identify low lying land and residential areas at risk.

#### (b) <u>Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding</u>

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the Ministry.
- (iii) Be ready to assist NEOC, if required.

#### (c) <u>During Heavy Rainfall/Torrential Rain/Flooding Conditions</u>

Assist NEOC at national level, if required.

- (d) <u>Aftermath</u>
  - Assist in the provision of temporary shelters to accommodate victims who have lost their houses during the flooding.
  - (ii) Carry out a post disaster damage assessment at national level jointly with MPI and Ministry of Social Integration and Economic Empowerment and submit report to Ministry and NEOC.

#### 2.6.4 Ministry of Energy and Public Utilities

#### ✤ Water Resources Unit (WRU)

- (a) General Preparedness before Rainy Season
  - (i) Survey of all dams and reservoirs.
  - (ii) Implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
  - (iii) Participate in the heavy rainfall/torrential rain/flooding simulation exercises organized by Municipal/ District Councils as per the NDS Simulation Calendar.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the Ministry and Departments.
- (iii) Assist NEOC at national level.
- (iv) Closely monitor water flows at available and selected stations and water level in dams. Close water valves/gates as required.
- (v) Measures as per internal plans. Activate La Ferme emergency action plan.
- (vi) Send situation report to NEOC.

#### (c) During Heavy Rainfall/Torrential Rain/Flooding Conditions

- (i) Assist NEOC at national level.
- (ii) Activate internal emergency plans.
- (iii) Issue communiqué on status and capacity of reservoirs and dams.
- (iv) Keep NEOC informed of the status of reservoirs, dams and rivers.
- (v) Close water valves/gates as required.
- (vi) Send situation report to NEOC.
- (d) <u>Aftermath</u>
  - (i) Carry out a post disaster damage assessment on dams, reservoirs and canals.
     Provide report to Ministry and NEOC.
  - (ii) Monitor water levels of dams, reservoirs and rivers.

#### Wastewater Management Authority (WMA)

(a) General Preparedness before Rainy Season

- Participate in heavy rainfall/torrential rain/flooding simulation exercises organized by Municipal and District Councils as per the NDS Simulation Calendar.
- (ii) Implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the ministry and departments.
- (iii) Special attention to be given to situation in Port Louis region.
- (iv) Be available and remain on stand-by.
- (v) Prepare to activate Service Continuity Plan.
- (vi) Assist NEOC for coordination at national level, if need arises.

#### (c) During Heavy Rainfall/Torrential Rain/Flooding Conditions

- (i) Assist NEOC for coordination at national level, if need arises.
- (ii) To issue communiqué as appropriate for the attention of general public.
- (iii) Monitor effect of rain water/flooding on sewerage system island wide.
- (iv) Carry out survey on any defects reported on sewerage system as long as it is safe to do so.
- (v) Intervene in case of sewerage malfunctioning.
- (vi) Send regular situation report to NEOC.
- (d)<u>Aftermath</u>
  - (i) Carry out a post disaster damage assessment and provide situation report to own Ministry and NEOC.
  - (ii) Inspect its installations in the affected areas and initiate appropriate and immediate action for abating any spillage problems until such time that these are resolved.
  - (iii) Ensure that wastewater sewerage system is rendered fully operational within the least possible delay.
  - (iv) Activate service continuity plan.

#### ✤ Central Electricity Board

#### (a) General Preparedness before Rainy Season

 Participate in heavy rainfall/torrential rain/flooding simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar. (ii) Implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the organisation.
- (iii) Special attention to be given to situation in Port Louis region.
- (iv) Issue advisory communiqué on safety measures to public and subscribers through MBC and radios.
- (v) Mobilise and remain on stand-by.
- (vi) Activate service continuity plan.
- (vii) Assist NEOC for coordination at national level, if need arises.

- (i) Continue issue of advisory communiqué on safety measures to public and subscribers through MBC and radios.
- (ii) Cut off CEB power supply to ensure public safety if and where required.
- (iii) Monitor flooding adverse effects on CEB facilities and power plants.
- (iv) Attend to cases of faults reported as long as it is safe to do so.
- (v) Send regular situation reports to NEOC.
- (d) <u>Aftermath</u>
  - (i) Restore electric power supplies to all key and essential services on a priority basis.
  - (ii) Ensure that any affected power supply facilities do not hinder the safe intervention of the stakeholders in the search and rescue operations.
  - (iii) Carry out a post disaster damage assessment and provide report to NEOC.

#### ✤ Central Water Authority

- (a) General Preparedness before Rainy Season
  - Participate in heavy rainfall/torrential rain/flooding simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
  - (ii) Implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
  - (iii) Sensitisation on risks of water contamination by flooding.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the organisation.
- (iii) Special attention to be given to situation in Port Louis region.
- (iv) Mobilise and remain on stand-by.
- (v) Activate service continuity plan.
- (vi) Assist NEOC for coordination at national level, if need arises.

- (i) Monitor and ensure water supply.
- (ii) Issue communiqué on supply and any precautions required with drinking water.
- (iii) Arrange for supply of water by tanker lorries, if required.
- (iv) Monitor any adverse effects on CWA infrastructures.
- (v) Send regular situation report to NEOC.
- (d) <u>Aftermath</u>
  - (i) Restore water supplies to all key and essential services on a priority basis.
  - (ii) Carry out a Post Disaster Needs Assessment and provide report to NEOC.
  - (iii) Arrange for supply of water by tanker lorries, if required.

#### 2.6.5 Ministry of Finance and Economic Development

(a) General Preparedness before Rainy Season

- Participate in heavy rainfall/torrential rain/flooding simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
- (ii) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the organisation.
- (iii) Special attention to be given to situation in Port Louis region.
- (iv) Activate Service Continuity Plan.

### (c) During Heavy Rainfall/Torrential Rain/Flooding Conditions

Assist NEOC at national level, if required.

#### (d) <u>Aftermath</u>

- (i) Release of funds from contingencies and reserve, if required.
- (ii) In case international or regional assistance is required, the MRA-Customs Department, will take necessary measures for the rapid release of relief consignments and any goods needed for relief, rehabilitation and construction phase.

#### 2.6.6 Ministry of Technology, Communication and Innovation

(a) General Preparedness before Rainy Season

- Develop and carry out IT based Community Sensitization Programmes on preparedness before rainy season, in collaboration with the NDRRMC.
- (ii) Arrange for an alert system to warn the public of the situation and the emergency measures to be taken. To firstly explore the possibility with Mauritius Telecom and other Service Providers to inform the public in general of warnings/emergency measures to be taken in case of Heavy

rainfall/Torrential Rain/Flooding or to target specifically parents of students through the e-Register System.

- (iii) Assist in the implementation of appropriate risk reduction structural(e.g relay stations, etc) and non-structural measures in coordination with NDRRMC.
- (iv) To participate in the heavy rainfall/torrential rain/flooding simulation exercises organized by Municipal/ District Councils as per the NDS Simulation Calendar.
- (v) Ensure that Service Continuity Plans, Business Continuity Plans, Contingency Plans of service providers and SOP's are up to date and to be shared with the NDRRMC.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the Ministry.
- (iii) Arrange for MT to operate Telmet Services (Tel. 8996 for fixed line telephones and Tel 171 for mobiles) by which any telephone enquirer may listen to a recorded version of the latest bulletin. If possible, arrange with other Service Providers to activate a similar system.
- (iv) Special attention to situation in Port Louis region.

- (i) Assist NEOC at national level, if required.
- (ii) Ensure that Telmet and Audiotex Services are updated and available to inform the public.
- (d) <u>Aftermath</u>
  - (i) Ensure that priority is given to restoration of communication systems of essential services.
  - (ii) In case international humanitarian support is required, ensure that all communication equipments are immediately cleared and operating bandwidth is made available within the frequency spectrum.
  - (iii) Carry out a post disaster assessment and provide report to NEOC.

#### ✤ Mauritius Broadcasting Corporation (MBC)

- (a) General Preparedness before Rainy Season
  - (i) The MBC in collaboration of the NDRRMC, MMS, Police and GIS, shall arrange to give talks on TV and Radio on dangers of flooding following heavy and torrential rains.
  - (ii) Implementation of appropriate risk reduction non-structural measures in coordination with NDRRMC.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) The MBC, on receipt of a heavy rainfall/torrential rain/flooding bulletin, will immediately broadcast same on TV and radio. Depending upon the magnitude and severity of the forecast, the same information will be repeated regularly in English, French, Creole and Hindustani until the next update. The information will also be scrolled on all TV channels.
- (ii) Ensure heavy rainfall/torrential rain/flooding bulletin are broadcasted simultaneously on both FM and AM channels.
- (iii) Assist NEOC at national level.

- Bulletin updates to be immediately broadcast at half hourly intervals simultaneously on both FM and AM channels.
- (ii) Assist NEOC at national level in broadcasting communiqués and making interventions as and when needed.
- (d) <u>Aftermath</u>
  - Broadcast termination bulletins as soon as received informing the public on precautions to be taken immediately after the termination of a Torrential Rain/ Heavy Rainfall/ Flooding Bulletin.
  - (ii) Activate service continuity plan.

#### 2.6.7 Ministry of Public Infrastructure and Land Transport

- (a) General Preparedness before Rainy Season
  - (i) Implement appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
  - (ii) LMU to ensure that necessary countermeasures are implemented to minimize the risks and effects of landslides in all identified landslide prone areas.
  - (iii) LMU to carry out risk assessments to identify areas at risk and implement remedial measures and sensitisation campaigns on landslide prone areas, in collaboration with the NDRRMC and local authorities.
  - (iv) The RDA will arrange for all possible measures such as channel improvements, upgrading of bridge capacities, construction of new drains, rising of embankments, underpasses and drainage maintenance programme for protection of urban and residential areas along main roads and motorways against flash floods.
  - (v) Promote the concept of self-help and mutual help through training of the local communities at risk.
  - (vi) MPI & LT jointly with local authorities to plan for regular removal of unstable and loose rocks (purging) along cliffs and mountains slopes to mitigate risk of rock fall within classified, non-classified roads and residential areas(e.g. at Macondé, Chamarel, Baie du Cap, etc).

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated to all MPI departments.
- (iii) LMU to be mobilised and remain on standby with all available resources.
- (iv) Special attention to be given to situation in Port Louis region.
- (v) LMU to monitor landslide sites at Vallée-Pitot, Chitrakoot, Quatre Soeurs and other known landslides prone sites through the designated inhabitants and engineers.
- (vi) Ready to activate the Landslide Emergency scheme, if required.

- (c) During Heavy Rainfall/Torrential Rain/Flooding Conditions
  - (i) Mobilise and remain on standby with all available resources.
  - (ii) Execution of tasks as per Port Louis flood response plan (section 8.0 of NDS 2015 Edition), if required.
  - (iii) Landslide Management Unit to monitor landslide sites at Vallée Pitot, Chitrakoot, and other known landslides prone sites through the designated inhabitants and engineers. Activate the Landslide Emergency Plan, if required.
  - (iv) Collect data of the extensometers where available with the assistance of Local Police/SMF.
  - (v) Advise and arrange for emergency remedial actions, as long as it is safe to do so.
  - (vi) Send regular situation report to NEOC.
- (d) <u>Aftermath</u>
  - LMU to survey and report any ground displacement in places identified as Landslide prone.
  - (ii) Clear and restore the road network. Inform public on road closed to traffic.
  - (iii) Restore emergency routes on priority basis such as those leading to hospitals in liaison with municipal/district councils.
  - (iv) Advise the public in general, through the NDRRMC, about risks of flooding, rock fall, mudslide etc.

#### ✤ National Transport Authority (NTA)

(a) General Preparedness before Rainy Season

- (i) Implementation of appropriate risk reduction non-structural measures in coordination with NDRRMC.
- (ii) Hold regular meetings with bus companies/owners, school van operators with a view to sensitizing them to react promptly in heavy rainfall/torrential rain/flooding situations.
- (iii) Prepare plan for making transport arrangements in the event of heavy rainfall/torrential rain/flooding situations at national level.

 (iv) Participate in heavy rainfall/torrential rain/flooding simulation exercises organized by Municipal and District Councils as per the NDS Simulation Calendar.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the ministry and departments.
- (iii) Special attention to situation in Port Louis region.
- (iv) Ensure availability of buses for evacuation from affected areas including schools, as and when required.
- (v) Assist NEOC for coordination at national level.

#### (c) <u>During Heavy Rainfall/Torrential Rain/Flooding Conditions</u>

- (i) Carry out survey to identify whether all bus routes are practicable.
- (ii) Ensure and supervise availability of public transport on all bus routes in liaison with NEOC.
- (iii) Deploy buses for evacuation from affected areas including schools.
- (iv) Arrange additional transport facilities if need arises.
- (v) Send regular situation report to NEOC.
- (d) <u>Aftermath</u>
  - (i) Carry out a post disaster damage assessment and provide situation report to Ministry and NEOC.
  - (ii) Restore public transport. Priority to be given to roads giving access to essential/emergency facilities.
  - (iii) Be prepared to extend transport assistance for relief operations, if required.

## 2.6.8 The Ministry of Education and Human Resources, Tertiary Education, and Scientific Research.

- (a) General Preparedness before Rainy Season
  - (i) Carry out sensitisation campaigns in all educational/technical/vocational institutions both public and private on actions to be taken by teachers, staff,

pupils/students and parents in the event of a heavy rainfall/torrential rain/flooding warning.

- (ii) Develop school safety plans.
- (iii) Ensure that Contingency Plans and SOPs for heavy rainfall/torrential rain/flooding are developed and these are tested regularly through mock drills and simulation exercises involving teachers, staff, pupils/students, parents and other stakeholders.
- (iv) Ensure that prior arrangements for transport/shuttle service are made with NTA and other transport service providers for use during heavy rainfall/torrential rain/flooding warnings declared within school hours. This can be done, for example, through MoU's, etc...
- (v) Ensure proper drainage systems are in place at all educational/technical/vocational institutions that both public and private to mitigate risk and prevent flooding.
- (vi) Ensure proper communication (Telmet, Audiotex, e-register, SMS) systems are in place to inform parents during emergencies.
- (vii) Develop service continuity plans to ensure that educational/technical/vocational institutions both public and private are able to operate during or resume full activities within reasonable time after heavy rainfall/torrential rains and flooding.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Decide in consultation with MMS if there is a need to close educational/technical/vocational institutions both public and private.
- (iii) Ensure that bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated to all educational/technical/vocational institutions both public and private.
- (iv) Be ready to activate internal SOP's and contingency plans.
- (v) Issue of timely communiqué for the benefit of parents, children and staff.
- (vi) Sensitisation of school population on measures and general precautions to be taken.

- (i) In case torrential rain bulletin is issued before the beginning of school day:
- All educational/technical/vocational institutions both public and private will not be opened. Accordingly, the Ministry will issue communiqués through TV, Radio public and private, and the press early in the morning after consultation with MMS and NDRRMC to inform parents not to send children to educational/technical/vocational institutions both public and private, and other service providers in the educational sector.
- 2. Ensure that staff is available at school premises as per their protocol.
- 3. Apply internal SOP's and contingency plans.
- 4. Send regular situation report to NEOC.
- (ii) In case torrential rain conditions develop during school hours:
- 1. All classes will stop. The Ministry will liaise with the NTA to arrange for bus facilities in all routes to be provided as soon as possible, to the school population who travel by bus.
- 2. To issue communiqués through TV, Radio public and private, and the press to inform parents and public on measures initiated by the Ministry.
- 3. Monitor the situation through the different zoning systems and whenever the Head of an educational/technical/vocational institutions both public or private has decided to release the school population, the administration will make prior arrangements to send a SMS through e-Register or other means available, to all parents of wards informing them of the closing time of the educational/technical/vocational institutions and pick up time and place.
- 4. No educational/technical/vocational institutions both public and private shall release its school population unless and until it has ensured that appropriate transport or a safe conduct home is made available.
- 5. The Heads of educational/technical/vocational institutions both public and private will liaise with Police to inform the respective parents/ wards in event the school population is not in a position to leave school premises for home.
- 6. Where appropriate, transport or safe conduct home is not available, the school population shall be ensured a place of temporary shelter, preferably a safe location within the same institution.

- 7. The place of temporary shelter shall be equipped with communication facilities and basic needs at which responsible parties may contact or reach their wards as soon as such warning is issued.
- 8. All educational/technical/vocational institutions both public and private will remain opened when classes are dismissed until all the school population has left the school premises.
- 9. Heads of educational/technical/vocational institutions both public and private together with staff will remain in educational/technical/vocational institutions until all the school population has left the premises, where required, in company of their parents/wards.
- 10. Apply internal SOP's and contingency plans.
- 11. Concerned Ministries and stakeholders to send regular situation report to NEOC.
- (iii) In case of localised flooding before beginning of school day:
- 1. Issue internal instructions to vest discretion on the Head of educational/technical/vocational institutions, which the latter will judiciously exercise to decide whether to open or to close specific educational/technical/vocational institutions both public and private.
- 2. Issue communiqués through TV, Radio public and private, and the press early in the morning after consultation with MMS and NDRRMC to inform parents/service providers in the educational sector/general public on specific decisions taken.
- 3. If required, specific educational institutions will have to be opened to students/parents who have not taken cognizance of such communiqués.
- 4. Heads of specific educational/technical/vocational institutions both public and private together with staff will remain in educational/technical/vocational institutions until school population who have called at educational/technical/vocational institutions has left the premises, where required, in company of their parents/ wards.
- 5. No educational/technical/vocational institutions both public and private shall release its school population unless and until it has ensured that appropriate transport or a safe conduct home is made available.

- 6. The Heads of educational/technical/vocational institutions both public and private will liaise with Police to inform the respective parents/ wards in event the school population is not in a position to leave school premises for home.
- 7. Where appropriate, transport or safe conduct home is not available, the school population shall be ensured a place of temporary shelter, preferably a safe location within the same institution.
- 8. Ensure that staff is available at school premises as per their protocol.
- 9. Apply internal SOP's and contingency plans.
- 10. Send consolidated situation report to NEOC.
- (iv) In case of localised flooding during school hours:
- 1. Issue internal instructions to vest discretion on the Head of educational/technical/vocational institutions, which the latter will judiciously use for the purpose of deciding whether to interrupt classes for the day.
- 2. To liaise with the NTA to arrange for bus facilities in all routes to be provided as soon as possible, to the school population who travel by bus.
- 3. Monitor the situation through the different zoning systems and whenever the Head of educational/technical/vocational institutions both public or private has decided to release the school population, the administration will make prior arrangements to send a sms through e-Register or other means available to all parents of wards informing them of the closing time of the educational/technical/vocational institutions and pick up time and place.
- 4. No educational/technical/vocational institutions both public and private shall release its school population unless and until it has ensured that appropriate transport or a safe conduct home is made available.
- 5. The Heads of educational/technical/vocational institutions both public and private will liaise with Police to inform the respective parents/wards in event the school population is not in a position to leave school premises for home.
- 6. Where appropriate, transport or safe conduct home is not available, the school population shall be ensured a place of temporary shelter, preferably a safe location within the same institution.

- 7. The place of temporary shelter shall be equipped with communication facilities and basic needs at which responsible parties may contact or reach their wards as soon as such warning is issued.
- 8. All educational/technical/vocational institutions both public and private will remain opened when classes are dismissed until all the school population has left the school premises.
- 9. Heads of educational/technical/vocational institutions both public and private together with staff will remain in educational/technical/vocational institutions until all the school population has left the premises, where required, in company of their parents/wards.
- 10. Apply internal SOP's and contingency plans.
- 11. Send consolidated situation report to NEOC.
- (v) In extreme circumstances, schools may be used as temporary shelters.
- (d) <u>Aftermath</u>
  - (i) Heads of educational/technical/vocational institutions both public and private should ensure that a core team of personnel will report at the premises to carry out a post disaster infrastructural damage assessment and send a full report to the Ministry.
  - (ii) Monitor the state of educational institutions in affected areas to ensure their operability.
  - (iii) Verify that the school buildings (where applicable) which have been used as emergency shelters are in a state to resume classes.
  - (iv) Activate service continuity plans, if required.

#### 2.6.9 Ministry of Local Government

#### (a) General Preparedness before Rainy Season

- (i) Implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (ii) Ensure preparedness actions prior to the rainy season are taken. These should include carrying out of surveys to identify vulnerable areas/communities and inadequate drainage system and take remedial

actions. Ensure cleaning and maintenance of drains, and canals. Enforce measures against illegal dumping in rivers, canals and drains.

- (iii) Ensure a well-established coordination between the NDRRMC, Local Authorities (Municipal and District Councils) and the RDA.
- (iv) Ensure proper construction of drains on non-classified roads.
- (v) Ensure a regular and proper scavenging service for removal of wastes from commercial activities (shop owners, hawkers, markets, etc) which may obstruct drains.
- (vi) Ensure that the standards of drains are of high quality.
- (vii) Ensure that monthly coordination meetings are held to monitor progress in construction and maintenance of drains.
- (viii) Drains Management Committee to ensure that survey of existing drains are carried out at regular intervals.
- (ix) Ensure that municipal and district councils plan, prepare and conduct heavy rain/torrential rain/flood simulation exercises as per NDS Annual calendar.

#### (b) <u>Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding</u>

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated to all municipal and district councils and other Local Government departments.
- (iii) Be ready to assist NEOC, if required.
- (iv) Ensure that Local Authorities (Municipal and District Councils) activate LEOC for coordination and monitoring of all responsive operations with DOCR's and other stakeholders, if required.
- (v) Mobilise and remain on standby with available resources.
- (vi) Special attention to be given to situation in Port Louis region.
- (vii) Monitor water flow through drains, canals, rivers.

- (i) Assist NEOC at national level, when required.
- (ii) Mobilise and remain on standby with available resources.

- (iii) Execution of tasks as per Port Louis flood response plan (section 8.0 of NDS 2015 Edition), if required.
- (iv) Survey of drains, canal and river blockages as long as it is safe to do so.
- (v) Advise and arrange for emergency remedial actions, as long as it is safe to do so.
- (vi) Send regular situation report to NEOC.
- (d) <u>Aftermath</u>

Ministry to cause district and municipal councils to carry out post disaster damage assessment in their areas of jurisdiction. Report to Ministry and NEOC with observations relating to any weaknesses of drainages network system, damage to public infrastructure and extent of immediate relief measure to be undertaken.

#### 2.6.10 Ministry of Social Integration & Economic Empowerment

- (a) General Preparedness before heavy rainfall/torrential rain/flooding
  - Support Ministry of Housing and Lands and other concerned authorities in developing housing schemes to those vulnerable to flooding.
  - (ii) Assist concerned authorities for implementation of appropriate risk reduction structural and non-structural measures.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the Ministry.
- (iii) Special attention to be given to situation in Port Louis region.
- (iv) Assist NEOC at national level, if required.

#### (c) <u>During Heavy Rainfall/Torrential Rain/Flooding Conditions</u> Assist NEOC at national level, if required.

#### (d) <u>Aftermath</u>

- (i) Carry out a post disaster need assessment and provide report to NEOC
- (ii) Assist Police, MoSS NS & RI and other stakeholders, where required, in identifying the number of households that have been affected, number of flood victims/people affected and displaced and in carrying out survey to assess extent of damage (loss of personal properties, loss of materials such as mattresses, furniture, etc).
- (iii) Identify sites in the affected areas for putting up temporary shelters for victims.
- (iv) Assist Ministry of Housing and Lands and other concerned authorities putting up of temporary shelters to accommodate victims who have suffered damages to their houses.

#### **2.6.11 Ministry of Social Security, National Solidarity and Reform Institutions** (a) <u>General Preparedness before Rainy Season</u>

- (i) Assist in the implementation of appropriate risk reduction structural and non-structural measures in coordination with NDRRMC.
- (ii) Assist, where required, the Ministry of Local Government and any other ministry in identifying appropriate Emergency Shelters based upon the topography of the region and vulnerability of the community to flooding.
- (iii) Support the Local Disaster Risk Reduction Management Committees of municipal and district councils in ensuring that emergency shelters are not located in any danger zone and suitable to accommodate evacuees
- (iv) Ensure that necessary administrative arrangements are put in place for the provision of amenities as per entitlement such as water and biscuits, hurricane lamps, etc when emergency shelters are opened with special attention to disabled persons and children.
- (v) Ensure that administrative arrangements are made with the MRCS for the provision of a minimum number of camp beds at each emergency shelter.
- (vi) Arrange for a suitable communication system at the emergency shelters.
- (vii) Ensure that specialised institutions dealing with physically handicapped, disabled and elderly develop their contingency plans

(viii) Participate in the heavy rainfall/torrential rain/flooding simulation exercises organized by Municipal/ District Councils as per the NDS Simulation Calendar.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the Ministry.
- (iii) Special attention to be given to situation in Port Louis region.
- (iv) Mobilise with available resources.
- (v) Be prepared to open emergency shelters if the need arises.
- (vi) Assist NEOC at national level, if the need arises.

- (i) Ensure that emergency shelters are opened after appropriate consultation and manned.
- (ii) Monitor the evacuation of the disabled/elderly by managers of the specialized centres in collaboration with Police and MFRS, when required.
- (iii) Execution of tasks as per Port Louis Flood Response Plan (section 8.0 of NDS 2015 Edition), if required.
- (iv) Provide evacuees with water and biscuits on the first day and food vouchers at approved rate on the following days for maximum of three days, in the event the flooding persists.
- (v) Communicate the names and details of evacuees (whether students, families, etc) who have evacuated from schools/houses and elected domicile in the emergency shelters to the NEOC.
- (vi) Arrange for medical assistance for special needs, elderly, persons with disabilities, handicapped, etc through the MoHQL.
- (vii) Provide regular situation report to NEOC.
- (d) <u>Aftermath</u>
  - Support the Ministry of Housing and Lands, Ministry of Social Intergration and Economic Empowerment and Local Authorities to arrange for shelters

for the affected population (priorities to be given to elderly, handicapped and children).

- (ii) Provide evacuees with food vouchers at approved rate for maximum of three days, in the event the flooding persists.
- (iii) Carry out post disaster damage assessment to identify the number of evacuees including students and provide report to NEOC.
- (iv) Assist Police, Ministry of Social Integration and Economic Empowerment and other stakeholders, where required, in identifying the number of households that have been affected, number of people affected and displaced and in carrying out survey to assess extent of damage (loss of personal properties, loss of materials such as mattresses, furniture, etc).
- (v) Compile data for issue of claims where applicable.
- (vi) Provide regular situation report to Police and NEOC.

#### 2.6.12 Ministry of Gender Equality, Child Development and Family Welfare

(a) General Preparedness before Rainy Season

- (i) Assist MoSS NS &RI in identifying appropriate emergency shelters in different zones based on the topography of the region and vulnerability of the community to flooding.
- (ii) Assist MoSS NS & RI in ensuring that emergency shelters are not located in any danger zone, suitable to accommodate evacuees and provide them with basic needs including food, drinking water, mattresses, blankets, clean toilet facilities for men and women, etc.
- (iii) Assist MoSS NS & RI in ensuring that specialized institutions dealing with physically handicapped, disabled and elderly develop their contingency plans.
- (iv) Participate in the heavy rainfall/torrential rain/flooding simulation exercises organized by Municipal/ District Councils as per the NDS Simulation Calendar.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the Ministry.
- (iii) Special attention to be given to situation in Port Louis region.
- (iv) Be prepared to assist MoSS NS & RI in managing opening of emergency shelters.
- (v) Assist NEOC at national level, if required.

- (i) Assist MoSS NS & RI in ensuring that emergency shelters are opened after appropriate consultation and manned.
- (ii) Assist MoS NS & RI in ensuring that specialized institutions dealing with physically handicapped, disabled and elderly are evacuated to safe location, if required.
- (iii) Execution of tasks as per Port Louis Flood Response Plan (section 8.0 of NDS 2015 Edition), if required.
- (iv) Assist MoSS NS & RI in arranging for basic needs to evacuees.
- (v) Assist MoSS NS & RI in communicating the names and details of evacuees (whether students, families, etc) who have evacuated from schools/houses and elected domicile in the emergency shelters to the NEOC.
- (vi) Assist MoSS NS & RI in arranging for medical assistance for special needs, elderly, disabled, handicapped, etc through the MoHQL.
- (vii) Assist MoSS NS & RI in providing psychological and psychosocial support through the MoHQL.
- (d) <u>Aftermath</u>
  - (i) Continue to assist in arranging for shelters for the affected population (priorities to be given to elderly, handicapped and children).
  - (ii) Continue to assist in providing basic needs until evacuees safely return to their homes.
  - (iii) Assist MoSS NS & RI in carrying out post disaster damage assessment to identify the number of evacuees including students and provide report to NEOC.

- (iv) Carry out survey to assess extent of damage (loss of properties, damage caused to houses, loss of materials such as mattresses, furniture, etc) experienced by victims assisted by Ministry of Social Intergration and Economic Empowerment and Police where required. Provide report to Ministry and NEOC.
- (v) Assist MoSS NS & RI in compiling data for issue of claims where applicable.
- (vi) Provide regular situation report to Police and NEOC.

#### 2.6.13 Ministry of Environment, Sustainable Development, and Disaster and Beach Management

#### (a) General Preparedness before Rainy Season

- Ensure that mapping of storage facilities for petroleum and hazardous substances in flood prone areas are available.
- (ii) Ensure that the NOSCP is tested.
- (iii) Development of a HAZMAT contingency plan.
- (iv) Ensure all operators/owners handling hazardous materials develop and test their contingency plans.
- (v) Participate in the heavy rainfall/torrential rain/flooding simulation exercises organized by Municipal/District Councils as per the NDS Simulation Calendar.
- (vi) Support, where applicable, concerned authorities within their respective jurisdiction the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) <u>Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding</u>

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the Ministry.
- (iii) Special attention to be given to situation in Port Louis region.
- (iv) Mobilisation of available resources.
- (v) Ensure that Contingency plans/SOP's are activated.
- (vi) Assist NEOC at national level, if need arises.

- (c) During Heavy Rainfall/Torrential Rain/Flooding Conditions
  - (i) Ensure that owners/operators of petroleum and hazardous storage in the flood prone areas take all necessary measures to secure such facilities, in collaboration with the MoHQL, Ministry of Local Government and Outer Islands, the Ministry of Labour and Industrial Relations and The Radiation Protection Authority.
  - (ii) Coordinate with operators/owners handling hazardous materials actions to be initiated in case of any HAZMAT spill or incident.
- (d) <u>Aftermath</u>
  - Survey teams, headed by Divisional Environment Officers/ Divisional Scientific Officers, to carry out surveys.
  - (ii) Cause environment impact assessment to be carried out on landfills and beaches.
  - (iii) Officer(s) representing the Ministry of Environment, Sustainable Development, and Disaster and Beach Management at the NEOC will report to the NEOC on observations made on site.

#### 2.6.14 Joint Economic Council/Mauritius Employers Federation

- (a) General Preparedness before Rainy Season
  - (i) Issue circulars to concerned stakeholders giving clear instructions in case of heavy rainfall/torrential rain bulletin and flood warnings are going to be issued during working hours.
  - (ii) Arrange for sensitisation campaigns for the benefit of private sector employees.
  - (iii) Assist in implementation of appropriate risk reduction structural and nonstructural measures.
  - (iv) Encourage private organisations to develop their Business Continuity Plan (BCP).
  - (v) Encourage stakeholders to actively participate in simulation exercises carried out as per the NDS simulation calendar.

#### (b) Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within all concerned organisations.
- (iii) Special attention to be given to situation in Port Louis region.
- (iv) Ensure that all organisations have activated their respective Business Continuity Plans.
- (v) In case of staff release, arrange in collaboration with the NDRRMC for staggering release in order to avoid traffic jam.

#### (c) <u>During Heavy Rainfall/Torrential Rain/Flooding Conditions</u>

- (i) Assist NEOC at national level, if required.
- (ii) Keep a team of essential staff to ensure that all properties are well protected and secured before closing organizations.
- (d) <u>Aftermath</u>
  - (i) Cause all organisations to carry out a post disaster damage assessment and provide consolidated report to NEOC.
  - (ii) Assist authorities in providing logistics.
  - (iii) Assist in cleaning/clearing of roads and removal of obstructions.

#### 2.6.15 The NGO's (Mauritius Red Cross Society, St John Ambulance, etc)

- (a) General Preparedness before Rainy Season
  - Participate in heavy rainfall/torrential rain/flooding simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
  - (ii) Participate in sensitisation campaign with the vulnerable communities.
  - (iii) Assist in the setting up of the Community Disaster Response Team.
- (b) <u>Upon Forecast of Heavy Rainfall/Torrential Rain/Flooding</u>
  - (i) Keep watch of weather situation.
  - (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within the organisation.
  - (iii) Special attention to be given to situation in Port Louis region.

- (iv) Activate Service Continuity Plan.
- (c) <u>During Heavy Rainfall/Torrential Rain/Flooding Conditions</u> Assist NEOC at national level, if required.
- (d) <u>Aftermath</u>

Assist in relief operations.

\*\*\*\*\*\*\*\*\*End of Scheme\*\*\*\*\*\*

# Tsunamí Emergency Scheme

SATING

## **National Disasters Scheme Edition 2015**



National Disaster Risk Reduction and Management Centre (NDRRMC) Line Barracks, Port-Louis Tsunami Emergency Scheme

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### 3.0 TSUNAMI EMERGENCY SCHEME

#### 3.1 Introduction

A tsunami, "harbour wave" in Japanese is a series of waves travelling at speeds of over 800 km/h in the deep ocean where they may go unnoticed. Once the waves reach coastlines, the energy of the huge water body behind them manifest themselves as they crash with devastating force across the shore flooding low-lying areas, causing death and severe destruction. They are generated by a disturbance such as a large magnitude earthquake in a subduction zone, a landslide, a volcanic eruption, or a meteorite.

Following the Indian Ocean-wide disaster caused by the December 26, 2004 Tsunami, it became evident that any country in the Indian Ocean could be under the potential threat of such a natural hazard at any time. Though tsunami is a low frequency hazard, it cannot be predicted and can strike within hours causing havoc.

A tsunami wave generated in the Indian Ocean may affect the Mauritius, Rodrigues, Agalega and St Brandon. In addition, there is a hypothesis that volcanic activity in Reunion Island represents a potential hazard which can generate a tsunami. However, further scientific studies need to be carried to determine its impacts along the coast of the islands of Republic of Mauritius.

The Government of the Republic of Mauritius has established a Tsunami Emergency Scheme to:

- a) Ensure co-ordination of the standing procedures of concerned stakeholders in the event of an emergency situation,
- b) Save life and protect property in coastal regions and other vulnerable areas of Mauritius, Rodrigues, Agalega and St. Brandon
- c) Provide recovery assistance to the affected local communities.

## 3.2. Occurrence and Potential Threat of a Destructive Tsunami

### 3.2.1 The Tsunami Warning System (South West Indian Ocean)

A tsunami threat is defined to exist if a section of coast is forecasted to receive a positive amplitude tsunami wave of 50 cm or more at the offshore water depth of 1 meter.

The Regional Tsunami Service Providers (RTSP) from India, Indonesia and Australia will provide tsunami bulletins to the National Tsunami Warning Centres (NTWC) of the Indian Ocean countries, including Mauritius.

The ICG-IOTEWS has agreed that all RTSPs will provide the following four types of Bulletin for National Tsunami Warning Centres:

**Bulletin Type 1 – Earthquake Bulletin:** providing details on earthquakes of magnitude 6.5 or greater (Mwp), which have the potential to generate tsunamis.

**Bulletin Type 2 – Tsunami Forecast:** providing an initial forecast of tsunami threat, including details such as Estimated Time of Arrival (ETA) and Estimated Tsunami Height (ETH) for each coastal zone under threat.

**Bulletins Type 3 – Tsunami Forecast and Observations:** providing the same information as the Tsunami Forecast Bulletins, with the following additional information on observed sea-level anomalies.

**Bulletins Type 4** –**Tsunami Service Finalization:** providing information on the finalization of advice or termination of the tsunami threat.

As soon as a Tsunami Bulletin is received from the RTSPs, MMS will determine:

- (a) whether it is from the tsunami generic source of Sumatra, Makran or any other source likely to generate tsunami waves and
- (b) whether it is a local tsunami, a regional tsunami or an Indian Ocean-wide tsunami.

If it is an Indian Ocean-wide tsunami, MMS will immediately inform the Minister of Environment, Sustainable Development, and Disaster and Beach Management, Secretary to Cabinet & Head of the Civil Service and the NDRRMC.

## 3.2.2 Tsunami Warning System (Mauritius)

The Tsunami Warning System has taken into consideration the degree of risk as well as the time factor. In virtue of its geographical location, Mauritius, Rodrigues and the Outer Islands have a lead-time of 5-7 hours before tsunami waves are likely to reach their coasts generated from either the Sumatra or the Makran source.

The Tsunami Warning System consists of the following stages:

(a) Tsunami Watch

This bulletin implies that a strong earthquake, generally of the magnitude greater than or equal to 7.0 on the Richter scale, has occurred in a region adjacent to the Indian Ocean and there is a likelihood of a tsunami being generated is evoked. This bulletin is issued as a means of providing an advance alert to areas that could be impacted by destructive tsunami waves. At this stage, the Chairperson of the Crisis Committee and the NDRRMC will be informed. Moreover, members of the public, sea-goers and fishermen in particular, will be advised not to venture out at sea or on the beach, boats should be secured ashore and vessels to proceed off lagoon. The situation is closely monitored. Watches are updated, as and when new information is received.

#### (b) Tsunami Warning

This bulletin confirms that a destructive tsunami will affect Mauritius/ Rodrigues / Outer Islands (Agalega and St. Brandon) within the next 5-7 hours. In case the incident point is closer to Mauritius/ Rodrigues/ Outer Islands (Agalega and St. Brandon, the lead-time will be correspondingly lesser.

(c) Termination

This bulletin will be issued after information from the Police, the Fisheries Posts, the Environment Division, observations from tide gauges at Port Louis and Port Mathurin and general sea state observations confirm that significant tsunami waves are no longer being noted.

Since a tsunami often occurs suddenly, there is need for education and on-going public awareness so as to:

- (i) Remind the public of the dangers of a tsunami,
- (ii) Reiterate the precautions that should be taken, and
- (iii)Establish preliminary recovery measures in case of an eventual disaster.

The following sections describe the roles, responsibilities and actions of concerned stakeholders so that they remain prepared and ready at all times. This Scheme assumes that each stakeholder identified herein has its own Tsunami Emergency Operational Plan.

All stakeholders have been classified under the following categories:

- (a) Alerting Agency
- (b) Coordinating Agencies at National and Local levels
- (c) Main Response Agencies
- (d) Other Stakeholders

Subsequently, roles, responsibilities and actions of each stakeholder are laid down during the following conditions:

- (a) General preparedness
- (b) Tsunami Watch
- (c) Tsunami Warning
- (d) Aftermath

#### 3.3 General Roles, Responsibilities and Actions of All Organisations

- (a) General Preparedness
  - (i) Ensure that all staff is familiar with the procedures of their SOPs/ Contingency Plans.
  - (ii) Update their SOPs/ Contingency Plans and ensure that they are properly understood and implemented.
  - (iii) Introduce signage to clearly mark routes for evacuation.
  - (iv) Display Tsunami posters supplied by the GIS in conspicuous places for the information of the general public.
  - (v) Carry out sensitisation programmes on Tsunamis.

(vi) Participate in Tsunami simulation exercises under the aegis of the municipal and district councils as per the NDS simulation calendar.

### (b)<u>Tsunami Watch</u>

- (i) Ensure all preparedness actions are in place.
- (ii) Forward sitrep to NEOC

#### (c) <u>Tsunami Warning</u>

- (i) Activate respective Contingency/action Plan.
- (ii) Forward situation report to NEOC

#### (d) <u>Aftermath</u>

- (i) Carry out a Post Disaster Damage Assessment pertaining to their area of responsibility and submit report to the NEOC.
- (ii) Immediate steps to be taken by Heads of Ministries/Departments as required:
  - 1. Clear roads.
  - 2. Restore public transport.
  - 3. Restore water supplies.
  - 4. Restore telephone lines of essential services.
  - 5. Restore power and lighting.
  - 6. Re-open the Port.
  - 7. Re-open the Airport.
  - 8. Assess damage to food stocks, livestock, agriculture & infrastructure.
  - 9. Obtain and provide funds for clearing of debris in the Local Disaster Committee areas.
  - 10. Provide and maintain sanitary arrangements at Emergency Shelters and clean and disinfect these later.
  - 11. Seek and provide funds for emergency works to be carried out.
- (iii) Activate service/ business continuity plans.
- (iv) Take steps to salvage damaged property.
- (v) Restore Ministry/Department/Organization to operational efficiency.
- (vi) Keep staff ready to provide any assistance, if required.

- (vii) Provide details of the extent of Tsunami runs in-land with respect to the topography for the benefit of the Mauritius Oceanography Institute.
- (viii) Forward regular reports to the NEOC.

## 3.4 Warning/ Alerting Agency

### 3.4.1 Mauritius Meteorological Services

The MMS is the main warning /alerting agency in the event of a Tsunami for the Republic of Mauritius.

As soon as a Tsunami Bulletin is received from the RTSPs informing of the occurrence of a strong earthquake giving rise to ocean-wide tsunami which is moving towards the South West Indian Ocean, the MMS will put into effect its Tsunami Emergency Plan.

- (a) General Preparedness
  - (i) Maintain a 24x7 monitoring of earthquakes (with special attention to those in the Sumatra and Makran subduction zones).
  - (ii) Be equipped to receive tsunami bulletins issued by the Regional Tsunami Service Providers (RTSP) from India, Indonesia and Australia.
  - (iii) Ensure the operability of an appropriate communication system to contact stakeholders. Regular tests should be conducted to ensure readiness and alertness.
  - (iv) Carry out sensitisation campaigns with focus on the types of tsunami warning system and tsunami bulletins in place. Need to continuously remind the public residing in the coastal areas as well as the general public about the dangers and safety precautions that need to be taken before, during and after the occurrence of tsunamis.

## (b) <u>Tsunami Watch</u>

- (i) Issue Tsunami Watch Bulletin to all concerned as at Annex III, including the Mauritius Oceanography Institute (MOI).
- (ii) Monitor situation and issue special bulletins as required.

## (c) <u>Tsunami Warning</u>

- (i) Issue Tsunami Warning Bulletin to all concerned as at Annex III, including the Mauritius Oceanography Institute (MOI).
- (ii) Monitor situation and issue special bulletins as required.

## (d) **Tsunami Termination**

- (i) Issue Tsunami Termination Bulletin to all concerned as at Annex III, including the Mauritius Oceanography Institute (MOI).
- (ii) Monitor situation and issue special bulletins as required.

## **3.5** Coordinating Bodies

## 3.5.1 National level

## National Disaster Risk Reduction and Management Council/Crisis Committee

Once a Tsunami Watch bulletin is issued by the MMS, the Minister of Environment, Sustainable Development, and Disaster and Beach Management will convene the Crisis Committee.

The Crisis Committee will meet as soon as possible at a convenient place. It will be supported by the NEOC and the LEOC from the city, municipal and district councils concerned.

The main functions of the Crisis Committee will be to:-

- (i) Monitor the general situation throughout the Island or Islands concerned.
- (ii) Analyse information on likely impact on the coasts of Mauritius, Rodrigues and on the other Outer Islands.
- (iii) Ensure that immediate executive actions including evacuation of people from vulnerable coastal areas are taken through the NEOC.
- (iv) Make recommendations on any relief measures that are immediately required.

## (a) General Preparedness

The National Disaster Risk Reduction and Management Council may be convened by the Minister of Environment, Sustainable Development, and Disaster and Beach Management, to review and, if necessary, to amend this Tsunami Emergency Scheme.

(b) <u>Tsunami Watch</u>

Depending upon the magnitude of the earthquake which has occurred in a region adjacent to the Indian Ocean and the likelihood of a tsunami being generated, the Crisis Committee may, at the discretion of the Minister of Environment, Sustainable Development, and Disaster and Beach Management, meet at the NDRRMC, Line-Barracks, Port Louis or the alternate NEOC at SMF Headquarters, Vacoas to take stock of the general situation throughout the neighbouring countries of the Indian Ocean (obtained mainly from the RTSPs, MMS, NEOC/NDRRMC and Police).

The members of the **Crisis Committee** will monitor situation based upon updated situational reports submitted by MMS and NEOC and may give general directions on actions that need to be taken.

#### (c) <u>Tsunami warning</u>

The **Crisis Committee** will be convened at the earliest possible and shall:

- 1. take decisive actions to safeguard and protect life through evacuation of vulnerable people (including elderly, disabled, women, children and persons detained in an institution) along coastal areas to safe zones.
- 2. supervise the organisation of disaster response operations in relation to the disaster.
- 3. take such other measures, after consultation with the Prime Minister, as may be appropriate in the circumstances.

#### (d) <u>Aftermath</u>

### (i) Cabinet

Depending upon the magnitude and severity of the tsunami impact, the Cabinet under the chairmanship of the Prime Minister, may meet to decide upon the strategic orientation of emergency relief operations.

The Secretary to Cabinet & Head of the Civil Service or his representative will act as secretary. The Cabinet will meet at the Government House, Port Louis, at the first opportunity after issue of the tsunami termination.

#### (ii) The **Crisis Committee**

The Crisis Committee may at the discretion of the Minister of Environment, Sustainable Development, and Disaster and Beach Management, meet at the NDRRMC, Line-Barracks, Port Louis or the alternate NEOC at SMF Headquarters, Vacoas as soon as possible, after the termination of tsunami conditions. The main functions of the Crisis Committee will be:-

1. Collect and present to the Cabinet information on:-

- General situation throughout Mauritius, Rodrigues and Outer Islands (obtained mainly from the NEOC and PIOR),

Condition of Government Departments (obtained from Permanent Secretaries and other heads of Ministries/ Departments/ Organisations),
Damage of non-government property (obtained mainly from NEOC/

LEOC), and

- General situation at the port and airport and updates on arrivals and departures.

- 2. Make recommendations on any relief measures immediately required.
- 3. Recommend to Cabinet for any regional and/or international assistance upon advice of NEOC.
- 4. Provide an accessible reporting point for Heads of Ministries/Departments/ Organizations primarily concerned in the work of relief and reconstruction.
- 5. Ensure that immediate executive action is taken on the decisions of the Cabinet.

6. Ensure the flow of information and instructions to Head of Ministries/Departments primarily concerned with the work of relief and reconstruction.

# National Disaster Risk Reduction and Management Centre (NDRRMC)/ National Emergency Operations Command (NEOC)

Upon confirmation of the occurrence of an Indian Ocean-wide tsunami, the NDRRMC will take the following actions:-

The NEOC will be activated and become operational and will be responsible for taking charge of the management of tsunami in the republic of Mauritius. The NEOC will initiate necessary actions to deal with the situation.

One representative from all the relevant Ministries/Departments, as per **Annex IV**, will report to NEOC as convened, so as to coordinate the efforts of their respective organization on the ground.

In case the NEOC, Line Barracks is at risk, the alternate NEOC at SMF Headquarters, Vacoas will be activated.

## (a) General Preparedness

- (i) Coordinate with concerned stakeholders all preparedness actions, including sensitising the general public of the dangers and precautions to be taken during a tsunami, targeting the community, schools, elderly and other population vulnerable to tsunami through TV, radios and press in collaboration with the relevant organisations.
- (ii) Monitor with concerned stakeholders that they are adequately equipped with the means to warn the public of the approach of a tsunami, especially those located along the coastline.
- (iii) Monitor with concerned authorities the implementation of appropriate risk reduction structural and non-structural measures.
- (iv) Coordinate with local authorities to establish an annual simulation calendar.
- (v) Ensure that tsunami simulation exercises are planned and conducted by the Local Disaster Risk Reduction and Management Committees in different

coastal regions. The exercises will involve all relevant Ministries and Departments and include the testing of the right means of communication for warning people at risk. Strengths and weaknesses should be identified and corrective measures should be taken as required.

### (b) Tsunami Watch

- (i) Inform the Chairperson of the Crisis Committee and other Senior Officials.
- (ii) Activate the NEOC and convene all its members.
- (iii) Activate National Tsunami Emergency Scheme.
- (iv) Ensure that concerned stakeholders are ready to implement relevant evacuation plans where required.
- (v) Issue Communiqué through the media specifically targeting people in tsunami prone areas.

## (c) <u>Tsunami Warning</u>

- (i) Move to alternate NEOC at SMF Headquarters, Vacoas, if required.
- (ii) Coordinate and monitor with LEOCs the activation of Evacuation Plans by concerned Ministries and Department.
- (iii) Ensure with LEOC that evacuation is completed well before the first waves hit the coast.
- (iv) Send regular situation report to the Minister of Environment, Sustainable Development, and Disaster and Beach Management, Secretary to Cabinet, members of the Crisis Committee and other Senior Officials.
- (d) <u>Aftermath</u>
  - After issue of Termination bulletin, NEOC will continue to oversee actions by all stakeholders involved in rescue operations and will inform the Crisis Committee of emergency requirements.
  - (ii) Send regular situation report to the Minister of Environment, Sustainable Development, and Disaster and Beach Management, Secretary to Cabinet and other Senior Officials and members of the Crisis Committee.
  - (iii) Ensure monitoring of the state of the main coastal road networks and main bridges.
  - (iv) Disseminate any traffic diversion plan.

- (v) Ensure emergency routes, such as, those leading to hospitals and other essential services are cleared.
- (vi) Ensure that communication and domestic supplies to all key and essential services are restored on a priority basis.
- (vii) Coordinate entry of International humanitarian aids and facilities into the country, as required.

## 3.5.2 Municipal/District Council Levels

#### Local Disaster Risk Reduction & Management Committee/ LEOC

- (a) General preparedness
  - (i) Identify the risk and vulnerabilities in respective area of jurisdiction.
  - (ii) Identify suitable evacuation routes with proper signage to assembly areas and safe zones in area of jurisdiction.
  - (iii) Plan, prepare and conduct annual simulation exercise/evacuation drills in collaboration with all stakeholders including the community.
  - (iv) To ensure that there is the right communication means to warn people at risk in place.
  - (v) Carry out Sensitisation/Awareness campaign with the community involving different stakeholders as well as Police Community Officers.
  - (vi) Train local communities on evacuation drills and promote the concept of Self Help and Mutual Help.

#### (b) <u>Tsunami Watch</u>

- (i) Activate their respective LEOC and convene all its members.
- (ii) Establish communication link with NEOC and send regular situation report.
- (iii) Mobilise available resources and be ready for deployment.

#### (c) Tsunami Warning

- Ensure evacuation shelters, if required, have been opened in their area of jurisdiction after consultation with relevant stakeholders.
- (ii) Coordinate evacuation and effective utilisation of available local resources.

- (iii) Coordinate with other stakeholders, community leaders and community disaster response team (CDRT) as appropriate for smooth evacuation of vulnerable inhabitants to safe zones.
- (iv) Send regular situation report to NEOC.
- (d) <u>Aftermath</u>
  - After issue of Termination bulletin, LEOC will continue to oversee actions by all stakeholders involved in search and rescue operations and will inform NEOC of any emergency requirements.
  - (ii) Send regular situation report to NEOC.
  - (iii) Ensure monitoring of the state of the main road networks and of main bridges,
  - (iv) Disseminate any traffic diversion plan.
  - (v) Ensure emergency routes, such as, those leading to hospitals are cleared,
  - (vi) Ensure that communication and domestic supplies to all key and essential services are restored on a priority basis.

## 3.6 Main Response Agencies

## 3.6.1 Mauritius Police Force

The MPF will take the following appropriate actions for Mauritius, Rodrigues and Outer Islands:

## (a) General Preparedness

- (i) Participate actively in annual simulation exercise/evacuation drill in collaboration with the Local DRRM Committee involving the community.
- (ii) Ensure that all Police vehicles allocated to Stations/ Units in Tsunami prone areas are equipped with Tsunami warning/alert System. This device is to be regularly checked and maintained in good working order at all times.
- (iii) Sensitise the local communities to the Tsunami warning/alerting system, and
- (iv) Ensure that disaster kits and resources including communications facilities are operational and ready for use.

(b) Tsunami Watch

- (i) The PIOR will inform all Divisional Ops Rooms, Units/ Branches, Senior Officers, Rodrigues, Outer Islands and other concerned Ministries and Departments as per Annex III.
- (ii) Police Division will inform all its units to be ready for any action.
- (iii) Division Operations Room concerned will be converted into a Division Disaster Operations and Coordination Room (DOCRs).
- (iv) NCG Operations Room at Les Salines and the Mauritius Radio Services under the control of the Director of Shipping will send tsunami watch through GMDSS to ships/ fishing vessels operating in Mauritian waters.
- (v) Be prepared to deploy vehicles to warn the public through sirens or loud hailers in the coastal areas as well as fishermen and sea-goers of the potential threat,
- (vi) Be prepared to assist those at risk to leave for designated emergency shelters, or safe places inland or on high ground.
- (vii) Send regular situation report to NEOC.
- (c) <u>Tsunami warning</u>
  - (i) Deploy vehicles to warn the public through sirens or loud hailers in the coastal areas as well as fishermen and sea-goers of the potential threat.
  - (ii) NCG Operations Room at Les Salines and the Mauritius Radio Services under the control of the Director of Shipping will send warnings through GMDSS to ships/ fishing vessels operating in Mauritian waters.
  - (iii) Provide transport and resources for evacuation.
  - (iv) Organize the deployment of all personnel, transport and other resources and place same at the disposal of the authorities engaged in disaster response.
  - (v) Assist those at risk to leave for designated emergency shelters, or safe places inland or on high ground.
  - (vi) Maintain patrol at abandoned residential or commercial areas to prevent theft and looting. Evacuate prior to impact time.
  - (vii) Police Helicopter will fly and sensitize persons on islets by using sirens and coded flags. NCG aircrafts and vessels will also be utilized.
  - (viii) Issue regular info-Route to communicate proposed Traffic Diversion Plans.
  - (ix) Send regular situation report to NEOC.

(d) <u>Aftermath</u>

- (i) PIOR will:
- 1. Coordinate and monitor all Police deployments through DOCRs.
- 2. Send regularly report to the NEOC.
- 3. Circulate Termination bulletin to all DOCRs and all senior officers.
- (ii) The Police will:
- 1. Carry out search and rescue or evacuation operations, where necessary, using Police Helicopters, NCG craft or Armoured Police Vehicles.
- 2. Ensure that all roads are practicable and assist to clear them.
- 3. Provide access to key services.
- 4. Ensure safe return of displaced person to their respective home.
- 5. Police Divers and Lifesavers from GIPM, SMF and NCG will be on stand-by for assistance in case the situation warrants.
- 6. Submit to the NEOC a general assessment of the damage to infrastructure, casualties and the situation throughout the affected areas following surveys performed by all Police Divisions/ Units/ Stations/ Posts and helicopters.
- 7. With the assistance of MoSS NS & RI, MoSI & EE and other stakeholders, where required, identify the number of households that have been affected, number of people affected and displaced and carry out survey to assess extent of damage (loss of personal properties, loss of materials such as mattresses, furniture, etc). Report to be copied to the NEOC.

## 3.6.2 The Mauritius Fire and Rescue Service (MFRS)

## (a) <u>General Preparedness</u>

- Ensure that adequate resources are available at Headquarters and in all Fire Stations for any intervention.
- (ii) Assist Municipal and District Councils in the planning, preparation and conduct of Tsunami simulation exercises as per the NDS Simulation Calendar.
- (iii) Carry out, in coordination with the NDRRMC, targeted community awareness campaigns to sensitise the community, schools, elderly, and other

identified as vulnerable to precautions and measures that can be taken during a tsunami.

- (iv) Monitor with concerned authorities the implementation of appropriate risk reduction structural and non-structural measures.
- (b) Tsunami Watch

Mobilize all available resources and remain on alert for any intervention.

- (c) <u>Tsunami Warning</u>
  - (i) Deploy all its resources in Tsunami prone areas to assist in evacuation.
  - (ii) Send Situation Report to NEOC.

## (d) <u>Aftermath</u>

- (i) Carry out search and rescue operations jointly with the Police.
- (ii) Carry out operations pertaining to any fire or hazardous material incidents.
- (iii) Send situation report to NEOC.

## 3.6.3 Ministry of Health and Quality of Life

## (a) <u>General Preparedness</u>

- (i) Identify Regional Operation and Field Operation Centres and establish plans for them to be activated in the event of a potentially destructive tsunami.
- (ii) A list of Tsunami Emergency Medical Personnel will be established together with phone numbers of SAMU and Ambulance Services.
- (iii) Ensure that members of the medical personnel are fully conversant with the Ministry's Tsunami Emergency Operation Plan. A copy of the Plan should be made available at the NDRRMC.
- (iv) Participate in the Tsunami simulation exercises organized by the Local Disaster Risk Reduction and Management Committee as per the NDS Simulation Calendar.
- (v) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

## (b) <u>Tsunami Watch</u>

- (i) Be prepared to activate Regional and Field Operation Centre which will monitor progress of work in the field and decide on the course of action.
- (ii) Establish communication link with NEOC.

## (c) <u>Tsunami Warning</u>

- (i) Activate Regional and Field Operation Centres which will monitor progress of work in the field and decide on the course of action.
- (ii) Establish communication link with NEOC.

## (d) <u>Aftermath</u>

- Members of the field operation centre will immediately visit affected areas to assess the immediate medical and public health needs.
- (ii) SAMU and ambulance services will be deployed to evacuate any casualty from the sites of disaster.
- (iii) Temporary first aid camps will be set up to provide immediate medical care,
- (iv) Dead bodies will be secured in an appropriate place for medico-legal purposes and thereafter transported to the mortuary.
- (v) Vector control measures will be reinforced around the affected areas.
- (vi) Surveillance activities will be undertaken to detect any emerging health problem.

## 3.7 Other Stakeholders

## 3.7.1 Prime Minister's Office

## ✤ Government Information Service

## (a) <u>General Preparedness</u>

Produce and distribute at regular intervals, posters, pamphlets and flyers for sensitising the public on precautions to be taken in case of potential tsunami threat, in collaboration with the following organisations:

- 1. Mauritius Meteorological Services.
- 2. Ministry of Environment, SD, and D & BM.

- 3. Ministry of Education and Human Resources, Tertiary Education and Scientific Research.
- 4. Ministry of Tourism and External Communications.
- Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Islands.

#### (b) <u>Tsunami Watch</u>

- (i) Issue Communiqué to public and private radios for onward broadcasting in view of advising the population on measures to be initiated during tsunami watch, in collaboration with the following organisations:
- 1. Mauritius Meteorological Services.
- 2. Ministry of Environment, SD, and D & BM.
- 3. Ministry of Education and Human Resources, Tertiary Education and Scientific Research.
- 4. Ministry of Tourism and External Communications.
- 5. Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Islands.
- (ii) Arrange for press brief.

## (c) <u>Tsunami Warning</u>

- (i) Issue Communiqué, to public and private radios for onward broadcasting in view of advising the population at risk on measures to be taken during the warning stage, in collaboration with the following organisations:
- 1. Mauritius Meteorological Services.
- 2. National Disaster Risk Reduction and Management Centre.
- 3. Ministry of Education and Human Resources, Tertiary Education and Scientific Research.
- 4. Ministry of Environment, Sustainable Development, and Disaster and Beach Management.
- (ii) Arrange for press brief.

(d) <u>Aftermath</u>

- (i) Issue Communiqué to the MBC, and all public and private Radios for onward broadcasting and to advise the population on precautions to be taken, in collaboration with the following organisations:
- 1. Mauritius Meteorological Services.
- 2. National Disaster Risk Reduction and Management Centre.
- 3. Ministry of Education and Human Resources, Tertiary Education and Scientific Research.
- 4. Ministry of Environment, Sustainable Development, and Disaster and Beach Management.
- (ii) Arrange for press brief.

## 3.7.2 Ministry of Tourism and External Communications and Tourism Authority

- (a) <u>General Preparedness</u>
  - (i) Ensure that all the hotels management, bungalow owners, tour operators, restaurants owners, other tourism enterprises and pleasure craft operators have their own SOPs. Staffs, employees and guests (as far as practicable) should be conversant with their evacuation plans. Drills should be carried out regularly.
  - (ii) Participate in Tsunami simulation exercises organized by the Local Disaster Risk reduction and Management Committee as per the NDS Simulation Calendar.
  - (iii) Develop a Service Continuity Plan.
- (b) Tsunami Watch
  - Be ready to activate Crisis Cell at the level of Tourism Authority for coordination with other stakeholders as per protocol.
  - (ii) Ensure that Hotels management, bungalow and restaurant owners, tour operators, pleasure craft operators and other tourism enterprises inform employees, guests and all concerned under their charge of the Tsunami watch bulletin.
  - (iii) Ensure Hotels and relevant tourism enterprises are ready to activate respective protocols.

(c) <u>Tsunami Warning</u>

- (i) Activate Crisis Cell at level of Tourism Authority.
- (ii) Crisis Cell of Tourism Authority to open and maintain line of communication with Hotels management, bungalow and restaurant owners, tour operators, pleasure craft operators and other tourism enterprises.
- (iii) Ensure Hotels and relevant tourism enterprises activate respective protocols.
- (iv) All hotels management, bungalows owners, tour operators, other tourism enterprises and pleasure craft operators to:
- 1. evacuate guests to safe zones, if required.
- 2. ensure safe transportation to safe zones, if required.
- 3. arrange for alternate residences for relocation of tourists in safe zones.
- 4. inform relevant authorities including the crisis cell of Tourism Authority and relevant embassies in case of relocation of tourists.
- (v) Crisis Cell of Tourism Authority to send regular situation report to NEOC.
- (d) <u>Aftermath</u>
  - (i) Carry out a Post Disaster Damage Assessment of all Tourism Enterprises and report to NEOC.
  - (ii) Ensure Hotels management, bungalows owners, tour operators, other tourism enterprises and pleasure craft operators return any displaced tourists and staffs as long as it is safe to do so.

#### \* Mauritius Ports Authority

- (a) <u>General Preparedness</u>
  - (i) Establish a Tsunami Emergency Committee for Port Louis Harbour consisting of representative from all sections of the Port Authority and stakeholders operating in the port area.
  - (ii) Tsunami Emergency Committee will ensure that each stakeholder has its own emergency plan in conformity with the MPA contingency plan.
  - (iii) Tsunami Emergency Committee will ensure that all the personnel working in the port area are familiar with the Contingency Plan.
  - (iv) Plan should be regularly tested and reviewed through drills and simulation exercises with all stakeholders to ensure its effectiveness.

- (v) Develop Service/Business Continuity Plan.
- (vi) An updated copy of the revised Plans should be made available at the NDRRMC.
- (b) Tsunami Watch
  - (i) Issue Tsunami Watch information to the shipping community.
  - (ii) Be ready to notify all vessels in the Port to proceed to high seas on their own whereas those already at large to remain in open sea in accordance to the instructions of the Port Master.
  - (iii) Be ready to secure gantry cranes of the Mauritius Container Terminal.
  - (iv) Be ready to retain and maintain minimum key personnel to assist in emergency evacuation.
  - (v) Be ready to secure all MPA crafts with additional moorings in a sheltered location.
- (c) Tsunami Warning
  - (i) Issue Tsunami Warning information to the shipping community.
  - (ii) Notify all vessels in the Port to proceed to high seas on their own whereas those already at large to remain in open sea in accordance to the instructions of the Port Master.
  - (iii) Ensure that gantry cranes of the Mauritius Container Terminal are properly secured.
  - (iv) Ensure that all MPA crafts are properly secured with additional moorings in a sheltered location.
  - (v) Ensure Port Emergency Services carry and complete evacuation of personnel.
  - (vi) Ensure the Mauritius Radio Services will broadcast the information on Marine Radio and GMDSS for the benefit of all boat operators, seafarers and vessels in the vicinity.
  - (vii) All personnel to evacuate before impact time.
  - (viii) Send regular Situation Report to NEOC.

(d) <u>Aftermath</u>

- (i) Make a Post Disaster Damage Assessment in the port area and plan, prepare and make remedial action and re-opening of the port.
- (ii) Activate Service Continuity Plan.
- (iii) Restore port operation at the earliest possible.
- (iv) Send Situation Report to NEOC.

## ✤ Department of Civil Aviation

(a) <u>General Preparedness</u>

- (i) Develop, update and regularly test SOPs.
- (ii) Develop Service Continuity Plan.
- (iii) Ensure that airport operators and service providers have a proper and well coordinated tsunami emergency plan.

## (b) <u>Tsunami Watch</u>

- (i) Be ready to activate tsunami emergency plan.
- (ii) Inform all aircraft operators of the situation.
- (iii) Be ready to coordinate the assessment of the situation for aircraft operations and protection of property.
- (iv) Keep NEOC informed of the situation.

## (c) <u>Tsunami Warning</u>

- (i) Activate Tsunami emergency plan.
- (ii) Inform all aircraft operators of the situation.
- (iii) Coordinate the assessment of the situation for aircraft operations and protection of property.
- (iv) Keep NEOC informed of the situation.
- (d) <u>Aftermath</u>
  - (i) Activate Service Continuity Plan.
  - (ii) Coordinate the efforts made by all concerned stakeholders in assessing the situation and to expedite the restoration of aircraft operations.
  - (iii) Facilitate the arrival of international aid and assistance, if required.

- (iv) Review the flight schedule with the aircraft operators and Airport of Mauritius Limited.
- (v) Carry out Post Disaster Damage Assessment.
- (vi) Keep NEOC informed of the situation.

## 3.7.3 Ministry of Housing and Lands

#### (a) <u>General Preparedness</u>

- (i) Carry out risk and vulnerability assessment around Mauritius, Rodrigues and outer islands to review and update hazard maps.
- (ii) Jointly with the concerned LDRRMC identify coastal low lying land and residential areas at risk.
- (iii) Jointly with the concerned LDRRMC identify land for temporary housing.
- (iv) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
- (v) Develop coastal land use planning guidelines.
- (vi) Develop Tsunami emergency plan.

## (b) <u>Tsunami Watch</u>

- (i) Begin all preliminary measures for activation of Tsunami emergency plan.
- (ii) Be ready to intervene, if required.

## (c) <u>Tsunami Warning</u>

Activate Tsunami emergency plan.

- (d) <u>Aftermath</u>
  - (i) Carry out jointly with MPI a Post Disaster Damage Assessment.
  - (ii) Take appropriate measures to facilitate the setting up of temporary shelters for victims.
  - (iii) Assist in the provision of temporary shelters to accommodate victims who have lost their houses.

## 3.7.4 Ministry of Social Integration and Economic Empowerment

## (a) <u>General Preparedness</u>

- (i) Assist:
- Ministry of Housing and Land to carry out risk and vulnerability assessment around Mauritius, Rodrigues and outer islands to review and update hazard maps.
- 2. the concerned LDRRMC to identify coastal low lying land and residential areas at risk.
- 3. the concerned LDRRMC to identify land for temporary housing in consultation with Ministry of Housing and Lands.
- (ii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
- (iii) Develop Tsunami emergency plan.

## (b) <u>Tsunami Watch</u>

- (i) Be ready to activate tsunami emergency plan.
- (ii) Be ready to intervene, if required.

## (c) <u>Tsunami Warning</u>

Activate Tsunami emergency plan.

## (d) <u>Aftermath</u>

- Assist in carrying out jointly with MPI and Ministry of Housing and Land a Post Disaster Damage Assessment.
- (ii) Assist Ministry of Housing and Lands and other concerned authorities in the setting up of temporary shelters for victims.
- (iii) Assist in the provision of temporary shelters to accommodate victims who have lost their houses.

## 3.7.5 Ministry of Energy and Public Utilities

### ✤ Wastewater Management Authority

#### (a) General Preparedness

- To participate in the Tsunami simulation exercises organized by the Local Disaster Risk Reduction and Management Committee as per the NDS Simulation Calendar.
- (ii) Develop Tsunami emergency plan.

#### (b) <u>Tsunami Watch</u>

Be prepared to activate Tsunami emergency plan.

#### (c) <u>Tsunami Warning</u>

Activate Tsunami emergency plan.

#### (d) <u>Aftermath</u>

- (i) Carry out Post Disaster Damage Assessment.
- (ii) Inspect its installations in the affected areas and initiate appropriate and immediate action for abating any spillage problems until such time that these are resolved.
- (iii) Send situation report to NEOC.

## ✤ Central Water Authority and Water Resources Unit

- (a) General Preparedness
  - Water Resources Unit will identify boreholes along coastal areas likely to be contaminated by salt water.
  - (ii) Develop respective Tsunami emergency plans.
- (b) <u>Tsunami Watch</u>
  - (i) Be prepared to activate respective Tsunami emergency plans.
  - (ii) Both CWA and WRU to instruct users to be prepared to protect their boreholes or minimise direct ingress of sea water in aquifers.

(c) <u>Tsunami Warning</u>

- (i) Activate respective Tsunami emergency plans.
- (ii) Instruct users to protect their boreholes by well cover to prevent or minimise direct ingress of sea water in aquifers.
- (iii) CWA to close valves of water pipelines within the coastal areas likely to be affected.
- (iv) CWA to arrange for water to be supplied regularly to the Emergency Shelters.
- (v) CWA and WRU to send regular situation report to NEOC.

## (d) <u>Aftermath</u>

- (i) Carry out Post Disaster Damage Assessment.
- Monitor the water distribution networks, boreholes and other water storage facilities near coastal areas to ensure that domestic and other water supply is not contaminated by intrusion of sea water.
- (iii) CWA will assess and repair any damage to its pipelines as soon as possible, where necessary.
- (iv) Send Situation Report to NEOC.

## 3.7.6 Ministry of Finance

## Mauritius Revenue Authority (MRA)/Custom Department <u>Aftermath</u>

- (i) The Mauritius Revenue Authority will take necessary measures for the rapid release of relief consignments and any goods needed during a disaster.
- (ii) Ensure the release of emergency supplies from the bonded warehouses outside the port area in safe zones, if required.

## 3.7.7 Ministry of Technology, Communication and Innovation

## \* Mauritius Telecom and Other Service Providers

- (a) General Preparedness
  - (i) Arrange for an Alert System to warn the public of the situation and the emergency measures to be taken.

- (ii) Arrange for an e-Register system to alert and inform the parents of students in case of disaster situations.
- (iii) Take measures to render coastal and sea based telecommunication infrastructure (eg 'SAFE' fibre optic cable, etc) resilient to Tsunami.
- (iv) Develop Business Continuity Plans.

#### (b) <u>Tsunami Watch</u>

- (i) Continue to inform the public in general of warnings/emergency measures to be taken.
- (ii) Arrange for Telmet Service (Tel No 8996 for fixed line telephone and Tel No 171 for mobiles) by which any telephone enquirer may listen to the recorded version of latest tsunami bulletins.

#### (c) <u>Tsunami Warning</u>

- (i) Continue to inform the public in general of warnings/ emergency measures to be taken.
- (ii) Update the Telmet Services.
- (iii) Send regular Situation Report to NEOC.

#### (d) <u>Aftermath</u>

- (i) Continue to inform the public in general of warnings/ emergency measures to be taken.
- (ii) Update the Telmet Services.
- (iii) Restore communication system in affected areas.
- (iv) Send situation report to NEOC.

## MBC/ Private Radios

(a) <u>General Preparedness</u>

The MBC and other private radios will collaborate with other stakeholders to sensitise the public on the potential threat of a Tsunami and necessary precautions to be taken in the event of a tsunami.

## (b) Tsunami Watch

- (i) The MBC, on receipt of a tsunami watch bulletin/alert, will immediately broadcast same on TV and radio. The same information will be repeated every 30 minutes or sooner in English, French, Creole and Hindustani until the next update. The information will also be scrolled on all TV channels.
- (ii) Private radios will also collaborate for the broadcasting of Tsunami Bulletins issued by MMS and NEOC.
- (c) <u>Tsunami Warning</u>
  - (i) MBC will broadcast MMS and NEOC Tsunami communiqués on TV and radio, repeat every 30 minutes or sooner in English, French, Creole and Hindustani and the information will be also scrolled on TV channels.
  - (ii) Private radios will assist in broadcasting MMS and NEOC Tsunami communiqués on TV and radio, repeat every 30 minutes or sooner in English, French, Creole and Hindustani and the information will be also scrolled on TV channels.
- (d) <u>Aftermath</u>

Regular broadcasting of Tsunami communiqués in English, French Creole and Hindustani and scrolls on TV channels.

#### ✤ MCML (Multi-Carrier Mauritius Limited)

(a) <u>General Preparedness</u>

Ensure that all technical equipment being extended as broadcasting facilities to the MBC and Private Radios are properly maintained and kept serviceable at all times.

#### (b) <u>Tsunami Watch</u>

The MCML will ensure that all its broadcasting facilities are available to MBC and Private Radios to alert the population and enable them to prepare for tsunami emergencies by means of prompt bulletins and announcements.

## (c) <u>Tsunami Warning</u>

Ensure that all its broadcasting facilities are available to MBC and Private Radios to alert the population and enable them to acts as per tsunami emergency plan by means of prompt bulletins and announcements.

## (d) <u>Aftermath</u>

Ensure that all its broadcasting facilities are available to MBC and Private Radios to alert the population on the situation.

## 3.7.8 Ministry of Public Infrastructure and Land Transport

## (a) General Preparedness

- (i) Construct new drainage system where required and rehabilitate existing ones.
- (ii) Develop building codes for development in coastal areas and constantly review these codes to promote Tsunami resilience.

## (b) <u>Tsunami Watch</u>

Be prepared to activate emergency plan.

## (c) <u>Tsunami Warning</u>

Activate emergency plan.

## (d) <u>Aftermath</u>

- Upon receipt of termination bulletin, carry out a Post Disaster Damage Assessment of Government Buildings and other infrastructures.
- (ii) Take remedial actions as required for the repair of damaged buildings, roads, bridges and other governmental infrastructures.
- (iii) Jointly with Ministry of Housing and Lands and Ministry of Social Integration and Economic Empowerment set up plan for temporary housing for the victims of Tsunami.

## ✤ National Transport Authority

(a) <u>General Preparedness</u>

- (i) Ensure that the Transport Depots are situated in safe area.
- (ii) Participate in the Tsunami simulation exercises organized by the Local Disaster Risk reduction and Management Committee as per the NDS Simulation Calendar.
- (iii) Develop a Service Continuity Plan and Business Continuity Plan jointly with bus operators.

#### (b) Tsunami Watch

Be ready to deploy buses for evacuation from affected areas, jointly with bus operators.

#### (c) <u>Tsunami Warning</u>

Supervise the deployment of buses in required areas.

- (d) <u>Aftermath</u>
  - (i) Carry out an assessment of all the bus routes networks and inform NEOC accordingly.
  - (ii) Arrange for quick deployment of all possible buses for the return of evacuees from Emergency Shelters/ Safe Havens.
  - (iii) Activate Service Continuity Plan.
  - (iv) Restore public transport as soon as possible.

# 3.7.9 Ministry of Education and Human Resources, Tertiary Education and Scientific Research

- (a) <u>General Preparedness</u>
  - (i) Identify educational institutions along the coastal areas which are likely to be inundated and inform them of necessary action to be taken.
  - (ii) Provide educational institutions with documents, posters and/ or other written materials to sensitise students and organise simulation or drill evacuation exercises.
  - (iii) Develop a Service Continuity Plan.

## (b) <u>Tsunami Watch</u>

- Be prepared to activate respective emergency plan and instruct educational institutions in inundation-prone locations to cease operation with immediate effect.
- (ii) Be prepared to arrange for schools to be used as emergency shelters in extreme circumstances.
- (c) <u>Tsunami Warning</u>
  - (i) Activate respective emergency plan and instruct educational institutions in inundation-prone locations to cease operation with immediate effect.
  - (ii) Arrange for schools to be used as emergency shelters in extreme circumstances.
  - (iii) Facilitate, in collaboration with different stakeholders, including first aiders, education psychologists for the provision of essential items.
- (d) <u>Aftermath</u>
  - (i) Monitor the state of educational institutions in affected areas to ensure their operability and report to the NEOC on conditions prevailing there at.
  - (ii) Verify that the school buildings which will have been used as emergency shelters are in a state to resume classes.

## 3.7.10 The Ministry of Local Government

- (a) <u>General Preparedness</u>
  - (i) Carry out surveys on the vulnerable areas and number of population at risk and identify evacuation routes to safe zones and provide proper directional signage accordingly.
  - Jointly with the Ministry of Youth and Sports and the Ministry of Public Infrastructure identify shelters in safe zones.
  - (iii) Ensure that all companies in each Municipal/District council area have their own Business Continuity Plan.
  - (iv) Establish a memorandum of understanding with Private Companies to use their facilities in the event of a tsunami.

 (v) Participate in the Tsunami simulation exercises organized by the Local Disaster Risk reduction and Management Committee as per the NDS Simulation Calendar.

## (b) <u>Tsunami Watch</u>

- Ensure that Local Authorities (Municipal and District Councils) activate LEOC for coordination and monitoring of all responsive operations with DOCR's and other stakeholders, if required.
- (ii) Be ready to mobilize available resources and keep them on stand-by for deployment.

## (c) <u>Tsunami Warning</u>

- (i) Ensure evacuation of areas likely to be affected by tsunami through Municipal and District Councils.
- Monitor the areas under their respective purview and deploy all necessary materials to assist in search and rescue operations.
- (ii) Liaise with private companies to use their facilities as required.

## (d) <u>Aftermath</u>

- (i) Carry out cleaning operations.
- (ii) Carry out a Post Disaster Damage Assessment.
- (iii) Provide report to NDRRMC of effects of the Tsunami and the deployment of resources and actions taken accordingly.
- (iv) Jointly with Ministry of Social Security, National Solidarity and Reform Institutions and other concerned authorities, identify additional emergency shelters.
- (v) Oversee and provide support where required.

## 3.7.11 Ministry of Social Security, National Solidarity and Reform Institutions

- (a) <u>General Preparedness</u>
  - Support the NDRRMC, Police and Local Disaster Risk Reduction Management Committees of municipal and district councils to identify safe emergency shelters nearest to the coasts.

- (ii) Ensure that necessary administrative arrangements are put in place for the provision of amenities as per entitlement such as water and biscuits, hurricane lamps, etc when emergency shelters are opened with special attention to persons with disabilities and children.
- (iii) Ensure that administrative arrangements are made with the MRCS for the provision of a minimum number of camp beds at each emergency shelter.
- (iv) Participate in the simulation exercises organized by the Local Disaster Risk reduction and Management Committee as per the NDS Simulation Calendar.
- (v) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
- (vi) Ensure the development of evacuation plans for persons with disabilities and the elderly, with appropriate specialised institutions.
- (b) <u>Tsunami Watch</u>
  - (i) Be prepared to activate in the emergency shelters to full capacity, where required.
  - (ii) Supervisor of Emergency Shelters to arrange with Ministry of Health and Quality of Life for special needs medical assistance, if required.
  - (iii) Be prepared to provide amenities as per entitlement such as water and biscuits, hurricane lamps, etc when emergency shelters are opened with special attention to disabled persons and children.
  - (iv) Ensure that camp beds from MRCS are made available.
  - (v) Send situation report to LEOC and NEOC.
- (c) <u>Tsunami Warning</u>
  - (i) Manage the emergency shelters to their full capacity.
  - (ii) Send situation report to Police, LEOC and NEOC.
- (d) <u>Aftermath</u>
  - (i) Provide amenities as per entitlement such as water, biscuits, etc. Food vouchers are provided for up to all clear (no tsunami threat).
  - (ii) Assist Police, Ministry of Social Integration and Economic Empowerment and other stakeholders, where required, in identifying the number of households that have been affected, number of people affected and displaced

and in carrying out survey to assess extent of damage (loss of personal properties, loss of materials such as mattresses, furniture, etc).

- (iii) Provide support to the NDRRMC, Police and Local Disaster Risk Reduction Management Committees of municipal and district councils to identify additional emergency to accommodate evacuees, if required.
- (iv) Send situation report to Police, LEOC and NEOC.

## 3.7.12 Ministry of Gender Equality, Child Development and Family Welfare

(a) <u>General Preparedness</u>

- (i) Assist MoSS NS & RI to make provisions for basic necessities in the emergency shelters.
- (ii) Participate in the simulation exercises organized by the Local Disaster Risk reduction and Management Committee as per the NDS Simulation Calendar, and
- (iii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
- (iv) Ensure the development of evacuation plans for people with disabilities and the elderly, with appropriate specialised institutions.

## (b)<u>Tsunami Watch</u>

Be prepared to assist MoSS NS & RI in the activation of emergency shelters facilities to full capacity, where required.

## (c) <u>Tsunami Warning</u>

Assist MoSS NS & RI in the management of the emergency shelters to their full capacity.

(d) <u>Aftermath</u>

- Assist MoSS NS & RI in providing basic needs until all displaced persons safely return to their respective homes.
- (ii) Assist in carrying out Post Disaster Damage Assessment in terms of personal property damaged, food stuff damaged, etc...

# 3.7.13 Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Islands.

- (a) <u>General Preparedness</u>
  - Regularly carry out sensitization /Awareness campaign with the fishermen community on tsunami hazard and action to be taken in the event of Tsunami Warnings.
  - (ii) To participate in the Tsunami simulation exercises organized by the Local Disaster Risk reduction and Management Committee as per the NDS Simulation Calendar.
  - (iii) Build tsunami resilience of Saint Brandon and Agalega in terms of infrastructure.
  - (iv) Develop and regularly test tsunami emergency plans for Saint Brandon and Agalega.
- (b) <u>Tsunami Watch</u>
  - (i) Inform Fishermen Associations/ Cooperatives in accordance with the list established in the Fisheries Emergency Operations Plan.
  - (ii) Inform and ensure that the Mauritius Radio Services broadcast the information on Marine Radio and GMDSS for the benefit of all boat operators, seafarers and vessels in the vicinity.
  - (iii) Inform fishing vessels with communication facilities and located in the open sea of the situation.
  - (iv) Be ready to activate tsunami emergency plan for Saint Brandon and Agalega.
- (c) Tsunami Warning
  - Alert with the collaboration of NCG, all small fishing boats in the near shore areas lagoon to come ashore in the shortest possible delay and evacuate to safe zones.
  - (ii) Inform fishing vessels with communication facilities and located in the open sea to stay away.
  - (iii) Activate Tsunami emergency plan for Saint Brandon and Agalega.
  - (iv) Send situation report to the NEOC.

(d) <u>Aftermath</u>

- (i) Carry out survey at the level of each Fisheries Post and all information collected will be channelled to the Director of Fisheries for necessary action.
- (ii) Carry out a post Disaster Damage Assessment for Saint Brandon and Agalega.
- (iii) Send situation report to the NEOC.

# ✤ Mauritius Oceanography Institute

(a) General Preparedness

- Keep under review/ revisit the inundation map after consideration of bathymetric and hydro graphic survey results and other factors such as site visits, local reports, etc.
- (ii) Risk areas will be established as well as the degree of vulnerability stated (if and when possible) on a map.
- (iii) The map shall be updated a minimum of once yearly, and a copy held at the NDRRMC.
- (b) <u>Tsunami Watch</u>

Be ready to assist NEOC.

(c) <u>Tsunami Warning</u>

Assist NEOC.

- (d) <u>Aftermath</u>
  - (i) To scientifically measure extent of tsunami runs in-land with respect to the topography.
  - (ii) Send report to NEOC.

# 3.7.14 Ministry of Environment, Sustainable Development, and Disaster and Beach Management

- (a) <u>General Preparedness</u>
  - (i) Participate in the simulation exercises organized by the Local Disaster Risk reduction and Management Committee.
  - (ii) Ensure mapping of storage facilities for petroleum and hazardous substances in the tsunami prone zone are prepared and made available.
  - (iii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) <u>Tsunami Watch</u>

- (i) Be ready to act according to SOP/Action Plan.
- (ii) Ensure that owners/operators of petroleum and hazardous storage facilities in the tsunami prone zone are informed accordingly, in collaboration with the MoHQL, Ministry of Local Government, Ministry of Labour and Industrial Relations and the Radiation Protection Authority.

# (c) <u>Tsunami Warning</u>

- (i) Ensure that owners of storage facilities for petroleum and hazardous substances in the tsunami prone zone execute their emergency plans.
- (ii) Monitor and be prepared to intervene at hazardous places if required.

#### (d) <u>Aftermath</u>

- (i) Muster all required staff within reasonable time at NEL, Reduit and preposition at specified locations.
- (ii) A Technical Committee to be set up at the level of the Ministry for advice,
- (iii) A Communication Cell to be set up to prepare/ submit observation reports to the Coordination Team as well as to draft any communiqué.
- (iv) Survey Teams to be constituted to effect surveys on the coastal zone.
- (v) Remain on alert and intervene when required.
- (vi) Technical Committee will meet, as soon as possible, after the tsunami alert has been waived.

- (vii) Communication Cell to be set up by the Divisional Environmental Officer responsible for information and education.
- (viii) Mobilisation of officers depending on the scale of the tsunami.
- (ix) Survey Teams, headed by Divisional Environment Officers/ Divisional Scientific Officers, to carry out surveys on the coastal zones.
- (x) Assess any impact, propose any relief measures and take appropriate action in collaboration with relevant stakeholders for:-
  - Cleaning of Public beaches and repairs and/or
  - Reinstatement of any of its property/assets standing on public beaches following a tsunami.
- (xi) Send regular situation report to the NEOC.

#### 3.7.15 NGO's

(a) <u>General Preparedness</u>

Participate in the Tsunami simulation exercises organized by the Local Disaster and Management Committee as per the NDS Simulation Calendar

#### (b) <u>Aftermath</u>

- (i) The NGO's will assist the health and other stakeholders in relief operations.
- (ii) Send regular situation report to the NEOC.

#### 3.7.16 Association des Hôteliers et Restaurateurs – Ile Maurice (A.H.R.I.M)

- (a) General Preparedness
  - Encourage members (hotels and restaurants) to participate in tsunami simulation exercises organized by the Local Disaster Risk reduction and Management Committee.
  - (ii) Encourage members to develop service/business continuity plans.

#### (b) <u>Tsunami Watch</u>

- (i) Inform all the hotels and restaurants of the potential threat.
- (ii) Be ready to activate emergency plans.

# (c) <u>Tsunami Warning</u>

- (i) Ensure that members (hotels and restaurants) activate their emergency plans.
- (ii) Send situation report to LEOC and NEOC.

# (d) <u>Aftermath</u>

- Liaise with members (hotels and restaurants) to carry out post disaster damage assessment on their facilities.
- (ii) Send situation report to the LEOC and NEOC.

\*\*\*\*\*\*\*\*\*End of Scheme\*\*\*\*\*\*\*

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# Hígh Waves Emergency Scheme

# **National Disasters Scheme Edition 2015**



National Disaster Risk Reduction and Management Centre (NDRRMC) Line Barracks, Port-Louis High Waves Emergency Scheme

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#### 4.0 HIGH WAVES EMERGENCY SCHEME

#### 4.1 Introduction

High energy waves are significant hazard which affects mostly coastal areas. It is a matter of fact that this natural hazard has significant effects on day-to-day sea activities due to its striking force and damages that may be caused. It has been observed that high waves usually affect the coastal areas of Mauritius, Rodrigues and Outer islands.

*"Raz de Marée"* is commonly used to describe the effects of high waves and a combination of other factors causing rise of sea water levels along the sea shore and the immediate neighbourhood of some beaches.

The threatening effects of the waves can cause the population to desert their dwelling places and to look for shelters elsewhere. Sea water can penetrate further in the low grounds and coastal roads in prone areas can be flooded and become dangerous.

#### **Causes of High Waves**

#### **Storm Surge**

Storm surge (*marée tempête*) is the change in the water level caused by the presence of a storm/cyclone. It is an abnormal rise of water generated by the storm or cyclone, over and above the predicted astronomical tide. Since storm surge is a difference between water levels, it does not have a reference level.

Storm surge is caused primarily by the strong winds in a storm/cyclone. The low pressure of the storm has minimal contribution. The wind circulation around the eye of a cyclone blowing on the ocean surface produces a vertical circulation in the ocean. In deep water, there is nothing to disturb this circulation and there is very little indication of storm surge. Once the cyclone/storm reaches shallower waters near the coast, the vertical circulation in the ocean becomes disrupted by the ocean bottom. The water can no longer go down, so it has nowhere else to go but up and inland.

In general, storm surge occurs where winds are blowing onshore. The highest surge tends to occur near the "radius of maximum winds," or where the strongest winds of the cyclone/storm occur.

#### **Heavy Swell**

A Swell is an ocean wave system raised at some distance away due to winds blowing over that area and not raised by the local wind blowing at the time of observation. Swell waves travel from their source, usually out of a stormy or a fetch of windy area and continue on in the direction of the winds that originally formed them as sea waves. The swell may travel for thousands of miles before dying away. As the swell wave advances, its crest becomes flattened and rounded and its surface smooth. Swell waves are characterized by a relatively long and regular period.

# 4.2 High Wave Warning System in Mauritius

# High waves warning

The Mauritius Meteorological Services issues warning for high waves arising from heavy swells which has originated far from our region or due to storm surge arising from a distant storm/cyclone. As far as practicable, about 12 hours in advance, a Special Communiqué is issued to inform the public of any impending high waves based on observation available.

# **Storm Surge Warning**

Storm surge warning is issued when a storm/cyclone is evolving close to our region. It is usually included in the Cyclone Warning issued.

# **Special Communiqué**

A Special Communiqué will be issued by the MMS, as far as practicable, about 12 hours in advance when such waves are detected or observed in order to allow for preparedness. The communiqué will be disseminated to the NDRRMC and other relevant stakeholders, including the media and will be updated, as necessary. It will, *inter alia*, give a general indication when seas are expected to become rough, the height of the waves, as far as practicable, and the regions where there may be a probability of surges, without being site specific.

The purpose of this Scheme is to ensure safety of life and property as well as to highlight precautionary measures that need to be taken by all stakeholders to reduce the devastating effects of the high waves.

This Scheme consists of the following sections:

- (a) General Preparedness
- (b) Action prior to occurrences of high waves
- (c) Action during the occurrence of high waves
- (d) Action in the aftermath of high waves

The following sections describe the responsibilities of all stakeholders so that they remain prepared and ready at all times.

#### 4.3 General Roles, Responsibilities and Actions of All Organisations

#### (a) General Preparedness

- (i) Ensure that all staffs are familiar with the procedures of their SOPs/ Contingency Plans.
- (ii) Update their SOPs/ Contingency Plans and ensure that they are properly understood and implemented.
- (iii) Display high waves, storm surge and heavy swells posters supplied by the GIS in conspicuous places for the information of the general public.
- (iv) Carry out sensitization programmes on high waves.
- (v) Implementation and testing of the right means of communication for warning the public of the occurrence of high waves especially those along the coast.
- (vi) Participate in high waves simulation exercises under the aegis of the municipal and district councils as per the NDS simulation calendar.
   Strengths and weaknesses should be identified and corrective measures should be taken as required.
- (vii) Develop service continuity/service plan, as applicable.

#### (b) Actions prior to occurrence of High Waves

- (i) Ensure all preparedness actions are in place.
- (ii) Be ready to activate contingency plan.
- (iii) Forward regular situation report to NEOC.
- (c) Actions during the occurrence of High Waves
  - (i) Activate contingency plan.
  - (ii) Forward regular situation report to NEOC

(d)<u>Aftermath</u>

- (i) Carry out a Post Disaster Damage Assessment pertaining to their area of responsibility and submit report to the NEOC.
- (ii) Immediate steps taken by Heads of Ministries/Departments to carry out and facilitate as required:
- 1. Clear roads.
- 2. Restore public transport.
- 3. Restore water supplies.
- 4. Restore essential communication services.
- 5. Restore power and lighting.
- 6. Restore ports services (Port Louis and Port Mathurin).
- 7. Restore airport operations.
- 8. Assess damage to food stocks, livestock, agriculture & infrastructure.
- 9. Obtain and provide funds for clearing of debris in the Local Disaster Committee's areas.
- 10. Provide and maintain sanitary arrangements at Emergency Shelters and clean and disinfect these later.
- 11. Obtain and provide funds for emergency works to be carried out.
- (iii) Activate respective business/service continuity plans where required.
- (iv) Take steps to salvage damaged property.
- (v) Keep staff ready to provide any assistance required.
- (vi) Forward regular situation reports to the NEOC accordingly.

# 4.4 Warning/Alerting Agency

# 4.4.1 The Mauritius Meteorological Services (MMS)

The MMS is the main warning/alerting agency to inform the General public in advance of the occurrence of high waves that may affect the Republic of Mauritius. However, such waves may also occur at short notice.

# (a) General Preparedness

(i) Maintain 24x7 monitoring of state of the sea.

- (ii) Ensure the operability of its communication system utilized to contact all stakeholders. Regular tests should be conducted to ensure readiness and alertness.
- (iii) Carry out sensitisation campaigns on high waves warnings. Need to continuously remind the public residing in the coastal areas as well as the general public about the dangers and safety precautions that need to be taken before, during and after the occurrence of high waves.
- (iv) Build capacity to improve on the high waves warning system.
- (b) Action prior to occurrence of High Waves
  - (i) Issue high waves warning for the information of the general public, the fisherman community and other stakeholders.
  - (ii) Monitor sea state around Mauritius, Rodrigues and the Outer Islands.
- (c) Action during the occurrence of High Waves
  - (i) Monitor sea state around Mauritius, Rodrigues and the Outer Islands.
  - (ii) Provide information to concerned stakeholders that include NEOC, PIOR and the public at large.
  - (iii) Issue regular special bulletins as required.

# (d) Aftermath of High Waves

- (i) Issue high wave termination bulletin.
- (ii) Continue to monitor the sea state around Mauritius, Rodigues and the Outer Islands.

# 4.5 Coordinating Bodies

# 4.5.1 National level

# 4.5.1.1 National Disaster Risk Reduction and Management Council/Crisis Committee

Upon confirmation of the occurrence of high waves by MMS, the Minister of Environment, Sustainable Development, and Disaster and Beach Management may convene the Crisis Committee depending on the gravity of the situation.

The Crisis Committee will meet as soon as possible at a convenient place. It will be supported by the NEOC and the LEOC from the city, municipal and district council concerned. The main functions of the Crisis Committee will be to:-

- (i) Monitor the general situation throughout the Island or Islands concerned.
- (ii) Analyse information on likely impact on the coasts of Mauritius or Rodrigues or on any of the other Outer Islands.
- (iii) Ensure that immediate executive actions including evacuation of people from vulnerable coastal areas are taken through the NEOC.
- (iv) Make recommendations on any relief measures that are immediately required.
- (a) General Preparedness

The National Disaster Risk Reduction and Management Council may be convened by the Minister of Environment, Sustainable Development, and Disaster and Beach Management, to review and, if necessary, to amend this High Wave Emergency scheme.

#### (b) Action prior to occurrence of High Waves

Depending upon the forecasted magnitude of the high waves, the **Crisis Committee** may, at the discretion of the Minister of Environment, Sustainable Development, and Disaster and Beach Management, meet at the NDRRMC, Line-Barracks, Port Louis or the alternate NEOC at SMF Headquarters, Vacoas to take stock of the general situation throughout Mauritius and outer islands and as well as from neighbouring countries of the Indian Ocean. The members of the **Crisis Committee** will monitor situation based upon updated situational reports submitted by MMS and NEOC and may give general direction on any action that need to be taken.

The **Crisis Committee once** convened shall take the following actions after consultation of the Prime Minister as the case may be:

- take decisive actions to safeguard and protect life through evacuation of vulnerable people (including elderly, disabled, women, children and persons detained in an institution) along coastal areas to safe zones.
- 2. supervise the organisation of disaster response operations in relation to the situation.
- 3. take such other measures, as may be appropriate in the circumstances.

(c) Actions during the occurrence of High Waves

Monitor and ensure that appropriate actions are initiated.

#### (d) Aftermath of High Waves

#### (i) Cabinet

Depending upon the magnitude and severity of the high wave impact, the Cabinet may be convened at the discretion of the chairperson to take strategic decisions.

#### (ii) The **Crisis Committee**

The **Crisis Committee** may at the discretion of its chairperson, meet at the NDRRMC, Line Barracks, Port Louis or the alternate NEOC at SMF Headquarters, Vacoas as soon as possible, after the termination of High waves conditions depending on the extent of affected population and damages. The main functions of the **Crisis Committee** will be:-

- (a) Collect and present to the Cabinet Office, information on:-
  - General situation throughout Mauritius, Rodrigues and outer Islands based on information from the NEOC.
  - (ii) Conditions of Government Departments as obtained from Permanent Secretaries and other heads of Ministries/ Departments/ Organisations.
  - (iii) Damage to non-government properties as obtained mainly from NEOC/ LEOC, and
  - (iv) General situation at the port and airport.
  - (v) Requirements for any relief measures
  - (vi) Requirements for any regional and/or international assistance.
- (b) Ensure that immediate executive actions are taken on the decisions of the Cabinet.
- (c) Ensure proper flow of information and instructions to Head of Ministries/Departments primarily concerned with the work of relief and early recovery.

# 4.5.1.2 The National Disaster Risk Reduction and Management Centre/ National Emergency Operations Command (NEOC)

Upon confirmation of the occurrence of high waves, the NDRRMC will take the following actions:-

(i) The NEOC will be activated and will become operational and will be responsible for taking charge of the management of the situation in coordination with concerned LEOC's.

(ii) Depending on the gravity of the situation, NEOC will be activated at Level I, II or III.

(iii)In case the NEOC, Line Barracks is at risk, the alternate NEOC at SMF Headquarters, Vacoas, will be activated.

# (a) General Preparedness

- (i) Coordinate with concerned stakeholders all preparedness actions, including sensitising the general public of the dangers and precautions, targeting the coastal community, fishermen communities, schools, elderlies and other population vulnerable to high waves through TV, radios, press and other relevant organisations,
- (ii) Monitor with concerned stakeholders that they are adequately equipped with the means to warn the public of the occurrence of high waves, especially those located along the coastline,
- (iii) Monitor with concerned authorities the implementation of appropriate risk reduction structural and non-structural measures, and
- (iv) Coordinate with local authorities to establish an annual simulation calendar.
- (v) Ensure that high waves simulation exercises are planned and conducted by the Local Disaster Risk Reduction and Management Committee in different coastal regions as per the annual simulation calendar. The exercises will involve all relevant Ministries and Departments and include the testing of the right means of communication for warning people at risk. Strengths and weaknesses should be identified and corrective measures should be taken as required.

#### (b) Actions prior to occurrence of High Waves

- (i) Activate the NEOC and convene its members, depending upon the situation.
- (ii) Inform the chairperson of the crisis committee and other Senior Officials.
- (iii) Activate High Wave Emergency Scheme.
- (iv) Ensure that concerned stakeholders activate relevant evacuation plans where required.
- (v) Issue Communiqué, in collaboration with GIS, through the media specifically targeting people in high waves prone areas.
- (vi) Send regular situation report to the members of the Crisis Committee and other Senior Officials.

# (c) Actions during the occurrence of High Waves

- (i) Move to alternate NEOC at SMF Headquarters, Vacoas, if required.
- (ii) Ensure that concerned LEOCs are activated.
- (iii) Ensure that evacuation plans of concerned Ministries, Departments and other stakeholders are activated.
- (iv) Ensure with LEOC that any evacuation is completed well before the first high waves start affecting the coast.
- (v) Send regular situation report to the members of the Crisis Committee and other Senior Officials.

# (d) Aftermath of High Waves

- (i) After issue of termination of high waves bulletin, NEOC will continue to oversee actions by all stakeholders involved in search and rescue operations and will inform the crisis committee of emergency requirements.
- (ii) Monitor state of the main coastal road networks and main bridges.
- (iii) Ensure that traffic diversion plans are activated.
- (iv) Ensure emergency routes, such as, those leading to hospitals and other essential services are cleared.
- (v) Ensure that communication and domestic supplies to all key and essential services along the coast are restored on a priority basis.
- (vi) Coordinate entry of International humanitarian aids and facilities into the country, as required.

- (vii) Continue to issue communiqué on precautions to be taken.
- (viii) Ensure that the affected population safely return back to their places of residences.
- (ix) Ensure that a Post Disaster Damage Assessment is carried out at National Level through Departments and Ministries and prepare consolidated report for the Crisis Committee and other senior officials.

#### 4.5.2 Municipal/ District Council Level

# Local Disaster Risk Reduction and Management Committee/Local Emergency Operation Command

#### (a) General preparedness

- (i) Identify the risk and vulnerabilities in respective area of jurisdiction.
- (ii) Develop and update emergency plans.
- (iii) Plan, prepare and conduct annual simulation exercise/evacuation drills in collaboration with all stakeholders including the community.
- (iv) Ensure that there is the right communication means to warn people at risk in place.
- (v) Carry out Sensitisation/Awareness campaign with the community involving concerned stakeholders.
- (vi) Train local communities on evacuation drills and promote the concept of self help and mutual help.

#### (b) Actions prior to occurrence of High Waves.

- (i) Activate respective LEOCs and convene all its members.
- (ii) Activate emergency plans.
- (iii) Establish communication link with NEOC and send regular situation report.
- (iv) Ensure that resources are readily available for deployment.
- (v) Warn local communities of the impending situation.
- (vi) Be prepared to activate emergency shelters.
- (vii) Coordinate evacuation and effective utilisation of available local resources.

(viii) Coordinate with other stakeholders, community leaders and Community Disaster Response Team (CDRT) as appropriate for smooth evacuation of vulnerable inhabitants to safe zones.

#### (c) Actions during the occurrence of High Waves.

- (i) Ensure evacuation shelters, if required, have been opened in their area of jurisdiction after consultation with relevant stakeholders.
- (ii) Continue to coordinate evacuation and effective utilisation of available local resources.
- (iii) Continue to coordinate with stakeholders, community leaders and Community Disaster Response Team (CDRT) as appropriate for smooth evacuation of vulnerable inhabitants to safe zones.
- (iv) Send regular situation report to NEOC.

#### (d) Aftermath of High Waves

- (i) After issue of the high wave termination bulletin, LEOC will continue to oversee actions by all stakeholders involved in search and rescue operations and will inform NEOC of any emergency requirements.
- (ii) Monitoring of the state of the coastal main road networks and of main bridges.
- (iii) Ensure that traffic diversion plans are activated.
- (iv) Ensure emergency routes, such as, those leading to hospitals and other essential services are cleared.
- (v) Ensure that communication and domestic supplies to key and essential services along the coastal areas are restored on a priority basis.
- (vi) Coordinate the conduct of a Post Damage Assessment by stakeholders concerned
- (vii) Send regular situation report to NEOC.

#### 4.6 Main Response Agencies

#### 4.6.1 The Mauritius Police Force

#### (a) <u>General Preparedness</u>

- (i) Participate actively in annual simulation exercise/evacuation drill in collaboration with the Local DRRM Committee involving the community.
- (ii) Develop Emergency Plans at divisions level.
- (iii) Identify with LDRRMC risks and vulnerabilities within respective area of jurisdiction.
- (iv) Ensure as far as practicable that Police stations have the appropriate equipment to warn the public in high wave prone areas.
- (v) Sensitise the public on safety precautions as well as the arrangements to be made in case of high waves situations requiring evacuation.
- (vi) Ensure that disaster kits and resources including communications facilities are operational and ready for use.

#### (b) Actions prior to occurrence of High Waves

- Inform concerned Divisional Ops Rooms, Units/ Branches, Senior Officers, Rodrigues, Outer Islands and other concerned Ministries and Departments on the impending situation.
- (ii) Activate emergency plans.
- (iii) Convert Division Operations Room into Division Disaster Operations and Coordination Rooms (DOCRs).
- (iv) Warn the public through sirens or loud hailers in the coastal areas as well as fishermen, tourists and sea-goers of the high wave threat.
- (v) Advise boat operators/ fishermen/ tourists/public to keep clear of the reefs and shallow areas and, not to attempt to negotiate any pass during high waves. Boats are to be properly secured.
- (vi) Police Helicopter will fly and sensitize persons on islets by using sirens and coded flags. NCG aircrafts and vessels will also be utilized.
- (vii) Ensure orderly and safe evacuation of the public from risk zones to designated Emergency Shelters, or safe places inland.
- (viii) Activate traffic diversion plan of coastal roads as required in collaboration with RDA and the Local Authorities.

(ix)Send regular situation report to NEOC.

#### (c) Actions during the occurrence of High Waves

- (i) Continue to warn the public through sirens or loud hailers in the coastal areas as well as fishermen and sea-goers of the occurrence of high waves.
- (ii) Locate any public in distress and organise for search and rescue or evacuation where necessary.
- (iii) The MRCC and the NCG operation room will constantly monitor the situation.
- (iv) Continue to ensure that no person/craft attempts to venture at sea and the public are kept informed of the situation.
- (v) Police Helicopter to continue to fly and sensitise persons on islets by using sirens and coded flags. NCG aircrafts and vessels will also be utilized.
- (vi) Issue regular info-route to communicate proposed coastal traffic diversion plans.
- (vii) Send regular situation report to NEOC.

# (d) Aftermath of High Waves

- (i) The Police will:-
- 1. Carry out search and rescue or evacuation operations.
- 2. Assist in coastal road clearance where required.
- 3. Provide access to key services.
- 4. Ensure safe return of displaced persons to their respective home.
- 5. Police Divers and Lifesavers from GIPM, SMF and NCG to be on stand-by and ready for deployment.
- 6. Ensure that police helicopters are ready to be deployed for air reconnaissance and aerial survey.
- 7. Forward to the NEOC a general assessment of the damage to infrastructure, casualties and the situation throughout the affected.

# 4.6.2 The Mauritius Fire and Rescue Service (MFRS)

#### (a) General Preparedness

- Ensure that adequate resources are available at Headquarters and in all Fire Stations for any intervention.
- (ii) Assist the Municipal and District Councils in the planning, preparation and conducting of high waves simulation exercises as per the NDS Simulation Calendar.
- (iii) Assist the Municipal and District Councils in carrying out sensitization campaigns targeting the vulnerable communities and the public in general on the safety measures to be taken in the event of high wave occurrence.
- (iv) Monitor with concerned authorities the implementation of appropriate risk reduction structural and non-structural measures.
- (b) Actions prior to occurrence of High Waves

Mobilize available resources and remain on alert for any intervention.

# (c) Actions during the occurrence of High Waves

- (i) Deploy resources in high wave prone areas, where evacuation is required.
- (ii) Carry out search and rescue operations jointly with the Police when required.
- (iii) Send situation report to NEOC.

# (d)Aftermath of High Waves

- (i) Carry out search and rescue operations jointly with the Police, if required.
- (ii) Carry out operations pertaining to any fire or hazardous material incidents.
- (iii) Send situation report to NEOC.

# 4.6.3 Ministry of Health and Quality of Life

(a) <u>General Preparedness</u>

- (i) Identify Regional Operation and Field Operation Centres and establish plans for them to be activated in the event of high waves.
- (ii) A list of Emergency Medical Personnel will be established together with phone numbers of SAMU and Ambulance Services.

- (iii) Ensure that members of the medical personnel are fully conversant with the Ministry's Emergency Operation Plan. A copy of the Plan should be made available at the NDRRMC.
- (iv) Participate in the simulation exercises organised by the Local Disaster Risk Reduction and Management Committee as per the NDS Simulation Calendar.
- (v) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
- (b) Actions prior to occurrence of High Waves
  - (i) Be prepared to activate Regional and Field Operation Centre, where necessary.
  - (ii) Establish communication link with NEOC.
- (c) Actions during the occurrence of High Waves
  - (i) Activate Regional and Field Operation Centres where required.
  - (ii) Deploy resources in high waves prone areas where emergency medical assistance may be required and at Emergency Shelters concerned.
  - (iii) Establish communication link with NEOC.
- (d) <u>Aftermath of High Waves</u>

Members of the field operation centre of Ministry of Health and QL will immediately:

- 1. visit affected areas.
- 2. visit evacuees at emergency centres so as to assess the immediate health needs and acts accordingly.
- 3. reinforce vector control measures around the affected areas.
- 4. undertake surveillance activities to detect any emerging health problem.
- 5. issue communiqué to advise public on precautionary measures to be taken on public health issues.

#### 4.7 Other Stakeholders

#### 4.7.1 **Prime Minister's Office**

# ✤ Government Information Service

#### (a) <u>General Preparedness</u>

Produce and distribute at regular intervals, posters, pamphlets and flyers for sensitising the public on precautions to be taken in case of potential high wave threat, in collaboration with the following organisations:

- 1. Mauritius Meteorological Services.
- 2. Ministry of Environment, SD, and D & BM.
- 3. Ministry of Education and Human Resources, Tertiary Education and Scientific Research.
- 4. Ministry of Tourism and External Communications.
- 5. Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Islands.

#### (b) Actions prior to occurrence of High Waves

- (i) Issue Communiqué to MBC TV, public and private radios for onward broadcasting in view of advising the population on measures to be initiated prior occurrence of high waves, in collaboration with the following organisations:
  - 1. Mauritius Meteorological Services.
  - 2. Ministry of Environment, SD, and D & BM.
  - 3. Ministry of Education and Human Resources, Tertiary Education and Scientific Research.
  - 4. Ministry of Tourism and External Communications.
  - Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Islands.
- (ii) Arrange for press brief.

#### (c) Actions during the occurrence of High Waves

Issue Communiqué to the MBC TV, public and all private radios for onward broadcasting and to advise the population on precautions to be taken in collaboration with the following organisations:

- 1. Mauritius Meteorological Services.
- 2. National Disaster Risk Reduction and Management Centre.
- 3. Ministry of Education and Human Resources, Tertiary Education and Scientific Research.
- 4. Ministry of Environment, Sustainable Development, and Disaster and Beach Management.
- 5. Ministry of Tourism and External Communications.
- 6. Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Islands.

# (d) Aftermath of High Waves

Issue Communiqué to the MBC TV public and all private radios for onward broadcasting and to advise the population on precautions to be taken in collaboration with the following organisations:

- 1. Mauritius Meteorological Services.
- 2. National Disaster Risk Reduction and Management Centre.
- 3. Ministry of Education and Human Resources, Tertiary Education and Scientific Research.
- 4. Ministry of Environment, Sustainable Development, and Disaster and Beach Management.

# 4.7.2 The Ministry of Tourism and External Communication

# **\*** Tourism Authority

(a) <u>General Preparedness</u>

- (i) Ensure that all the hotels management, bungalow owners, tour operators, restaurants owners, other tourism enterprises and pleasure craft operators have their own SOPs. Staffs, employees and guests (as far as practicable) should be conversant with high waves safety precautions. Drills should be carried out regularly.
- (ii) Participate in High Wave simulation exercises organised by the Local Disaster Risk Reduction and Management Committee as per the NDS Simulation Calendar.
- (iii) Develop a Service Continuity Plan.

#### (b) Actions prior to occurrence of High Waves

- (i) Act according to own SOPs.
- (ii) Inform the licensees (skippers/owners of Pleasure Crafts) by radio communiqué of the situation and advise to cease operations.
- (iii) Jointly with Association des Hoteliers et Restaurateurs Ile Maurice (A.H.R.I.M), inform all hotels, bungalows owners, tour operators and other relevant stakeholders, and other tourism sector operators, of the High Wave occurrence.

#### (c)Actions during the occurrence of High Waves

- (i) Act according to own SOPs.
- (ii) Continue to inform the licensees (skippers/owners of Pleasure Crafts) by radio communiqué of the situation and advise to cease operation

#### (d) Aftermath of High Waves

- (i) Carry out Post Disaster Damage Assessment
- (ii) Activate Service Continuity Plan
- (iii) Send regular sitrep to NEOC

#### Department of Civil Aviation (DCA)

(a) <u>General Preparedness</u>

In line with provisions of DCA Emergency Procedures.

#### (b) Actions prior to occurrence of High Waves

- Examine the report from Meteorological Services and keep the aeronautical community informed of any significant weather and any possible effect on the runway and facilities at the Airport.
- (ii) Apply DCA procedures as applicable.
- (iii) Keep NEOC informed of the operational situation of airports in Mauritius and Rodrigues.

#### (c) Actions during the occurrence of High Waves

- Liaise with Airport stakeholders and inform the NEOC of any disruption to traffic as result of high waves or inundations of any parts of the movement area
- (ii) Apply DCA procedures as applicable.
- (iii) Obtain from the NEOC pertinent information about accessibility of airport from various regions of the island and inform relevant stakeholders accordingly.
- (iv) In case of any disruption of services implement contingency plan and arrange for resumption of services as soon as possible.
- (v) Keep NEOC informed of the operational situation of airport.
- (d) <u>Aftermath</u>
  - (i) Carry out post Disaster Damage Assessment on Airport.
  - (ii) Obtain from the NEOC pertinent information about accessibility of airport from various regions of the island and inform relevant stakeholders accordingly.
  - (iii) Re-open Airports (Mauritius and Rodrigues), as soon as it is operationally safe to do so.
  - (iv) Send situation report to NEOC.

# ✤ Mauritius Ports Authority (MPA)

(a) <u>General Preparedness</u>

- Ensure that each stakeholder within Port Area has their own Emergency Plan in conformity with the MPA contingency plan.
- (ii) Ensure that the personnel are familiar with the contents of the Contingency Plan.
- (iii) Plan should be regularly tested and reviewed through drills and simulation exercises with all stakeholders to ensure its effectiveness.
- (iv) An updated copy of the revised plan should be made available at the NDRRMC.

# (b) Actions prior to occurrence of High Waves

Upon reception of a high wave bulletin/ alert, the Mauritius Ports Authority will take appropriate action at its end as per its Contingency Plan for high waves.

(c) Actions during the occurrence of High Waves

Activate own contingency plan

- (d) <u>Aftermath of High Waves</u>
  - (i) Carry out post disaster damage assessment on port facilities.
  - (ii) Obtain from the NEOC pertinent information about accessibility of port from various regions of the island and inform relevant stakeholders accordingly.
  - (iii) Re-open ports (Mauritius and Rodrigues), as soon as it is operationally safe to do so.
  - (iv) Send situation report to NEOC.

# Central Water Authority (CWA)

(a) <u>General Preparedness</u>

- (i) Identify the pumping stations and pipelines along the areas which are likely to be affected.
- (ii) Participate in High Waves simulation exercises in collaboration with the LDRRMC.

# (b) Actions Prior to Occurrence of High Waves

- (i) Keep watch of weather situation.
- (ii) Implement respective emergency plan in inundation prone locations.
- (iii) Assist NEOC for coordination at national level, if the need arises.

# (c) Actions during the occurrence of High Waves

- (i) Monitor and ensure water supply.
- (ii) Issue communiqués on water supply and any precautions required with drinking water.
- (iii) Arrange for supply of water by tanker lorries, if required.

- (iv) Monitor any adverse effects on CWA infrastructures.
- (v) Send regular situation reports to NEOC.

#### (d) <u>Aftermath</u>

- (i) Carry out a post Disaster Needs Assessment and provide report to NEOC.
- (ii) Restore water supplies to essential services on priority basis.
- (iii) Arrange for supply of water by tankers lorries, if required.
- (iv) Continue to issue communiqués on water supply and any precautions required with drinking water.

#### 4.7.3 The Ministry of Housing and Lands

#### (a) General Preparedness

- (i) Ensure proper land use planning.
- (ii) Carry out risk and vulnerability assessment around Mauritius and outer islands to review and update hazard maps.
- (iii) Jointly with the concerned LDRRMC identify low lying land and residential coastal areas at risk.
- (iv) Jointly with the concerned LDRRMC identify land for temporary housing.
- (v) Support concerned authorities with the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) Actions prior to occurrence of High Waves:

- (i) Mobilise and be ready to intervene if required.
- (ii) Begin all preliminary measures for activation of action plan.

#### (c) Actions during the occurrence of High Waves

Activate action plan as per SOPs.

#### (d) <u>Aftermath</u>

- (i) Take appropriate measures to facilitate the setting up of temporary housing facilities for victims.
- (ii) Carry out a Post Disaster Damage Assessment jointly with MPI and Ministry of Social Integration and Economic Empowerment.

# 4.7.4 The Ministry of Technology, Communication and Innovation

# (a) <u>General Preparedness</u>

- (i) Arrange with service providers for an alert system to warn the public of the situation and the emergency measures to be taken.
- (ii) Jointly with the Ministry of Education and HR & TE & SR, arrange with service providers for an e-Register system to alert and inform the parents of students in case of a high waves.
- (iii) Encourage service providers to develop a business continuity plan.

# (b) <u>Actions prior the occurrence of High Waves</u>

- (i) Inform the public in general of warnings/ emergency measures to be taken.
- (ii) Arrange for Telmet Service (Tel No 8996 for fixed line telephone and Tel No 171 for mobiles) by which any telephone enquirer may listen to the recorded version of latest bulletins.

# (c) Actions during the occurrence of High Waves

- (i) Continue to inform the public in general of warnings/ emergency measures to be taken.
- (ii) Update the Telmet Services.

# (d) <u>Aftermath</u>

- (i) Continue to inform the public in general of warnings/ emergency measures to be taken.
- (ii) Update the Telmet Services.
- (iii) Coordinate with service providers for activation of their Business Continuity plans.

# **Mauritius Broadcasting Corporation (MBC)**

(a) <u>General Preparedness</u>

Support in the general sensitisation campaign with all concerned stakeholders informing the public on the potential threat of High waves and necessary precautions to be taken.

# (b) Actions prior to occurrence of High Waves

The MBC, on receipt of a High wave bulletin/alert, will immediately broadcast same on TV and radio. The same information will be repeated every hour or sooner in English, French, Creole and Hindustani until the next update. The information will also be scrolled on all TV channels.

# (c) Actions during the occurrence of High Waves

Maintain broadcast of the Communiqués, issued by various authorities, on TV and radio every hour in English, French, Creole and Hindustani and same to be scrolled on TV channels.

# (d) <u>Aftermath</u>

Broadcast of the Communiqués, issued by various authorities, on TV and radio every hour in English, French, Creole and Hindustani and same to be scrolled on TV channels.

# 4.7.5 Ministry of Public Infrastructure and Land Transport

# (a) General Preparedness

- (i) Construct new drainage systems where required, along roads falling under the purview of the Ministry and rehabilitate existing ones.
- (ii) Develop a proper maintenance plan of drains falling under the purview of the Ministry.

# (b) Actions prior to occurrence of High Waves

Be prepared to activate own contingency plan.

# (c) Actions during the occurrence of High Waves

Activate own contingency plan.

- (d) <u>Aftermath</u>
  - Upon receipt of termination bulletin, carry out Post Disaster Damage Assessment of Government buildings and other infrastructures affected by high waves.

- (ii) Take remedial actions as required for the repair of damaged buildings, roads, bridges and other governmental infrastructures and activate own Service Continuity Plan.
- (iii) Jointly with Ministry of Housing and Land and Ministry of Social Integration and Economic Empowerment set up a plan for temporary housing for the victims of high waves, as required.

# Road Development Authority (RDA)

- (a) <u>General Preparedness</u>
  - (i) Jointly with the MoE, SD, and D & BM carry out risk assessments to identify areas/roads at risk along roads and motorways.
  - (ii) Upgrade, rehabilitate and maintain drains falling under RDA's responsibility.
  - (iii) Participate in the High Waves simulation exercises organized by the Local Disaster Risk Reduction and Management Committee of Municipal and District Councils as per the NDS Simulation Calendar.

# (b) Actions prior to occurrence to High Waves

- (i) Mobilise and be ready to intervene, if required.
- (ii) Activate traffic diversion plan of coastal roads as required in collaboration with Police and the Local Authorities.
- (iii) Monitor state of the main coastal road networks and main bridges.
- (iv) Send regular situation report to NEOC.

# (c) Action during the occurrence of High Waves

- (i) Keep watch on effects of high waves on coastal roads, bridges, etc.
- (ii) Ensure with Police that traffic diversion plans are activated.
- (iii) Assist police in the issue of regular info-route on coastal traffic diversion plans.
- (iv) Send regular situation report to NEOC.

(d) <u>Aftermath</u>

- (i) Carry out Post Disaster Damage Assessment on classified coastal roads and initiate repair actions accordingly.
- (ii) Ensure emergency routes under the purview of RDA, such as, those leading to hospitals and other essential services are cleared on priority basis.
- (iii) Provide assistance to Police and Local authorities, if possible.
- (iv) Send report to NEOC.

# National Transport Authority (NTA)

- (a) <u>General Preparedness</u>
  - (i) Ensure that the any coastal Transport Depots are situated in high wave safe zones.
  - (ii) Participate in the high wave simulation exercises organized by the Local Disaster Risk reduction and Management Committee as per the NDS Simulation Calendar.
  - (iii) Develop a Service Continuity Plan and Business Continuity Plan jointly with bus operators.

# (b) Actions prior to occurrence to High Waves

Be ready to deploy buses for evacuation from high waves affected coastal areas, jointly with bus operators.

# (c) Action during the occurrence of High Waves

Supervise the deployment of buses in required coastal areas.

# (d) Aftermath of High Waves

- (i) Carry out an assessment of all the coastal bus routes networks and inform NEOC accordingly.
- (ii) Arrange for quick deployment of all possible buses for the return of evacuees from Emergency Shelters/ Safe Havens.
- (iii) Activate Service Continuity Plan.
- (iv) Restore public transport along coastal roads as soon as possible.

# 4.7.7 The Ministry of Education and Human Resources, Tertiary Education and Scientific Research

- (a) <u>General Preparedness</u>
  - (i) Identify the educational institutions along the coastal areas which are likely to be affected and inform them of necessary actions to be taken.
  - (ii) Provide educational institutions with documents, posters and/ or other written materials to sensitise students and organise simulation or drill evacuation exercises.
  - (iii) Develop and organise High Waves simulation exercises in educational institution and in collaboration with the Local Disaster Risk Reduction and Management Committee of Municipal and District Councils.
  - (iv) Develop a Service Continuity Plan.
- (b) Actions prior to occurrence of High Waves
  - Activate respective emergency plan and instruct any educational institutions in high wave prone locations to cease operation.
  - (ii) Be ready for safe evacuation of school children and to inform parents accordingly.
  - (iii) Be prepared to arrange for schools to be used as emergency shelters in extreme circumstances.
  - (iv) Send situation report to NEOC.

#### (c) Actions during the occurrence of High Waves

- (i) Activate emergency plan and instruct educational institutions in inundationprone locations to cease operation with immediate effect.
- (ii) Ensure that all school children of highwave prone educational institutions have been safely evacuated and parents have been informed accordingly.
- (iii) Send updated situation report to NEOC.
- (d) Aftermath of High Waves
  - (i) Carry out Post Disaster Damage Assessment of educational institutions of affected coastal areas.
  - (ii) Verify that any school buildings which have been used as emergency shelters are in a state to resume classes.

- (iii) Ensure schools can resume activity as soon as possible.
- (iv) Send report to NEOC.

# 4.7.8 Ministry of Local Government

#### (a) <u>General Preparedness</u>

- (i) Carry out surveys on the vulnerable areas and population at risk and identify safe zones.
- (ii) Jointly with the Ministry of Youth and Sports and the MPI identify shelters in safe zones.
- (iii) Ensure as far as practicable that all private companies in each Municipal/District Council area have their Business Continuity Plan and a copy submitted to the concerned local council.
- (iv) Establish a memorandum of understanding with private organisations to use their facilities in the event of high waves situations.
- (v) Support concerned municipal and district councils in the implementation of appropriate risk reduction structural and non-structural measures.
- (vi) Participate in the High Waves simulation exercises organized by the Local Disaster Risk Reduction and Management Committee as per the NDS Simulation Calendar.

#### (b) Actions prior to occurrence of High Waves

Be ready to mobilize their resources and keep them on stand-by for deployment.

#### (c) Actions during the occurrence of High Waves

- Ensure evacuation of areas likely to be affected by high waves through LEOC of concerned Municipal and District Councils.
- Monitor the areas under their respective purview and deploy all necessary materials to assist in search and rescue operations.
- (iii) Liaise with private companies to use their facilities as required.

#### (d) Aftermath of High Waves

- (i) Carry out a Post Disaster Damage Assessment.
- (ii) Carry out cleaning operations
- (iii) Oversee and provide support where required.

(iv) Provide report to NEOC/NDRRMC of effects of the high waves and the deployment of resources and actions taken accordingly.

### 4.7.9 Ministry of Social Integration and Economic Empowerment

- (a) General Preparedness
  - (i) Assist:
    - 1. Ministry of Housing and Lands to carry out risk and vulnerability assessment around Mauritius, Rodrigues and outer islands to review and update hazard maps.
    - 2. the concerned LDRRMC to identify coastal low lying land and residential areas at risk.
    - 3. the concerned LDRRMC to identify land for temporary housing in consultation with Ministry of Housing and Lands.
  - (ii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
  - (iii) Develop high wave emergency plan.

### (b) Actions prior to occurrence of High Waves

- (i) Activate high wave emergency plan.
- (ii) Be ready provide assistance, if required.

### (c) Actions during the occurrence of High Waves

Activate high wave emergency plan.

### (d) Aftermath of High Waves

- Jointly with MPI and Ministry of Housing and Lands, assist in carrying out a Post Disaster Damage Assessment.
- (ii) Assist Ministry of Housing and Lands and other concerned authorities in the setting up of temporary shelters for high waves victims.
- (iii) Assist in the provision of temporary housing to accommodate victims who have lost their houses.

### 4.7.10 Ministry of Social Security, National Solidarity and Reform Institutions

- (a) <u>General Preparedness</u>
  - Support the NDRRMC, Police and Local Disaster Risk Reduction Management Committees of municipal and district councils to identify safe emergency shelters nearest to the coasts.
  - (ii) Ensure that necessary administrative arrangements are put in place for the provision of amenities as per entitlement such as water and biscuits, hurricane lamps, etc when emergency shelters are opened with special attention to disabled persons and children.
  - (iii) Arrange for the training of supervisors of emergency shelters in first aid by the MRCS. It is understood that this is a long term process and it is not expected to be implemented in the near future.
  - (iv) Ensure that administrative arrangements are made with the MRCS for the provision of a minimum number of camp beds at each emergency shelter.
  - (v) Participate in the High Waves simulation exercises organized by the Local Disaster Risk Reduction and Management Committee as per the NDS Simulation Calendar.
  - (vi) Ensure that appropriate specialised institutions develop evacuation plans for people with disabilities and the elderly.
  - (vii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
- (b) Actions prior to occurrence of High Waves
  - (i) Be prepared to open emergency shelters after appropriate consultation, where required.
  - (ii) Supervisor of Emergency Shelters to arrange with Ministry of Health and Quality of Life for special needs medical assistance, if required.
  - (iii) Be prepared to provide amenities as per entitlement such as water and biscuits, hurricane lamps, etc when emergency shelters are opened with special attention to disabled persons and children.
  - (iv) Ensure that camp beds from MRCS are made available.
  - (v) Send situation report to LEOC and NEOC.

- (c) Actions during the occurrence of High Waves
  - (i) Management of the Emergency Shelters.
  - (ii) Provide evacuees with water and biscuits on the first night and on following days, in the event the high waves persist and houses are flooded, food vouchers at approved rate are provided for a maximum period of three days.
  - (iii) Send situation report to Police and NEOC.
- (d) <u>Aftermath of High Waves</u>
  - Provide evacuees with water and biscuits on the first night and on following days, in the event the high waves persist and houses are flooded, food vouchers at approved rate are provided for a maximum period of three days.
  - (ii) Support concerned authorities providing temporary housing facilities.
  - (iii) Assist Police, Ministry of Social Integration and Economic Empowerment and other stakeholders in carrying out, where required, post disaster damage assessment to identify the number of households that have been affected and number of people affected and displaced.

### 4.7.11 Ministry of Gender Equality, Child Development and Family Welfare

(a) <u>General Preparedness</u>

- (i) Assist MoSS NS & RI to make provisions for basic necessities in the emergency shelters.
- (ii) Participate in the simulation exercises organized by the Local Disaster Risk reduction and Management Committee as per the NDS Simulation Calendar.
- (iii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
- (iv) Ensure the development of evacuation plans for people with disabilities and the elderly, with appropriate specialised institutions.

### (b) Actions prior to occurrence of High Waves

Be prepared to assist MoSS NS & RI in the opening of emergency shelters facilities, where required.

(c) Actions during the occurrence of High Waves

Assist MoSS NS & RI in the management of the emergency shelters.

### (d) Aftermath of High Waves

- (i) Assist MoSS NS & RI in providing basic needs until all displaced persons safely return to their respective homes.
- (ii) Assist MoSS NS & RI in carrying out Post Disaster Damage Assessment in terms of personal property damaged, food stuff damaged, etc...

# 4.7.11 Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Islands

- (a) <u>General preparedness</u>
  - (i) Regularly carry out sensitization /Awareness campaign with the fishermen community and action to be taken in the occurrence of high waves.
  - (ii) Participate in the high wave simulation exercises organized by the Local Disaster Risk reduction and Management Committee as per the NDS Simulation Calendar.
  - (iii) Build high wave resilience of Saint Brandon and Agalega in terms of infrastructure.
  - (iv) Develop and regularly test high wave emergency plans for Saint Brandon and Agalega.

### (b) Actions prior to occurrence of High Waves

- (i) Be ready to activate own emergency plans.
- (ii) Inform Fishermen Associations/Cooperatives in accordance with the list established in the Fisheries Emergency Operations Plan.
- (iii) Inform and ensure that the Mauritius Radio Services broadcast the information on Marine Radio and GMDSS for the benefit of all boat operators, seafarers and vessels in the vicinity.
- (iv) Inform fishing vessels with communication facilities and located in the open sea of the situation.
- (v) Alert with the collaboration of NCG, all small fishing boats found in the lagoon.

### (c) Actions during the occurrence of High Waves

- (i) Ensure that no fishing vessel is operating in the lagoon.
- (ii) Send situation report to the NEOC.

### (d) Aftermath of High Waves

- (i) Carry out survey at the level of each Fisheries Post and all information collected will be channelled to the Director of Fisheries for necessary action.
- (ii) Carry out a Post Disaster Damage Assessment for Saint Brandon and Agalega.
- (iii) Send situation report to the NEOC.

### \* The Mauritius Oceanography Institute (MOI)

- (a) <u>General Preparedness</u>
  - (i) Ensure proper maintenance of the wave rider under its responsibility.
  - (ii) Develop an updated high wave inundation map for different wave heights through modelling for Mauritius, Algalega and St Brandon.

### (b) Actions prior to occurrence of High Waves

- (i) Keep watch of the situation.
- (ii) Assist NDRRMC/NEOC, if required.

### (c) Actions during the occurrence of High Waves

- (i) Keep watch of the situation
- (ii) Assist NDRRMC/NEOC, if required.

### (d) Aftermath of High Waves

- (i) To scientifically measure extent of high wave runs in-land with respect to the topography.
- (ii) Send report to NEOC.

# 4.7.12 Ministry of Environment, Sustainable Development, and Disaster and Beach Management

(a) <u>General Preparedness</u>

- Ensure that mapping of storage facilities for petroleum and hazardous substances in coastal and high wave prone areas are prepared and made available.
- (ii) Ensure that a contingency plan for oil spill and HAZMAT risks is developed.
- (iii) Participate in the high wave simulation exercises organized by the Local Disaster Risk Reduction and Management Committee as per the NDS Simulation Calendar.
- (iv) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

### (b) Actions prior to occurrence of High Waves

- (i) Be ready to act according to own SOP/Action Plan.
- (ii) Be ready to activate National Oil Spill Contingency Plan.
- (iii) Be ready to activate HAZMAT CP where available
- (iv) Ensure that owners/operators of petroleum and hazardous storage facilities in the high wave prone zones are informed accordingly, in collaboration with the MoHQL, Ministry of Local Government, Ministry of Labour and Industrial Relations and the Radiation Protection Authority.
- (c) Actions during the occurrence of High Waves

Monitor and be prepared to intervene, if required.

- (d) Aftermath of High Waves
  - Survey teams, headed by Divisional Environment Officers/ Divisional Scientific Officers, to carry out surveys on the coastal zones around Mauritius.
  - (ii) Officer(s) representing the Ministry at the NEOC will report on observations made on site.
  - (iii) Assess any impact and propose relief measures for appropriate actions in collaboration with relevant stakeholders for the cleaning of beaches and repairs and/ or reinstatement of any of its property/ assets standing on public beaches following high waves.

### 4.7.13 The NGO's

### (a) General Preparedness

- (i) Assist in the setting up of the Community Disaster Response Team.
- (ii) Participate in sensitisation campaign with the vulnerable communities.
- (iii) Participate in the high wave simulation exercises organized by the Local Disaster and Management Committee as per the NDS Simulation Calendar.
- (b) Actions prior to occurrence of High Waves

Be prepared to mobilise volunteers.

- (c) <u>Actions during the occurrence of High Waves</u> Mobilise volunteers.
- (d) <u>Aftermath of High Waves</u>

Participate in relief operations.

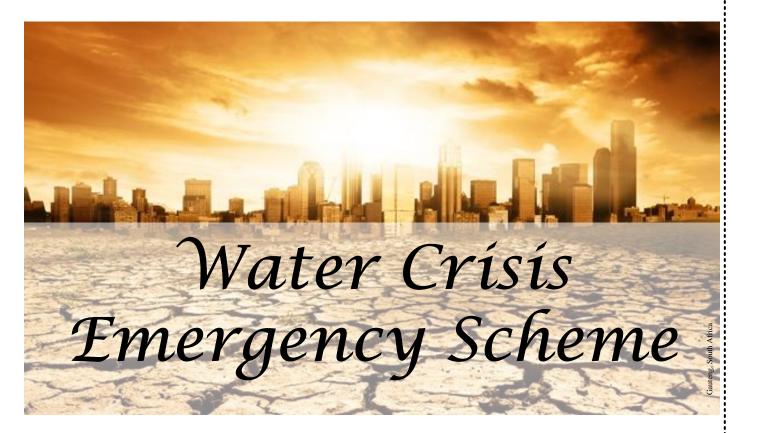
### 4.8 Distribution of Bulletins.

The MMS will distribute bulletins to the following, as appropriate:-

- 1. The Prime Minister;
- 2. The Deputy Prime Minister;
- 3. The Vice-Prime Ministers;
- 4. All Ministers;
- 5. The Secretary to Cabinet & Head of the Civil Service;
- 6. The Secretary for Home Affairs, Prime Minister's Office;
- 7. The Commissioner of Police;
- 8. The Commanding Officer, Special Mobile Force;
- 9. The Commandant, National Coast Guard
- 10. The Director-General, NDRRMC
- 11. The Chief Commissioner, Rodrigues Regional Assembly;
- 12. The Island Chief Executive, Rodrigues Regional Assembly;

- 13. The National Transport Authority;
- 14. The Director of Civil Aviation;
- 15. The Chief Fire Officer, Mauritius Fire and Rescue Service;
- 16. The Water Resources Unit;
- 17. The Airports of Mauritius Limited;
- 18. The General Manager, Central Electricity Board;
- 19. The Port-Master, Mauritius Ports Authority;
- 20. The General Manager, Beach Authority;
- 21. The MBC and MBC Rodrigues;
- 22. All Private Radio Stations;
- 23. The Chief Executive Officer MCML;
- 24. The Mauritius Telecom Call Centre (Telmet);
- 25. The General Manager, Outer Islands Development Corporation;
- 26. Resident Manager, Agalega Island;
- 27. The Saint Brandon Meteorological Station;
- 28. The Agalega Meteorological Station;
- 29. The Aapravasi Ghat Trust Fund; and
- 30. The C.E.O. Association des Hôteliers et Restaurateurs Ile Maurice (A.H.R.I.M).

\*\*\*\*\*\*\*\*\*End of Scheme\*\*\*\*\*\*\*



# <image>

National Disaster Risk Reduction and Management Centre (NDRRMC) Line Barracks, Port-Louis Water Crisis Emergency Scheme

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### 5.0 WATER CRISIS EMERGENCY SCHEME

### 5.1 Introduction

The dry season is from September to November and the rainy season is from December to April. Water crisis can be described as a situation where the available water within the country is less than the country's demand. Given the current concerns with climate change, projected increases in the frequency, intensity, and duration of dry periods and resulting impacts on many sectors, a national water crisis emergency scheme has been formulated with the collaboration of all concerned stakeholders.

All concerned stakeholders have been classified under the following categories:

- (a) Warning/Alerting agency,
- (b) Coordinating agencies/committees,
- (c) Main stakeholders, and
- (d) Other stakeholders.

Subsequently, the roles and responsibilities of each stakeholder are defined under the following conditions:

- (a) General Preparedness
- (b) During the Dry Season
- (c) During Water Crisis

### 5.2 General Roles, Responsibilities and Actions

### 5.2.1 All Organisations

### (a) General Preparedness

- (i) Ensure enforcement on the judicious use of water.
- (ii) Encourage rain water harvesting.

### (b) During the Dry Season

- (i) Ensure enforcement on the judicious use of water.
- (ii) Encourage rain water harvesting.

### (c) During Water Crisis

Ensure enforcement on the judicious use of water.

### 5.3 Warning /Alerting Agency

### 5.3.1 Ministry of Energy and Public Utilities

The Ministry of Energy and Public Utilities (MEPU) is the main warning/alerting agency in case of a water crisis situation arising for the Republic of Mauritius.

The MEPU will:

- (a) in liaison with the Water Resources Unit (WRU), Central Water Authority (CWA), Irrigation Authority (IA) and the Mauritius Meteorological Services (MMS), monitor and inform the population at large on the prevailing water situation; and
- (b) as and when required, and in liaison with the Water Resources Unit (WRU), Central Water Authority (CWA), Irrigation Authority (IA) and the Mauritius Meteorological Services (MMS), assess and provide the status of water resources situation comprising, inter-alia, the following:
  - 1. Daily reservoir storage and reservoir projection level based on the forecast of rainfall provided by the MMS.
  - 2. River flow monitoring and abstraction reports.
  - 3. Groundwater situation (groundwater levels and production from major aquifers).
  - 4. Water supply situation provided by the Dry Season Committee of the CWA. Latter to meet regularly to monitor the supply situation in the different water supply zones.

### 5.4 Coordinating Agencies/Committees

### 5.4.1 The Ministry of Energy and Public Utilities

The Ministry of Energy and Public Utilities (MEPU) is the main coordinating body for the dry season and in case of a water crisis situation arising for the Republic of Mauritius.

### (a) General Preparedness

(i) As and when required, the MEPU shall in liaison with the Water Resources Unit (WRU), Central Water Authority (CWA), Irrigation Authority (IA) and the Mauritius Meteorological Services (MMS), assess and provide the status of water resources situation comprising, inter-alia, the following:

- 1. Daily reservoir storage and reservoir projection level based on the forecast of rainfall provided by the MMS.
- 2. River flow monitoring and abstraction reports.
- 3. Groundwater situation (groundwater levels and production from major aquifers).
- 4. Water supply situation provided by the CWA.
- (ii) Ensure the availability of relevant contingency plans to tap additional sources of water supply.
- (iii) Built resilience.

### (b) During the Dry Season

### The MEPU shall:

- (i) Call for meetings of the Dry Season Committee.
- (ii) In liaison with the Water Resources Unit (WRU), Central Water Authority (CWA), Irrigation Authority (IA) and the Mauritius Meteorological Services (MMS), assess and provide the status of water resources situation comprising, inter-alia, the following:
  - 1. Daily reservoir storage and reservoir projection level based on the forecast of rainfall provided by the MMS.
  - 2. River flow monitoring and abstraction reports.
  - 3. Groundwater situation (groundwater levels and production from major aquifers).
  - 4. Water supply situation provided by the CWA.
- (iii) Regularly disseminate water resources situation through the media.

### (c) During Water Crisis

The MEPU shall:

- 1. Call for meetings of the Water Resources Monitoring Committee (WRMC) on a regular basis.
- 2. Set up the Water Crisis Cell as required.
- 3. Provide support to the CWA/WRU, if the need arises, in order to ensure that water distribution in affected areas is being carried out in accordance with existing regulations/plans.

- 4. Regularly inform the Cabinet, Minister of Environment, Sustainable Development, and Disaster and Beach Management, the Secretary to Cabinet and the NDRRMC on the status, measures being applied and evolution of the water crisis situation.
- 5. In liaison with the WRU, CWA, Irrigation Authority (IA) and the MMS, monitor and inform the population at large on the prevailing water crisis situation.

### 5.4.2 Water Resources Monitoring Committee (WRMC)

The WRMC will be set up under the MEPU during the water crisis situation.

- (i) The WRMC would be chaired by the MEPU and would comprise the following Ministries/Departments:
  - 1. MEPU (chair)
  - 2. WRU
  - 3. CWA
  - 4. Irrigation Authority
  - 5. MMS
  - 6. WMA
  - 7. CEB
  - 8. NDRRMC
- (ii) Depending on the severity of the water crisis, other stakeholders such as the Ministry of Health and Quality of Life, Ministry of Agro Industry and Food Security, Ministry of Tourism and External Communication, the Mauritius Fire and Rescue Services, the Joint Economic Council (JEC), the Mauritius Export Association (MEXA), the Association des Hoteliers et Restaurateurs de l'Ile Maurice (AHRIM), the Mauritius Police Force, Tourism Authority and other relevant Ministries/Departments and major private users may also be co-opted to form part of the WRMC, as and when required.
- (iii) The WRMC will meet regularly at the MEPU to monitor the supply situation in the different water supply zones. Actions should be initiated to alleviate any hardship being caused by reduced water supply to such extent possible.

- (iv) The WRMC will review the water resources situation in the main reservoirs, water boreholes, and flow in the concerned rivers for potable water supply as well as ground water situation in the major aquifers.
- (v) The WRMC will recommend the supply strategy to be adopted after careful consideration of the water resources situation, the forecast rainfall regime and the estimated rainfall amount. The WRMC will decide on the water allocation and other mechanisms in order to meet, to the extent possible, the demands of the different sectors.
- (vi) The WRMC will activate the contingency plans to tap additional sources of water supply such as from rivers.
- (vii) The Dry Season Committee will carry out regular water education campaigns through the Central Water Authority.
- (viii) The WRMC will issue 'Communiqués' to the media (MBC, Private Radios, Press) on the measures to be adopted for an adequate supply of water. Emphasis will be laid on the judicious use of available water resources.
- (ix) The WRMC will liaise with the MBC and the media through its Communication Cell to regularly inform members of the public on the potable water supply situation and the measures being implemented.
- (x) The WRMC will send regular Situation Report to the NDRRMC and Senior Officials. The Situation Report shall contain information on the types, evolution of the water crisis situation and its effect on water distribution to the population, as well as its effect on the environment, industries and agriculture.
- (xi) The WRMC will recommend the promulgation of appropriate regulations to enforce the judicious use of water at all levels.
- (xii) The decisions of the WRMC shall be complied with by all the stakeholders.
- (xiii) Depending on the magnitude and severity of water crisis situation, the WRMC with other relevant stakeholders will set up special sub committees to look into the following aspects:
  - 1. Internal Security, Public Safety, Policing and Law and Order
  - 2. Public and Private Water Supply
  - 3. Economic (Tourism + Industry)
  - 4. Agriculture
  - 5. Public Health
  - 6. Fire outbreaks

### 5.5 Main stakeholders

### 5.5.1 The Water Resources Unit

### (a) <u>General Preparedness</u>

- (i) Provide information on water resources situation in reservoirs, private dams, rivers and aquifers.
- (ii) Provide forecast of water resources under different scenario, based on meteorological outlook/ season forecast.
- (iii) Carry out regular maintenance of feeder canals, reservoirs and dams.
- (iv) Assist the MEPU to prepare the contingency plans in view to tap additional sources of water in situation of water crisis.

### (b) During the Dry Season

- (i) Participate in the meetings of the Dry Season Committee.
- (ii) Ensure enforcement on the judicious use of water.

### (c) <u>During Water Crisis</u>

- (i) Participate in the meetings of the Water Resources Monitoring Committee (WRMC).
- (ii) Implement actions as per the contingency plans to tap additional sources of water.
- (iii) Take appropriate action to prevent contamination of water resources in liaison with Ministry of Environment, Sustainable Development, and Disaster and Beach Management.

### 5.5.2 The Central Water Authority

(a) <u>General Preparedness</u>

(i) In collaboration with other stakeholders (such as, the Ministry of Agro-Industry and Food Security, the Ministry of Education and Human Resources, Tertiary Education and Scientific Research, the Ministry of Gender Equality, Child Development and Family Welfare, the Mauritius Meteorological Services, NDRRMC and the Government Information Service), carry out regular water awareness campaigns during the water crisis situation. Pamphlets, brochures, billboards, etc will be used to sensitise the public in general on the water situation.

(ii) Encourage rain water harvesting.

### (b) During dry season

- (i) Organise meetings of the Dry Season Committee.
- (ii) Ensure enforcement on the judicious use of water.
- (iii) Provide updated information on potable water supply situation.
- (iv) Encourage rain water harvesting.
- (v) In collaboration with other stakeholders (such as, the Ministry of Agro-Industry and Food Security, the Ministry of Education and Human Resources, Tertiary Education and Scientific Research, the Ministry of Gender Equality, Child Development and Family Welfare, the Mauritius Meteorological Services, NDRRMC and the Government Information Service), carry out regular water awareness campaigns during the public in general on the water situation.
- (vi) Undertake regular water quality monitoring.

### (c) During Water Crisis

- (i) Participate in the meeting of the Water Resources Monitoring Committee (WRMC)
- (ii) In collaboration with other stakeholders (such as, the Ministry of Agro-Industry and Food Security, the Ministry of Education and Human Resources, Tertiary Education and Scientific Research, the Ministry of Gender Equality, Child Development and Family Welfare, the Mauritius Meteorological Services, NDRRMC and the Government Information Service), carry out regular water awareness campaigns during water crisis situation.
- (iii) Provide updated information on potable water supply situation.
- (iv) Ensure that all regions have a minimum water supply level within constraints of available resources.
- (v) Maintain a stock of pumps/generators/mobile water tankers/ filtration units.
- (vi) Explore additional sources of water supply, where possible.

- (vii) Liaise with the MBC and the media through its Communication Cell to regularly inform members of the public on the potable water supply situation and the measures being implemented.
- (viii) Undertake regular water quality monitoring.

### 5.5.3 Mauritius Meteorological Services

### (a) <u>General Preparedness</u>

- (i) Regularly update the MEPU on the weather/ rainfall forecasts (fortnightly and seasonal).
- (ii) Provide rainfall data and related statistics to the MEPU for decision making purposes.

### (b) During dry season

- (i) Participate in the Dry Season Committee.
- (ii) Regularly update the Dry Season Committee on the weather/ rainfall forecasts (fortnightly and seasonal).
- (iii) Provide rainfall data and related statistics to the Dry Season Committee for decision making purposes.

### (c) During Water Crisis

- (i) Participate in the Water Resources Monitoring Committee (WRMC)
- (ii) Regularly update the WRMC on the weather/ rainfall forecasts (weekly).
- (iii) Provide rainfall data and related statistics to the WRMC for decision making purposes.

## 5.5.4 National Disaster Risk Reduction and Management Centre/ National Emergency Operations Command

- (a) <u>General Preparedness</u>
  - (i) Assist concerned agencies in contingency planning.

### (b) <u>During the Dry Season</u>

- (i) Participate in the meetings of the Dry Season Committee as co opt member.
- (ii) Activate the NEOC in case of large scale fire outbreak.

(c) <u>During Water Crisis</u>

- (i) Participate in the Water Resources Monitoring Committee (WRMC).
- (ii) Activate the NEOC in consultation with the WRMC, in case the water crisis situation aggravates.
- (iii) Activate the NEOC in case of large scale fire outbreak.

### 5.5.5 Mauritius Police Force

### (a) <u>During the Dry Season</u>

- (i) Participate in the meetings of the Dry Season Committee as and when required.
- (ii) Participate in search and rescue in connection with wildfires to forest endangering life and property of nearby residences and inhabitants, including on islets.
- (iii) Maintain law and order.
- (iv) Extend community policing to sensitise the public.

### (b) During Water Crisis

- (i) Initiate action for the prevention of looting and other criminal activities.
- (ii) Ensure the enforcement of law for the prevention of water wastage and observation of water restrictions by the population.
- (iii) Assist the WRMC in all aspects falling under the parameter of security, i.e. law enforcement.
- (iv) Participate in search and rescue in connection with wildfires to forest endangering life and property of nearby residences and inhabitants, including on islets.

### 5.5.6 The Mauritius Fire and Rescue Service

- (a) <u>General Preparedness</u>
  - (i) Conduct fire safety/prevention awareness programmes.
  - (ii) Formulate and implement a forest and sugar cane plantation fire precaution plan in collaboration with the Ministry of Agro Industry and Food Security, Forestry Service and the Mauritius Sugar Producers' Association.
  - (iii) Conduct fire fighting simulation exercises.

 (iv) Develop and implement a prescribed burning plan for vegetation fire load management at strategic state owned land in collaboration with responsible tenants.

### (b) During the Dry Season

- (i) Participate in the meetings of the Dry Season Committee as and when required.
- (ii) Participate in search and rescue in connection with wildfires to forest endangering life and property of nearby residences and inhabitants, including on islets.
- (iii) Fight outbreak of fires.
- (iv) Maintain adequate fire breaks.
- (c) During Water Crisis
  - (i) Participate in the meetings of the Water Resources Monitoring Committee (WRMC).
  - (ii) Assist the Central Water Authority to supply water to Government Institutions.
  - (iii) Fight outbreak of fires.

### 5.5.7 The Ministry of Agro-Industry and Food Security

(a) <u>General Preparedness</u>

- (i) Inform all stakeholders in the agricultural sector of the water situation and of the precautionary measures to be taken.
- (ii) Conduct awareness/sensitization campaigns on the necessity to ensure a permanent forest cover on the Island as a mitigating measure to reduce a water crisis situation.
- (iii) Sensitize all stakeholders of the agricultural sector, including the livestock sector on measures to use water judiciously, for water harvesting and for recycling of water for irrigation of special crops.
- (iv) Encourage rain water harvesting.

### (b) During the Dry Season

- (i) Participate in the meetings of the Dry Season Committee.
- (ii) Ensure enforcement on the judicious use of water.
- (iii) Encourage rain water harvesting.

### (c) During Water Crisis

- (i) Participate in the meetings of the Water Resources Monitoring Committee (WRMC).
- (ii) Issue regular reports on the effects of the water crisis situation on crops.
- (iii) Sensitize all stakeholders in agriculture on measures to use water judiciously.

### The Forestry Services

- (a) <u>General Preparedness</u>
  - (i) Carry out an inventory of vegetation on river reserves and mountain reserves to help in assessing the extent of damage during the water crisis situation.
  - (ii) Prevent deforestation and encourage replanting of trees.

### (b) During Water Crisis

Ensure enforcement on the judicious use of water.

### (c) <u>Aftermath</u>

- (i) Carry out an inventory of vegetation on river reserves and mountain reserves to assess the extent of damage caused by the water crisis situation.
- (ii) Remove trees affected by the water crisis situation and which represent a danger to the public.
- (iii) Arrange for replanting of trees in areas affected by the water crisis situation.

### 5.5.8 The Irrigation Authority

(a)<u>General Preparedness</u>

- (i) Ensure enforcement on the judicious use of water.
- (ii) Encourage rain water harvesting.

### (b) <u>During the Dry Season</u>

- (i) Participate in the meetings of the Dry Season Committee.
- (ii) Ensure enforcement on the judicious use of water.
- (iii) Encourage rain water harvesting.

### (c) During Water Crisis

- (i) Participate in the meetings of the Water Resources Monitoring Committee (WRMC).
- (ii) Provide data on allocation of water for irrigation to different users.
- (iii) Allocate minimum water for irrigation to different users.
- (iv) Inform the farmer's community and other users on the water situation and eventual restrictions and seek their collaboration for the judicious use of water resources.

### 5.5.9 Central Electricity Board (Hydro power generation)

(a) <u>During the Dry Season</u>

Participate in the meetings of the Dry Season Committee.

### (b) <u>During Water Crisis</u>

- (i) Participate in the meetings of the Water Resources Monitoring Committee (WRMC).
- (ii) Provide water usage/water storage data for concerned reservoirs to the WRMC.
- (iii) Inform the WRMC on the options available for power generation in the event of reallocation of stored water for domestic use.

### 5.6 Other stakeholders

### 5.6.1 Ministry of Tourism and External Communications

- (a) <u>General Preparedness</u>
  - (i) Sensitize tourism sector on the judicious use of water.
  - (ii) Promote water recycling and sea water desalinisation.
  - (iii) Encourage rain water harvesting.

### (b) During the Dry Season

- (i) Sensitize tourism sector on the judicious use of water.
- (ii) Participate in the meetings of the Dry Season Committee as and when required.
- (iii) Promote water recycling and sea water desalinisation.

### (c) During Water Crisis

- (i) Inform hotels and other stakeholders on any communiqué on the water situation and eventual restrictions
- (ii) Participate in the meetings of the Water Resources Monitoring Committee (WRMC) as and when required.
- (iii) Promote water recycling and sea water desalinisation.

### 5.6.2 Ministry of Health and Quality of Life

- (a) <u>During Water Crisis</u>
  - (i) Undertake surveillance activities to detect any emerging public health problem associated with the water crisis.
  - (ii) Issue communiqués for precautions to be taken by the public to avoid water borne diseases.

### 5.6.3 The Ministry of Industry, Commerce and Consumer Protection

### (a) <u>General Preparedness</u>

Put in place, in collaboration with all relevant stakeholders, a mechanism to regularly communicate with enterprises which are intensive water users to inform them on the prevailing water situation and the supply capacity.

### (b)During the Dry Season

- (i) Ensure, as far as practicable, enforcement on the judicious use of water.
- (ii) Participate in the meetings of the Dry Season Committee as and when required.
- (iii) Promote, as far as practicable, water recycling and sea water desalinisation.
- (iv) Encourage, as far as practicable, rain water harvesting.

### (c) <u>During Water Crisis</u>

- (i) Ensure, as far as practicable, enforcement on the judicious use of water.
- (ii) Promote water recycling, as far as practicable.

### 5.6.4 The Ministry of Business, Enterprise and Cooperatives

- (a) <u>During Water Crisis</u>
  - Use the cooperative network to reach the stakeholders concerned for the dissemination of information and coordination of support during a situation of water crisis.
  - (ii) Ensure enforcement on the judicious use of water.

### 5.6.5 Private Sector

- (a) General Preparedness
  - (i) Ensure enforcement on the judicious use of water,
  - (ii) Encourage rain water harvesting.
  - (iii) Develop business continuity plans in relation to water crisis.

### (b) During the Dry Season

- (i) Ensure enforcement on the judicious use of water,
- (ii) Encourage rain water harvesting and water recycling,
- (iii) Activate the business continuity plan, and
- (iv) Maintain adequate fire breaks, for example in sugar cane fields.
- (v) Depending upon situations, assist CWA and MRFS as far as possible in terms of water tanks lorries facilities where required.

### (c) During Water Crisis

- (i) Inform private enterprises on the water situation and eventual restrictions and seek their collaboration for the judicious use of water resources
- (ii) Activate the business continuity plan.
- (iii) Maintain adequate fire breaks, for example in sugar cane fields.

### \*\*\*\*\*\*\*\*End of Scheme\*\*\*\*\*\*\*

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# Earthquake Emergency Scheme



National Disaster Risk Reduction and Management Centre (NDRRMC) Line Barracks, Port-Louis Earthquake Emergency Scheme

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### 6.0 EARTHQUAKE EMERGENCY SCHEME

### 6.1 Introduction

An earthquake is a sudden rapid shaking of the earth that is caused by the breaking and shifting of the rocks beneath the earth surface. The vibrations generated then travel as waves and shaking of the ground is felt depending on severity of the event.

Earthquakes are considered to be low frequency hazards in the region of the Republic of Mauritius and its outer islands. However, they cannot be predicted and may strike at any time causing damage. Earthquakes of moderate to high magnitude sometimes generally occur for a few seconds only and may cause damage to buildings and infrastructure.

A large magnitude earthquake could generate a tsunami, landslides, dam failures and other associated disasters. The possibility of these cascade effects should be considered and the relevant Emergency Scheme activated accordingly.

The Government of Mauritius has established this Earthquake Emergency Scheme in order to ensure safety of life and property of the citizens of the Republic of Mauritius.

The purpose of this Scheme is to ensure coordination among stakeholders who shall have clearly defined responsibilities during an earthquake emergency situation.

The dimensions of response at the national level shall be determined in accordance with the following:

- 1. The gravity of the earthquake
- 2. The scale of relief operations necessary

As earthquakes occur suddenly, there is need for education and awareness so as to:

- 1. Remind the public of dangers regarding earthquakes;
- 2. Reiterate precautions that should be taken;
- 3. Establish preliminary recovery measures in case of an eventual disaster; and
- 4. Identify evacuation means and safer spaces in buildings.

All institutions must have a clear set of procedures for evacuation with which all members of staff should be familiar in case of an earthquake of considerable magnitude. Each identified stakeholder should develop their own internal standard operating procedures regarding response measures.

The following sections describe the responsibilities of the relevant stakeholders so that they remain prepared and ready to intervene at all times.

The concerned stakeholders have been classified under the following categories in this scheme:

- 1. Warning/Alerting agency,
- 2. Coordinating agencies at national and municipalities/districts council levels,
- 3. Main response agencies, and
- 4. Other stakeholders.

Subsequently, roles and responsibilities of each stakeholder are defined during the following conditions:

- 1. General Preparedness
- 2. During Earthquake
- 3. Aftermath

### 6.2 General Roles, Responsibilities and Actions

### 6.2.1 All Organisations

### (a) <u>General Preparedness</u>

- (i) Ensure that all staff is familiar with the procedures of their SOPs/ Contingency Plans.
- (ii) Update their SOPs/ Contingency Plan and ensure that they are properly understood and implemented.
- (iii) Earthquake posters supplied by the GIS should be displayed for the information of the general public.

(iv) Ensure all organisations have developed their Business or Service Continuity Plan (BCP).

### (b) <u>During Earthquake</u>

Heads and occupants of Ministries/ Departments of Government buildings, ensure all appropriate measures as per their Standard Operating Procedures are in place, to ensure the security of their staff.

### (c)<u>Aftermath</u>

- (i) Carry out a post-disaster damage assessment pertaining to their respective organisation/area of responsibility and submit their reports to the NEOC.
- (ii) Immediate steps to be taken by Heads of Ministries/Departments concerned to:
- 1. Assist the injured
- 2. Clear roads
- 3. Restore public transport
- 4. Restore water supplies
- 5. Restore essential telephones
- 6. Restore electricity supply
- 7. Re-opening the Port
- 8. Re-opening the Airport
- 9. Assess damage to food stocks & infrastructure
- 10. Obtain and provide funds for clearing of debris in the Local Disaster Committee areas
- 11. Obtain and provide funds for emergency works to be carried out
- 12. Provide and maintain sanitary arrangements at emergency shelters. Clean and disinfect later.
- (iii) Take steps to salvage damaged property and restore their Ministry/ Department/ Organization to full operational efficiency.
- (iv) Forward regular situation reports to the NEOC accordingly.
- (v) Activate Business Continuity Plan.

### 6.3 Warning/Alerting Agency

### 6.3.1 Mauritius Meteorological Services

The Mauritius Meteorological Services (MMS) is the primary warning/alerting agency and the official source of the Earthquake Warning System in the Republic of Mauritius. The MMS will inform the Minister of Environment, Sustainable Development, and Disaster and Beach Management, Secretary to Cabinet and Head of the Civil Service, the Commissioner of Police, the NDRRMC and the media only if an earthquake is of any concern to the Islands of the Republic of Mauritius. In such cases, the MMS will specify the location of the earthquake and its intensity, if available.

### (a) General Preparedness

The MMS will:

- (i) maintain a 24 x 7 earthquake watch for the Republic of Mauritius. It will inform the key stakeholders in order to enable them to take response measures in case of severe earthquakes which occur in the close vicinity of the Republic of Mauritius.
- (ii) assist Municipal and District Councils in the preparation and conduct of earthquake simulation exercises as per the NDS Simulation Calendar.

### (b) <u>During Earthquake</u>

- (i) Where an earthquake has affected the islands of the Republic of Mauritius and shaking has been felt, the MMS will issue and distribute an earthquake bulletin to the recipients mentioned below on a priority basis:
- 1. The Prime Minister
- 2. The Minister of Environment, Sustainable Development, and Disaster and Beach Management
- 3. The Secretary to Cabinet and Head of the Civil Service
- 4. The Secretary for Home Affairs, Prime Minister's Office, Home Affairs
- 5. The Commissioner of Police
- 6. The Permanent Secretary, MoE, SD, and D & BM

- 7. The Permanent Secretary, Ministry of Local Government and Outer Islands
- 8. The Commanding Officer, Special Mobile Force
- 9. The Chief Fire Officer
- 10. The Director-General NDRRMC
- 11. The Chief Commissioner, Rodrigues Regional Assembly
- 12. The Island Chief Executive, Rodrigues
- 13. The General Manager, Outer Islands Development Corporation
- 14. The Resident Manager, Agalega Island
- 15. The General Manager, Central Electricity Board
- 16. The Director of Civil Aviation
- 17. The MBC and MBC Rodrigues
- 18. Private Radio Stations,
- (ii) The Earthquake Information Bulletin will contain the following details:
- 1. Time of issue of information bulletin
- 2. Time of earthquake occurrence
- 3. Appropriate coordinates and distance of the epicentre and its magnitude.
- 4. Any effects felt.

Note:

- Point of occurrence of the earthquake may vary depending on the continuous analysis performed by seismologists and renowned earthquake monitoring centres; and
- (ii) The magnitude may generally vary up to  $\pm 1.5$  on the Richter Scale.
- (c) <u>Aftermath</u>
  - (i) If an earthquake of magnitude greater than 5.0 on the Richter scale occurs within 400 km of the islands of Mauritius and no evidence of damage is reported or expected, the general information will be sent to the Minister of Environment, Sustainable Development, and Disaster and Beach Management,

the Director General of NDRRMC, the Commissioner of Police and to the media for information only.

- (ii) In case an earthquake of magnitude of less than 5.0 on the Richter Scale is recorded within less than 400 km, the MMS may after receiving reports and confirmation that the event occurred with minor shaking effect, issue a bulletin to key stakeholders and the media for information only.
- (iii) After an earthquake has occurred, the MMS will continue to monitor the earthquake aftershocks.
- (iv) After an earthquake has occurred, the MMS will monitor the risk for any tsunami that may be generated by the earthquake.

### 6.4 Coordinating Agencies

### 6.4.1 National Level

### Cabinet

- (i) Depending upon the magnitude and severity of the earthquake situation, the Cabinet under the chairmanship of Prime Minister may meet to decide upon the strategic orientation of emergency relief operations.
- (ii) The Secretary to Cabinet & Head of the Civil Service or his representative will act as Secretary. The Cabinet will meet at the Government House, Port Louis, at the first opportunity after the earthquake.

### National Disaster Risk Reduction and Management Council/Crisis Committee

- (a) <u>Aftermath</u>
  - (i) Upon confirmation of the occurrence of a significant earthquake in the islands of the Republic of Mauritius or in the immediate vicinity of islands and depending on the magnitude and location, the Minister of Environment, Sustainable Development, and Disaster and Beach Management may convene the Council/Crisis Committee to take stock of damages and initiate response measures.

The main functions of the Council/Crisis Committee will be to:

- 1. Monitor the general situation throughout the island or islands concerned.
- 2. Ensure that immediate action is taken on the decisions of the Committee.
- 3. Make recommendations on the relief measures that are immediately required.

The Council/Crisis Committee will be supported by the NDRRMC and NEOC.

### The National Disaster Risk Reduction and Management Centre/ National Emergency Operations Command

- (a) <u>General Preparedness</u>
  - (i) The NDRRMC will actively participate in collaboration with other stakeholders in the education and public awareness of the threat of earthquakes and precautions that need to be taken in the event of an occurrence of such an earthquake.
  - (ii) The NDRRMC will ensure that a simulation exercise is carried out at least once a year in different locations/ buildings. Strengths and weaknesses will be identified and corrective measures taken.
  - (iii) The NDRRMC will ensure that the Local Authorities identify all safe places/ evacuation sites, including, football pitches, across the island and after the earthquake a temporary list of such places/ sites would be drawn up. The contact details of the persons responsible for these places/ sites would be made available to the NDRRMC.

#### (b) During Earthquake

- (i) The NEOC will immediately be activated at Line Barracks. It will assist all relevant agencies in initiating necessary actions to deal with the event by coordinating the efforts and harmonizing the decisions of the various agencies in terms of deployment of personnel, equipment and other resources; and
- (ii) In case the NDRRMC at Line Barracks is disabled following an earthquake in Port Louis Region, it will move to its alternate location at SMF Headquarters, Vacoas, thereafter, to be known as the NDRRMC, Abercrombie, Vacoas, or to another location as appropriate.

(iii) The NDRRMC and NEOC will provide all necessary information to the Council/Crisis Committee for decision making.

#### (c)<u>Aftermath</u>

- The NEOC will oversee actions by all stakeholders involved in rescue and relief operations.
- Send regular Situation Reports to the Chairperson of the Council/Crisis Committee and other Senior Officials.
- (iii) Ensure monitoring of the state of the main road networks and of main bridges.
- (iv) Disseminate information in connection with any traffic diversion plan.
- (v) Ensure that the debris on roads is cleared in view to restore traffic.
- (vi) Ensure that emergency routes are opened, such as, those leading to hospitals.
- (vii) Advise the public in general about risks of flooding, landslides or rock fall along routes.
- (viii) Ensure that communication and domestic supplies to all key and essential services are restored on a priority basis.
- (ix) Facilitate entry of humanitarian aids into the country, as required.

#### The Mauritius Police Force (The Police Information and Operation Room)

(a)<u>Aftermath</u>

- (i) The PIOR will be responsible for coordinating and monitoring all Police deployments through Police Divisional/ Branch Operations Rooms and regularly reporting to the NEOC. All Police Divisional Operations Rooms will be converted into Divisional Disaster Operations and Coordination Rooms (DOCRs); and
- (ii) The PIOR, through DOCRs will ensure that a complete assessment of the situation is carried out and communicate all relevant information to the NEOC.

#### 6.4.2 Municipal/District Council Level

### Local Disaster Risk Reduction and Management Committee/ Local Emergency Operations Command

#### (a) General Preparedness

- (i) Mobilize resources and keep them ready for deployment.
- Plan, prepare and conduct earthquake simulation exercises as per the NDS Simulation Calendar, and which shall include participation of the local communities.
- (iii) Train local communities on evacuation drill to promote the concept of self help and mutual help.
- (iv) Identify appropriate evacuation sites and routes.
- (v) Identify vulnerable and high-risk infrastructure.
- (vi) Prepare a contingency plan at the local level.

#### (b)<u>Aftermath</u>

- (i) Activate the Local Emergency Operation Command.
- (ii) Assess infrastructural damages in their respective areas of jurisdiction.
- (iii) Provide the resources for evacuation of affected population.
- (iv) Provide appropriate support to the affected population.
- (v) Ensure that emergency shelters are in place.
- (vi) Carry out a Post Disaster Needs Assessment according to an agreed format and methodology and provide report to NEOC.

#### 6.5 Main Response Agencies

#### 6.5.1 The Mauritius Police Force

- (a) <u>General Preparedness</u>
  - (i) The Mauritius Police Force will actively participate in collaboration with the NDRRMC and other stakeholders in the education and public awareness of the

threat of earthquakes and precautions that need to be taken in the event of an occurrence of an earthquake.

- (ii) The Mauritius Police Force through the DOCRs and all relevant authorities will assist in the identification of all safe places/ evacuation sites, including, football pitches, across the island and after the earthquake a temporary list of such places/ sites would be drawn up. The contact details of the persons responsible for these places/ sites would be made available to the NDRRMC.
- (iii) Assist Municipal and District Councils in the planning, preparation and conduct of earthquake simulation exercises as per the NDS Simulation Calendar.
- (iv) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
- (b) During Earthquake
  - Police Divisional Operations Rooms will be converted into a local DOCR and, will on their part, coordinate and monitor the actions of various stakeholders deployed to deal with the event.
  - (ii) Provide all its resources, SMF, SSU, Police Helicopters, NCG, etc. to be ready for search, rescue or evacuation operations.
- (c) <u>Aftermath</u>
  - (i) Organize search and rescue operations where necessary, using police helicopters, armoured vehicles and other available means. Give priority to access key services and ensure the safe return of distressed persons to their respective homes if they are displaced.
  - (ii) Assist those displaced from their homes to safe places.
  - (iii) Patrol abandoned residential and commercial areas to prevent theft and looting.
  - (iv) Organize the deployment of personnel, transport and other resources and place same at the disposal of stakeholders concerned.
  - (v) Support if required transfer of injured persons to hospitals.
  - (vi) The NCG will:
  - 1. Organize search and rescue operations where necessary.

- 2. Prepare for the risk for any eventual tsunami that may be generated by the earthquake.
- 3. Inform all beach users, swimmers and boat operators about the occurrence of an earthquake and direct them to safer place.
- 4. Inform the shipping community about any relevant information through broadcast by MRS.
- 5. Ensure the transportation of relief goods between coastal embarkation points using NCG ships and boats since road network could be disrupted.
- 6. Carry out aerial reconnaissance of the affected area by the NCG aircraft (if air strip is available for operations) to provide critical inputs for focusing the relief efforts.

#### 6.5.2 The Mauritius Fire and Rescue Service

- (a) <u>General Preparedness</u>
  - (i) The Chief Fire Officer will keep resources mobilized at Headquarters and in all Fire Stations for any intervention,
  - (ii) The Mauritius Fire and Rescue Service will assist Municipal and District Councils in the planning, preparation and conduct of earthquake simulation exercises as per the NDS Simulation Calendar,
  - (iii) Carry out in coordination with the NDRRMC, targeted community awareness campaigns to sensitise the community, schools, elderly and other identified as vulnerable on precautions and measures that can be taken during earthquake, and
  - (iv) The Mauritius Fire and Rescue Service will support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
- (b) <u>Aftermath</u>
  - (i) Intervene for life saving and property protection.
  - (ii) Carry out search and rescue operations and handle fire or hazardous material incidents.

#### 6.5.3 The Ministry of Health and Quality of Life

#### (a) General Preparedness

- (i) Identify Regional Operation Centre and establish plans to be activated in the event of an earthquake which has affected the population.
- (ii) Established a list of personnel with phone numbers of SAMU and ambulance services and the Ministry will ensure that medical and para-medical personnel are fully aware of their Emergency Preparedness and Response Plan.
- (iii) Participate actively in the earthquake simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
- (iv) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
- (b) <u>Aftermath</u>
  - (i) Members of the Regional Operations Centre will immediately visit affected areas to assess the immediate health needs.
  - (ii) SAMU and ambulance services will be deployed to evacuate any casualty from the earthquake sites.
  - (iii) Temporary first aid camps will be set up to provide medical care to the injured.
  - (iv) Dead bodies will be secured in an appropriate place for medico-legal purposes and thereafter transported to the mortuary.
  - (v) Provide post-disaster psychological and psychosocial care to those in need.
  - (vi) Coordinate the actions of health related NGOs such as the Mauritius Red Cross Society and the St. John's Ambulance.

#### 6.6 Other Stakeholders

# 6.6.1 The Ministry of Public Infrastructure and Land Transport (Public Infrastructure Division)

- (a) <u>General Preparedness</u>
  - Participate in the earthquake simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.

- (ii) Implement appropriate risk reduction structural and non-structural measures with the assistance of other stakeholders.
- (iii) Develop building codes for earthquake for inclusion in building practices.
- (iv) Sensitise stakeholders and the public on the building codes for earthquake.
- (v) Arrange for the training of engineers and skilled labour force in the construction industry, through competent training agencies. The trainings should focus on the good building practices which incorporate resilience to earthquake.

#### (b) <u>Aftermath</u>

- (i) Carry out a post disaster needs assessment according to an agreed format and methodology and provide report to NEOC.
- (ii) Make a general survey of Government buildings, bridges and other infrastructures affected by the earthquake and assess their structural stability and safety for further occupation and use.
- (iii) Liaise with the NDRRMC and propose remedial actions required to restore the use of the affected Governmental buildings, bridges and other infrastructures.
- (iv) Ensure the restoration works to the Governmental buildings, bridges and other infrastructures.
- Monitor the restoration works of the Governmental buildings, bridges and other infrastructures.
- (vi) Monitor landslide activities associated with the earthquake and take necessary measures in line with the Landslide Emergency Scheme.

#### 6.6.2 The Ministry of Housing and Lands

- (a) <u>General Preparedness</u>
  - (i) Identify potential suitable locations for the construction of temporary housing in different regions.
  - (ii) Assist concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) <u>Aftermath</u>

- (i) Identify sites in the affected areas for putting up temporary shelters for victims.
- (ii) Assist in the provision of temporary shelters to accommodate victims who have suffered damages to their houses during an earthquake.

#### 6.6.3 The Ministry of Social Security, National Solidarity and Reform Institutions

- (a) <u>General Preparedness</u>
  - (i) Provide any assistance, if required, to the Ministry of Local Government and any other ministry in identifying appropriate Emergency Shelters which could be used as shelters.
  - (ii) Ensure that necessary administrative arrangements are put in place for the provision of amenities as per entitlement such as water and biscuits, hurricane lamps, etc when available emergency shelters are opened with special attention to persons with disabilities and children.
  - (iii) Arrange for the training of supervisors of emergency shelters in first aid by the MRCS. It is understood that this is a long term process and it is not expected to be implemented in the near future.
  - (iv) Ensure that administrative arrangements are made with the MRCS for the provision of a minimum number of camp beds at each emergency shelter.
  - (v) Ensure that SOPs are in place for activation of these shelters.
  - (vi) Assist Municipal and District Councils in the planning, preparation and conduct of earthquake simulation exercises as per the NDS Simulation Calendar.
  - (vii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) <u>Aftermath</u>

- (i) Support concerned authorities providing temporary housing facilities.
- (ii) Provide basic needs until displaced persons safely return to their homes.
- (iii) Assist Police, Ministry of Social Integration and Economic Empowerment and other stakeholders, where required, in identifying the number of households that have been affected, number of people affected and displaced and in carrying out

survey to assess extent of damage (loss of personal properties, loss of materials such as mattresses, furniture, etc).

(iv) Send situation report to Police, LEOC and NEOC.

# 6.6.4 The Ministry of Education and Human Resources, Tertiary Education and Scientific Research

#### (a) <u>General Preparedness</u>

- (i) Provide educational institutions with materials to sensitize students on precautions that need to be taken in case of earthquakes and liaise with relevant authorities for the organization of simulation exercises for the benefit of teaching and non-teaching staff and the students.
- (ii) All Heads of Schools should identify safe places to be used as temporary shelters after earthquakes ahead of time.
- (iii) Develop procedures to evacuate students in the event of an earthquake at the level of each educational institution.
- (iv) Develop and practice mock drills for emergency evacuation for each institution.
- (v) Perform evacuation simulation exercises according to school emergency plan during awareness campaigns.
- (vi) Participate actively in earthquake simulation exercises organized by Municipal and District Councils as per the NDS Simulation Calendar.
- (vii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) <u>During Earthquake</u>

Evacuate as per emergency drills.

#### (c) <u>Aftermath</u>

- (i) Carry out a Post Disaster Needs Assessment and provide report to NEOC.
- (ii) Arrange for evacuation of staff and pupils to pre-established evacuation site to ensure safe collection by parents.

- (iii) Arrange for schools to be used as temporary shelters if required and where no structural damage is observed.
- (iv) Monitor the state of educational institutions in affected areas and ensure their operability and report to the NDRRMC, the NEOC and the Ministry on conditions prevailing there.
- (v) Verify that the school buildings, if any, which have been used as emergency shelters are in a state to resume classes.

### 6.6.5 The Ministry of Environment, Sustainable Development, and Disaster and Beach Management

- (a) <u>General Preparedness</u>
  - Participate actively in the earthquake simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
  - (ii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.
  - (iii) Ensure that oil spills and HAZMAT contingency plans are available.
- (b) <u>Aftermath</u>
  - (i) Depending on the scale of the crisis situation after the earthquake, set up a Technical Committee chaired by the Director of Environment to come up with recommendations and remedial measures in relation to environmental issues.
  - Prepare and submit observation reports and draft any communiqué, as may be required.
  - (iii) Carry out a Post Disaster Needs Assessment and provide report to NEOC.
  - (iv) Activate the oil spills and HAZMAT contingency plans.
  - (v) Take stock of all hazardous materials for the safety and security in collaboration with the Fire and Rescue Services and other relevant stakeholders.

# 6.6.6 The Ministry of Technology, Communication and Innovation and Mauritius Telecom

#### (a) <u>General Preparedness</u>

Explore the possibility with Mauritius Telecom and other Mobile Operators of informing the public in general through an integrated alert system of warnings/emergency measures to be taken in case of natural disasters and to target specifically parents of students through the e-Register system, in case of disaster situations.

#### (b) <u>Aftermath</u>

- (i) Carry out a Post Disaster Needs Assessment and provide report to NEOC.
- (ii) Ensure that an integrated alert system is fully operational in order to inform the public in general of the emergency measures to be taken.

#### 6.6.7 Ministry of Tourism and External Communications and Tourism Authority

#### (a) General Preparedness

- (i) All hotels, tourism establishments, tour operators and other relevant stakeholders to inform all guests of precautionary measures that need to be taken in event of an earthquake.
- (ii) All hotels, tourism establishments, tour operators and other relevant stakeholders to have an evacuation procedure following the announcement of the occurrence of an earthquake.
- (iii) Participate in mock drills during awareness campaigns.

#### (b) During Earthquake

- (i) All hotels, tourism establishments, tour operators and other relevant stakeholders to ensure that tourists/guests are mustered under their and their safety ensured.
- (ii) All hotels, tourism establishments, tour operators and other relevant stakeholders to evacuate tourists/guests as per emergency drill.

- (c) <u>Aftermath</u>
  - (i) All hotels, tourism establishments, tour operators and other relevant stakeholders to communicate information on tourists/ guests to Embassies and High Commissions;
  - (ii) Collect information and submit a Post Damage Assessment report to the NEOC.

#### 6.6.8 Ministry of Social Integration & Economic Empowerment

#### (a) <u>General Preparedness</u>

Assist concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

- (b) <u>Aftermath</u>
  - (i) Assist Police, MoSS NS & RI and other stakeholders, where required, in identifying the number of households that have been affected, number of people affected and displaced and in carrying out survey to assess extent of damage (loss of personal properties, loss of materials such as mattresses, furniture, etc).
  - (ii) Identify sites in the affected areas for putting up temporary shelters (tents) for victims.
  - (iii) Assist the Ministry of Housing and Lands and other concerned authorities in the setting up of temporary shelters to accommodate victims who have suffered damages to their houses during an earthquake.

#### 6.6.9 Government Information Service (GIS)

(a) <u>General Preparedness</u>

Produce and distribute sensitization materials to remind the population of the threat and precautions that need to be taken in case of earthquakes in collaboration with the National Disaster Risk Reduction & Management Centre (NDRRMC), the Local Disaster Risk Reduction & Management Committees, the Ministry of Environment, Sustainable Development and Disaster and Beach Management, the Ministry of Education and Human Resources, the Ministry of Tertiary Education Science, Research and Technology, the Mauritius Meteorological Services and the Mauritius Oceanography Institute.

(b) <u>Aftermath</u>

Produce and release press communiqués to remind the population of the precautions that need to be taken in collaboration with the National Disaster Risk Reduction & Management Centre (NDRRMC).

#### 6.6.10 Mauritius Revenue Authority (MRA)

- (a) <u>General Preparedness</u>
  - (i) Identify bonded warehouses for management of relief materials in different regions.
  - (ii) Ensure that appropriate procedures for receiving and managing international humanitarian aid are in place, including reception of SAR animals, and facilitation of international relief teams.

#### (b) <u>Aftermath</u>

- (i) Customs Department will take necessary measures for the rapid release of relief consignments and any goods needed in the aftermath of an earthquake.
- (ii) Facilitation of international relief teams.

#### 6.6.11 Road Development Authority

- (a) <u>General Preparedness</u>
  - Participate actively in the earthquake simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
  - (ii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) <u>Aftermath</u>

- (i) Carry out a Post Disaster Needs Assessment and provide report to NEOC.
- Monitor the road network and the state of bridges and disseminate information in connection with any traffic diversion plan.
- (iii) Secure emergency routes, such as, those leading to hospitals.
- (iv) Advise the public in general, through the NDRRMC, about risks of flooding or rock fall along routes.
- (v) Proceed with the clearance of debris on roads to restore traffic.
- (vi) Restore roads and bridges.

#### 6.6.12 National Transport Authority (NTA)

- (a) <u>General Preparedness</u>
  - (i) Ensure availability of buses for evacuation from affected areas, as and when required.
  - Participate actively in the earthquake simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
  - (iii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) <u>Aftermath</u>

- (i) Carry out survey to identify whether all bus routes are practicable.
- (ii) Deploy buses for evacuation from affected areas.
- (iii) Carry out a Post Disaster Needs Assessment and provide report to NEOC.

#### 6.6.13 Central Electricity Board

#### (a) General Preparedness

- Participate actively in the earthquake simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
- (ii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) <u>Aftermath</u>

- (i) Restore electric power supplies to all key and essential services on a priority basis.
- (ii) Ensure that the damaged power cables do not hinder the safe intervention of the stakeholders in the search and rescue operations.
- (iii) Carry out a Post Disaster Needs Assessment and provide report to NEOC.

#### 6.6.14 Water Resources Unit

#### (a) <u>General Preparedness</u>

- (i) Take action to minimize risks from water invasions.
- (ii) Assess the stability of water dams and take necessary measures.
- (iii) Develop contingency plans for dam failure due to earthquake.
- (iv) Participate actively in the earthquake simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
- (v) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) <u>Aftermath</u>

- (i) Monitor water distribution networks, boreholes and other water storage facilities to ensure domestic and other water supplies. Ensure that the CWA proceed as soon as possible with the repair damaged pipelines.
- (ii) Carry out a Post Disaster Needs Assessment and provide report to NEOC.
- (iii) Be prepared to activate the contingency plans for dam failure due to earthquake.
- (iv) Assess infrastructural damages with regard to water dams and reservoirs and take necessary actions as needed restore damages.
- (v) Consider evacuation of downstream population.

#### 6.6.15 Central Water Authority

#### (a) <u>General Preparedness</u>

- (i) Take action to minimize risks from water invasions.
- Participate actively in the earthquake simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
- (iii) Follow up with concerned authorities on the implementation of appropriate risk.

#### (b) <u>Aftermath</u>

- Monitor water distribution networks, boreholes and other water storage facilities to ensure domestic and other water supplies. Proceed as soon as possible with the repair damaged pipelines.
- (ii) Restore water supplies to all key and essential services on a priority basis.
- (iii) Carry out a Post Disaster Needs Assessment and provide report to NEOC.

#### 6.6.16 Department of Civil Aviation

- (a) <u>General Preparedness</u>
  - (i) Coordinate assessment of infrastructure at SSR International Airport with respect to aircraft operations.
  - (ii) Develop internal standard operating procedures regarding response measures.
  - (iii) Develop Business Continuity Plan.
- (b) <u>Aftermath</u>
  - (i) Ensure that the airport infrastructures and runway are fully functional. Otherwise activate the Business Continuity Plan.
  - (ii) Restore aircraft operations as soon as possible.
  - (iii) Facilitate entry of humanitarian aid into the country.
  - (iv) Carry out a Post Disaster Needs Assessment and provide report to NEOC.

#### 6.6.17 Mauritius Red Cross Society/St. John Ambulance and other NGOs

#### (a) <u>General Preparedness</u>

- Participate actively in the earthquake simulation exercises organized by the Municipal and District Councils as per the NDS Simulation Calendar.
- (ii) Support concerned authorities in the implementation of appropriate risk reduction structural and non-structural measures.

#### (b) <u>Aftermath</u>

Participate in humanitarian relief operations.

\*\*\*\*\*\*\*\*\*End of Scheme\*\*\*\*\*\*\*

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# Landslide Emergency Scheme



National Disaster Risk Reduction and Management Centre (NDRRMC) Line Barracks, Port-Louis Landslide Emergency Scheme

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#### 7.0 LANDSLIDE EMERGENCY SCHEME

#### 7.1 Monitoring of Landslides

- (i) The Ministry of Public Infrastructure and Land Transport (MPI) are responsible for the monitoring of landslides in the landslide-prone regions.
- (ii) The Landslide Emergency Scheme applies to the 3 high risked areas identified by JICA Landslide Management Project, as follows: Chitrakoot, QuatreSoeurs and Vallée Pitot.

#### 7.2 General

- (i) With the increase in development and the pressure on land requirements, new and existing constructions have considerably changed the configuration and physical properties of some areas which, as a result, have become prone to landslide.
- (ii) There is a need to warn the public and more particularly the inhabitants of these sensitive areas of the need for precautionary measures in case of likelihood of landslides.

#### 7.3 Action by Local Authorities

Local Authorities shall, ahead of the convening of the Council, undertake a fresh survey and provide such information to MPI and any other ministry/ agency as soon as possible and update the list of landslide-prone regions in Mauritius.

#### 7.3.1 The Government Information Service

In collaboration with Local Authorities, the MPI, the MMS and the NDRRMC, the GIS and the MBC will prepare illustrated posters and film strips to remind the public of the dangers of landslide.

#### 7.3.2 The National Emergency Operation Command

The NEOC is activated and is responsible for the centralized command and control of information for coordinating and monitoring all responsive actions and operations on ground by all stakeholders. It will regularly provide updated situational reports to the Council/Crisis Committee.

#### 7.3.3 The Police

- (i) The Police, in collaboration with the MMS and the MBC shall arrange to give talks on TV and Radio on dangers to transportation in landslide conditions.
- (ii) The Police Divisional Operations Rooms (where applicable) will be converted into Divisional Disaster Operations and Coordination Rooms (DOCR) to coordinate the efforts of relevant stakeholders in responding to the crisis.

#### 7.4 Landslide Conditions

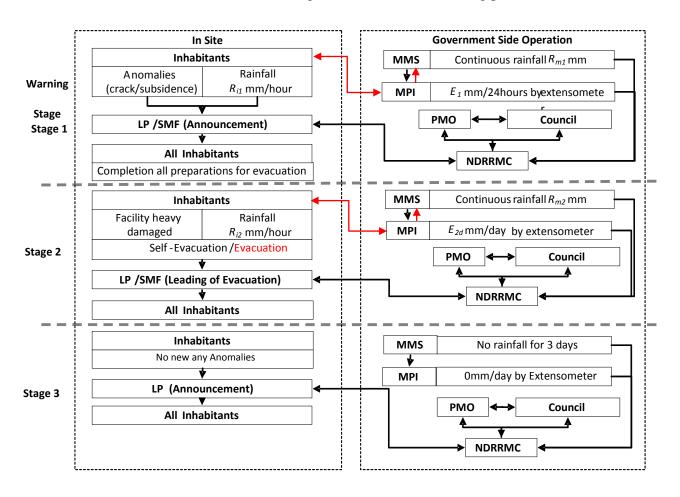
The following criteria for the issue of warnings to the inhabitants of landslide areas will henceforth apply:

- 1. Geomorphology;
- 2. Identification of Landslide Areas;
- 3. Rainfall Recording; and
- 4. Ground Displacement.

#### 7.5 The Landslide Warning System shall consist of three stages as follows:

- (i) Stage 1 -Warning Stage
- (ii) Stage 2 -Evacuation Stage
- (iii) Stage 3 -Termination

The Landslide Warning System flow chart is shown below for landslide areas which are identified as subject to high risk of landslide. When the warning system is activated, the concerned ministries/ agencies will follow standing procedures.



#### 7.6 Stage 1 – Warning Stage

Stage 1 Warning will be triggered based on any one of the following conditions, whichever arises first:

- 1. The MMS observed rainfall  $R_{m1}$  mm/hour, or
- 2. The MPI confirmed measurement of displacement  $E_1 \text{ mm/day}$ , or
- 3. Any inhabitant in the Landslide zone observed anomalies (cracks, subsidence, etc.)

	Stage 1: Warning Stage		
Area Name	R <sub>i1</sub>	$R_{m1}$	$E_{I}$
	(Rainfall [mm/ hour] observed by inhabitants)	(Rainfall [mm/ hour] observed by MMS)	(Displacement of ground [mm/ day] observed by MPI)
Chitrakoot	75	75	10
Quatre Soeurs	100	100	Not applicable
Vallée Pitot	75	75	10

- (i) The MMS will constantly monitor the amount of rainfall and will inform the MPI and NDRRMC and the PIOR as soon as the Rm1 mm/ hour rainfall is recorded. The local Police will give warning to all inhabitants based on the information from NDRRMC and PIOR.
- (ii) The MPI will constantly monitor ground movement where applicable and will inform the NDRRMC and the PIOR as soon as a displacement of E<sub>1</sub> mm/ day is recorded or if visual displacement of ground is noted. The Local Police will react according to 7.6(iv)
- (iii) However, under the situation of Cyclone Class II Warning or above or in Torrential Rain which is described in the scheme, the SMF will assist the MPI in taking readings of extensometers on hills and will in turn communicate the information to the NDRRMC.
- (iv) The designated inhabitants will monitor the amount of rainfall on site using simple rain gauges and will inform the local Police and the Ministry of Public Infrastructure when the threshold value is reached. The inhabitants will inform the Local Police and MPI about anomalies. The MPI will proceed, after confirmation with Local Police or the NDRRMC, as per Clause 7.6 (iii). The Local Police/ SMF in collaboration with the Local Authority will check the situation on site and inform the NDRRMC. The local Police will then give warning to all the inhabitants.

- (v) The warning will be broadcast by the MBC and Private Radios.
   Communication to the affected residents will be done by the local Police by loudspeakers or other means.
- (vi) The PIOR will notify all persons as per Annex IV of the Landslide Communiqué.
- (vii) The local Police shall, when issuing Stage 1 Warning, advise the inhabitants to complete all preparations for an eventual evacuation and stand ready to vacate their houses once the order to evacuate is issued. Arrangements should be made by the Ministry of Health and Quality of Life and with the assistance of the SMF for the transfer to hospitals of disabled people who elect to do so. First Aid Service providers shall be requested to extend their assistance.
- (viii) The NDRRMC will take appropriate measures to muster all available resources and equipment in order to assist in an eventual evacuation exercise and any salvage operation.

The Stage 1 Warning will also be communicated by the PIOR to the following Ministries/Departments/ Organisations and which will be responsible for the following:

#### 7.6.1 The Ministry of Health and Quality of Life

- (i) To activate hospital contingency plan for mass casualties;
- (ii) To provide adequate number of medical and para-medical personnel intended to receive casualties; and,
- (iii) To be ready to despatch Ambulances adequately staffed and equipped.

### 7.6.2 The Ministry of Social Security, National Solidarity and Reform Institutions, Ministry of Gender Equality, Child Development and Family Welfare

The Ministries will ensure that appropriate Emergency Shelters under their respective control are opened and made ready for use. However, Ministry of Social Security, National Solidarity and Reform Institutions will be solely responsible for managing emergency shelters.

#### 7.6.3 The Central Water Authority

(i) The CWA will stand ready to close the shut-off valves on the pipes going through the region as soon as the evacuation order is issued.

#### 7.6.4 The Central Electricity Board

(i) The CEB will be ready to switch off electricity supply in the affected area as and when instructed by the NDRRMC or the most senior Police Officer on spot. The CEB will ensure as far as practicable that power cuts are restricted to the affected areas only so as to avoid unnecessary deprivation of electricity to unaffected areas.

### 7.6.5 The Mauritius Fire and Rescue Service and the Non-Governmental Organizations (Mauritius Red Cross Society, St. John Ambulance etc.)

(i) The Mauritius Fire and Rescue Service and the Non-Governmental Organizations (Mauritius Red Cross Society, St. John Ambulance, will be informed by the NDRRMC of the possibility of an evacuation order being issued to enlist their assistance.

#### 7.7 Stage 2 – Evacuation Stage

Stage 2 is reached based on any one of the following conditions, whichever arises first:

- (a) the MMS has observed continuous rainfall  $R_{\rm m2}$  mm/hour; or
- (b) the MPI has confirmed measurement of displacement  $E_{2d}$  mm/day or  $E_{2h},\!mm/\!hour$  ;or
- (c) Inhabitants have confirmed heavy damage to their buildings,  $R_{i2}$  mm/hour rainfall.

	Stage 2: Evacuation Stage		
Area Name	R <sub>i1</sub>	R <sub>m1</sub>	E <sub>1</sub>
	(Rainfall [mm/ hour]	(Rainfall [mm/ hour] observed by MMS)	(Displacement of ground [mm/ day]
	observed by inhabitants)		observed by MPI)
Chitrakoot	100	100	20
Quatre Soeurs	200	200	Not applicable

Vallée Pitot	100	100	20

- (i) The MMS will constantly monitor the amount of rainfall and will inform the MPI and NDRRMC as soon as continuous rainfall of Rm2 mm/hour is recorded. The local Police/ SMF and Local Authorities will assist the inhabitants for evacuation based on information from NDRRMC.
- (ii) The MPI will constantly monitor ground movement and will inform the NDRRMC as soon as a displacement  $E_{2d}$  mm/day or  $E_{2h}$  mm/hour is recorded or if visual displacement of ground is noted. The local Police/ SMF will assist the MPI in the situation of Cyclone Class II or above or Torrential Rain which is described in the scheme.
- (iii) The designated inhabitants will continue to monitor the amount of rainfall using the simple rain gauges and will inform MPI and Local Police when Ri2 mm/hour of rainfall is recorded and same will be communicated to the Director of MMS who will confirm the recording and transmit the information to the NDRRMC. The inhabitants will inform the local Police/ SMF when they notice heavy damage to their buildings and will evacuate by themselves (voluntary evacuation) and. The local Police/ SMF will check the situation on site and inform the NDRRMC. The Local Police/ SMF and Local Authorities will assist the inhabitants for evacuation.
- (iv) The NDRRMC will also inform the Minister of Environment, Sustainable Development, and Disaster and Beach Management, and Secretary to Cabinet and Head of the Civil Service or, in his absence, the Senior Chief Executive, Home Affairs.
- (iv) The evacuation order will be broadcast and/ or communicated to the appropriate inhabitants in the same manner as in Stage 1.

As Stage 2 is reached and evacuation is in progress, the various Ministries/ Departments/ Organisations involved should actively set in motion arrangements for which they are responsible. In particular, the following measures should be implemented:

## 7.7.1 The Ministry of Education and Human Resources, Tertiary Education and Scientific Research

The Ministries should ensure that all Educational Institutions in affected areas should be closed.

## 7.7.2 The Ministry of Social Security, National Solidarity and Reform Institutions and the Ministry of Gender Equality, Child Development and Family Welfare:

The Ministries will ensure that all appropriate Emergency Shelters under their respective control are opened and made ready for use. However, Ministry of Social Security, National Solidarity and Reform Institutions will be solely responsible for managing emergency shelters.

#### 7.7.3 The Ministry of Health and Quality of Life

Ambulances should be dispatched on site for the conveyance of handicapped, old and sick people, and any casualty cases to hospital. Arrangements will also be made for Health Inspectors to visit regularly the Emergency Shelters to ensure acceptable sanitary conditions there.

### 7.7.4 The Central Water Authority:

The CWA will close the valves on the pipelines within the affected area and will arrange for water to be supplied regularly to the Emergency Shelters.

#### 7.7.5 The Central Electricity Board:

The CEB will proceed with the interruption of the power supply in the affected areas.

### 7.7.6 The Police

Police will cordon off the affected area and ensure the protection of property of the residents. An Incident Officer will be responsible and will have full authority for the control and coordination of the operation on site. Access to the cordoned off area will only be permitted by the Incident Officer.

#### 7.8 Stage 3 – Termination

A close monitoring and stocktaking exercise will be undertaken by relevant authorities after stabilization of ground movement has been noted. As in the case of the previous stages, the recording will be continually monitored by the MMS and the MPI and the data communicated to the NDRRMC. The NDRRMC will then pass on the information to the Council/Crisis Committee. The all-clear signal will be given after a meeting of the Council/Crisis Committee when the following conditions have been reached;

(a) Inhabitants have confirmed no new anomalies, or

(b) the MMS has observed no rainfall for three days or

(c) the MPI has confirmed measurement of displacement 0 mm a day

The Local Authority/ Police will inform the inhabitants of the termination of the evacuation stage

#### 7.8.1 In Case of Sudden Landslide

When there is sudden landslide the Emergency Warning is issued by the NDRRMC. Action will be triggered off as provided for under Stage 2.

#### 7.8.2 Special Arrangements during Cyclone Warning/Torrential Rains Warning

- (i) The prevalence of cyclonic conditions over and around Mauritius will entail the adoption of special arrangements with regard to the inhabitants of landslideprone areas. The issue of a Cyclone Warning Class II or a Torrential Rain Warning may constitute for the inhabitants a Landslide Stage 1 Warning.
- (ii) Given that the issue of a Cyclone Warning Class III entails the cessation of all normal activities, the inhabitants of the landslide-prone areas may be evacuated if there exists a strong likelihood of a Cyclone Warning Class III being issued and the possibility of landslide occurring.
- (iii) As soon as a Cyclone Warning II or a Torrential Rain Warning is issued by the MMS, the NDRRMC will, in consultation with the Chairperson of the Council/Crisis Committee, consider the advisability of issuing an evacuation order. Actions as provided for in Stage 2 will be triggered off.
- (iv) It will be followed by the warning/ evacuation system flow chart of the Landslide Stage 1/ 2 when the trigger reaches the designated threshold even though the Cyclone Warning I.

#### 7.8.3 Landslide Communiqué

(i) A Landslide Communiqué will be issued by the NDRRMC in consultation with the MPI and the MMS.

#### 7.8.4 Distribution of Landslide Communiqué

Landslide Communiqué will be broadcast by the MBC, the Press, the Private Radios, the telephone system including Mauritius Telecom Call Centre.

#### 7.8.5 The MBC

The MBC will, on receipt of the Communiqué, arrange for immediate broadcast and for its rebroadcast at half hourly intervals.

# 7.8.6 The Ministry of Technology, Communication and Innovation and the Mauritius Telecom

- (i) The Ministry with the NDRRMC will explore the possibility with Mauritius Telecom and other Mobile Operators of informing the public in general through an integrated alert system of cyclone warnings/ emergency measures to be taken in case of natural disasters or to target specifically parents of students through the e-Register system, in case of disaster situations.
- (ii) The Mauritius Telecom will arrange with the GIS to give wide publicity to the above facilities through the Radio, TV and Press.

#### 7.8.7 The Police

The PIOR is responsible for informing all persons as per **Annex IV** that the warning, evacuations and termination stages have been reached.

### 7.8.8 The Ministry of Housing and Lands and Ministry of Social Integration and Economic Empowerment

- (i) The Ministry of Housing and Lands will intervene immediately to identify sites in the affected areas for putting up temporary shelters for victims.
- (ii) The Ministry of Social Integration and Economic Empowerment will assist in the provision of temporary shelters to accommodate victims who have lost their houses during the landslides.

#### 7.8.9 The Mauritius Revenue Authority, (Customs Department)

The MRA, Customs Department, will take necessary measures for the rapid release of relief consignments and any goods needed during a disaster.

No	District Council/ Municipality	Area Name	Classification of disaster
1		Chitrakoot, Vallée des Prêtres	Landslide
2	City Council of	Vallée Pitot (near Eidgah)	Landslide
3	Port Louis	Mgr. Leen Street and nearby vicinity, La Butte	Landslide
4		Old Moka Road, Camp Chapelon	Landslide
5	Grand Port District Council	Quatre Soeurs, Marie Jeanne, Jhummah Street, Old Grand Port	Landslide
6	Municipality of Quatre Bornes	Candos Hill at Lall Bahadoor Shastri and Mahatma Gandhi Avenues	Landslide

The Table below shows the locations that have been earmarked as Landslide Zone:

\*\*\*\*\*\*\*\*\*End of Scheme\*\*\*\*\*\*\*

# Port-Louís Flood Response Plan



National Disaster Risk Reduction and Management Centre (NDRRMC) Line Barracks, Port-Louis

Port-Louis Flood Response Plar

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#### 8.0 Port Louis Flood Response Plan

#### 8.1 Introduction

This Flood Response Plan (FRP) has been prepared to lay down roles, responsibilities and actions that should be taken by various stakeholders in the event of flood/ flash flood due to heavy rainfall, torrential rains and cyclone within the area of Port Louis.

#### 8.2 General Roles, Responsibilities and Actions

#### 8.2.1 Warning/ Alerting Agency

#### **Mauritius Meteorological Services**

- (a) Bulletins of heavy rains, torrential rains, flooding, heavy swells, high waves and storm surge for the region of Port-Louis to be issued to PIOR, NEOC, MBC, private radios and public,
- (b) Rainfall data of the automatic weather stations at Line Barracks, Champs de Mars and Domaine des Pailles to be transmitted to NEOC and PIOR at the shortest possible intervals.

#### 8.2.2 Activation of National Emergency Operations Command (NEOC)

In the event of:-

- (a) The Mauritius Meteorological Services (MMS) has registered:
  - (1) 100 mm of rain in a period of 12 hours at several stations over the Island, and/or
  - (2) substantial and unusual amount of rainfall in a short period of time within the region of Port-Louis at any one of the automatic weather stations located at Domaine des Pailles, Champs de Mars or Line-Barracks, and/or
- (b) The region of Port-Louis is experiencing sudden heavy rainfall with abnormal flow of water at any of the following locations :Canal Dayot, Le Pouce Stream, Champ de Mars, Vallée Pitot, Chitrakoot, Chaussee Street, Labourdonnais Street, Signal Mountain Health Track, Caudan, Camp Chapelon, Domaine des Pailles, Pointe aux Sables, M1, A1 and at any other locations in Port-Louis,

The National Emergency Operation Command (NEOC) of National Disaster Risk Reduction and Management Centre (NDRRMC) shall be activated at the earliest. In case Line-Barracks, Port-Louis becomes inaccessible, then the alternate NEOC at SMF Headquarters, Vacoas will be used.

NEOC members will be convened at the NEOC either at Line-Barracks or SMF, Vacoas within the shortest possible delay.

Once activated, NEOC will as soon as practically possible issue communiqué to alert the public and all concerned stakeholders.

#### 8.3 Coordinating Bodies

#### 8.3.1 National Level

#### **National Emergency Operations Command (NEOC)**

The NEOC will as soon as possible establish a forward communication link with:

- (a) Mauritius Meteorological Services
- (b) Police
  - 1. Police Information and Operations Room (PIOR)
  - 2. Metropolitan Divisional Police:-Metro (North) OPS Room

:-Metro (South) OPS Room

- 3. SMF
- 4. NCG
- 5. Traffic Branch
- 6. SSU
- 7. PHS
- (c) Mauritius Fire and Rescue Service
- (d) Ministry of Health and Quality of Life/ SAMU Control Room
- (e) City Council of Port-Louis
- (f) Mauritius Ports Authority

- (g) Ministry of Education and Human Resources, Tertiary Education and Scientific Research
- (h) Ministries, Departments, MEF, JEC and NGOs

The NEOC will:

- (a) ensure that communication is established with all first responders.
- (b) ensure that respective response plans of all major stakeholders for responding to flooding situations are activated.
- (c) coordinate and monitor response interventions of emergency services and supporting agencies that may be required on ground.
- (d) requisition and mobilise additional resources and services that may be required by emergency services and supporting agencies.
- (e) prepare and issue communiqués on precautions and safety measures to be taken by the public.
- (f) deliver press brief, as and when required, jointly with Government Information Services (GIS) through the medias.
- (g) monitor of flood-prone areas through CCTV.
- (h) issue Situation Reports to concerned officials.

#### 8.3.2 Municipal Council Level

#### City Council of Port-Louis (CCPL)

- (a) Activate LEOC.
- (b) Mobilise available personnel, plants, equipment and resources for response and recovery.
- (c) Extend shelter facilities to Ministry of Social Security if required.
- (d) Assist Police in warning shop owners, hawkers and other similar operators to stop their activities and move to flood-safe locations.
- (e) Assist Police in warning the owner of Cine City (Majestic) movie theatre and organisers of other public gatherings to stop their activities and evacuate to flood-safe locations.
- (f) Survey drains, canal and river blockages as long as it is safe to do so.

- (g) Arrange for remedial measures in case of drains and canal blockages.
- (h) Monitor, using available means, flood prone areas, subways, underground parking, canals and rivers.
- (i) Monitor landslide prone areas of Chitrakoot and Vallee Pitot and other vulnerable areas.
- (j) Provide regular situation report to NEOC.

#### 8.4 Main Response Agencies

#### 8.4.1 Mauritius Police Force (MPF)

#### **Police Information and Operations Room (PIOR)**

- (a) Responsible for coordinating and monitoring all Police deployments through Police (N) and Police (S) Ops Rooms initially till the time the DOCR is activated.
- (b) CCTV live monitoring of general situation in city centre, water flow of Ruisseau Creole, Le Pouce Stream, Port-Louis Waterfront, Le Caudan Waterfront, M1 and other areas covered by CCTV.
- (c) Send regular situation report to NEOC.

#### Metropolitan Division, Metro (N) Police

- (a) The Metro (N) Divisional Operations Room will be converted into Divisional Disaster Operations and Coordination Rooms (DOCR) within the least possible delay.
- (b) Mobilise teams and be on standby for quick interventions.
- (c) Keep constant watch of the level of water flow in canals, drains, rivers (Riviere Lataniers, Rivière Citron); along river/canal banks bounded by inhabitations and well as within flood prone areas.
- (d) Maintain regular patrols within the main city arteries and residential areas, as long as it is safe to do so.
- (e) Advise personnel responsible of below ground level facilities to remain on the alert and to execute emergency plans. Otherwise, sanitise/evacuate and close below ground level facilities. Prohibit access until the situation is normalised and becomes safe again.

- (f) Make use of siren, loud hailers and public address systems for warning of public where applicable.
- (g) Inform devotees at places of worship (temples, churches, mosques, pagodas, assemblies...etc) to be cautious and move to safe places.
- (h) Terre Rouge bird Sanctuary to be sanitised and close to public if required.
- (i) Ensure that infrastructures such as bridges, culverts which could serve as shelters for the homeless (SDF) have been properly sanitised.
- (j) Locate and isolate water accumulation/flood prone risky zones. Divert traffic. Evacuate if necessary.
- (k) Cause vehicles/motorcycles which are parked in drainage systems (canals, road surface drains) to be removed by their owners as long as it is safe to do so.
- Report abnormalities and obstructions of any passage of rain water flow to NEOC, LEOC and DOCR.
- (m)Sensitise and advise public/residents/employees to be cautious and remain in office/indoors as long as it is safe to do so.
- (n) Locate any public in distress and quickly organise for search/assistance/rescue through DOCR/PIOR.
- (o) Warn shop owners, hawkers and other similar operators to stop their activities and to move to flood-safe locations.
- (p) Warn all educational institutions within the Police Division Area to be on the alert and to initiate measures as applicable.
- (q) Monitor landslide prone areas and other vulnerable areas.
- (r) Warn charitable institutions including elderly day home care and provide assistance in case of evacuation.
- (s) Assist in controlling at traffic at Traffic Bus Centres.
- (t) Send regular situation report to NEOC.

#### Metropolitan Division, Metro (S) Police

- (a) The Metro (S) Divisional Operations Room will be converted into Divisional Disaster Operations and Coordination Rooms (DOCR) within the least possible delay,
- (b) Mobilise teams and be on standby for quick interventions,

- (c) Keep constant watch of flow of water in canals (Canal Dayot, Sable Noire...) drains(Signal Mountain,...), rivers( Le Pouce Stream, Ruisseau Créole, GRNW Bridge, Rivière St Louis......),
- (d) Maintain regular patrol within the main city arteries and residential areas, as long as it is safe to do so,
- (e) North and South Underpasses at Esplanade/Waterfront to be closely monitored jointly with Port Police and SPDC,
- (f) Advise personnel responsible of below ground level facilities to remain alert and to execute underground emergency plans. Otherwise, sanitise/evacuate and close below ground level facilities. Prohibit access until situation is normalised and becomes safe again,
- (g) Make use of sirene, loud hailers and public address systems where required for warning of public where applicable,
- (h) Inform devotees at places of worship (temples, churches, mosques, pagodas, assemblies...etc) to be cautious and move to safe places,
- (i) Ensure that infrastructures such as bridges, culverts which could serve as shelters for the homeless (SDF) have been properly sanitised,
- (j) Locate and isolate water accumulation/flood prone risky zones. Divert traffic. Evacuate if necessary,
- (k) To cause vehicles/motorcycles which are parked in drainage systems (canals, road surface drains, ...) to be removed by their owners as long as it is safe to do so,
- Report abnormalities and obstruction of any passage of rain water flow to NEOC, LEOC and DOCR,
- (m)Sensitise and advise public/residents to be cautious and remain in office/indoors as long as it is safe,
- (n) Locate any public in distress and to quickly organise for search/assistance/rescue through DOCR/PIOR,
- (o) To warn all educational institutions within the Police Division Area to be on the alert and initiate measures as applicable,
- (p) To warn shop owners, hawkers and other similar operators to stop their activities and move to flood-safe locations,
- (q) Warn charitable institutions including elderly day home care and provide assistance in case of evacuation,
- (r) Assist in controlling of traffic at Traffic Bus Centres, and

(s) Send regular situation report to NEOC.

#### **Port Police**

- (a) Monitor Caudan (North) and (South) Underpasses. Evacuate and close underpasses to public as soon as water level exceeds critical level,
- (b) Provide Police assistance to enforce evacuation of pedestrians, shop operators and owners from underpasses,
- (c) Keep watch of level of water flow in canals, drains, rivers and sea within port area. Report sea level abnormalities and obstruction to any passage of rain water flow in canals, drains, rivers to NEOC, LEOC and DOCR,
- (d) Maintain regular patrols within the port and Caudan Waterfront/Esplanade areas, as long as it is safe to do so,
- (e) Locate and isolate water accumulation/flood prone risky zones. Divert traffic. Evacuate if necessary,
- (f) Advise personnel responsible of facilities within harbour and port area to remain on the alert and to execute relevant emergency plans. Otherwise, sanitise/evacuate and close facilities. Prohibit access until situation is normalised and becomes safe again,
- (g) Sensitise/Advise operators, public and tourists within Port area/ Caudan Waterfront and Port Louis Habour Front to be cautious, avoid moving around and remain in places until it becomes safe to move out,
- (h) Locate any person in distress and organise for quick assistance/rescue through DOCR/PIOR, and
- (i) Send regular situation report to NEOC.

#### **Government House Police**

- (a) Mobilise and remain on Standby,
- (b) Monitor any water level rise within Government House area, Assembly House, New Treasury Building, and other Ministries,
- (c) Assist in executing emergency plans of Assembly House, New Treasury Building, and other Ministries,
- (d) Liaise with SSU for sand bagging.
- (e) Send regular situation reports to NEOC.

#### **Central Market Police**

- (a) Mobilise and remain on standby,
- (b) Assist CCPL to warn shop owners, hawkers and other similar operators within the Central market area to stop their activities and prepare to evacuate to flood-safe locations,
- (c) Sensitise/Advise operators, public and tourists within Central market area to be cautious, avoid moving around and remain in secure places until it becomes safe to move around,
- (d) Cause vehicles/motorcycles which are parked in drainage systems (canals, road surface drain) to be removed by their owners as long as it is safe to do so, and
- (e) Send regular situation reports to NEOC.

#### **Traffic Branch**

- (a) Arrange for riders and vehicular patrols, as long as it is safe to do so, along M1, M2, A1, at roundabouts and within the important roads to assess safe vehicular movement,
- (b) Apply appropriate traffic diversion schemes for M1, M2, A1 and any other roads proceeding to and leaving Port-Louis area if required,
- (c) Traffic Diversion plans for alternate access and exit routes to and from Port-Louis to be put in place in case of release of schools and as well as public and private sector employees,
- (d) Keep public informed upon the latest status on traffic access to and from Port-Louis through Info Route and as well as advising public to avoid flooded areas in Port Louis and to avoid proceeding to Port-Louis,
- (e) Depending upon the prevailing situation, arrange for traffic point to enable safe crossing of M1 and main roads by pedestrians, as soon as subways/underpasses are closed,
- (f) Sensitise and advise road users/public within Port-Louis area to be cautious and remain in office/indoors as long as it is safe,
- (g) Locate any road user/person in distress and quickly organise for search/assistance/rescue through DOCR/PIOR.
- (h) Send regular situation report to NEOC.

#### **Special Support Unit (SSU)**

- (a) Mobilise and remain on standby at Line Barracks and at other convenient places and be ready for quick intervention/assistance, search and rescue operations, crowd control to ensure public safety, and evacuation where required,
- (b) Carry out speedy sandbagging at New Treasury Building & New Government Centre and other public buildings in case required,
- (c) Be ready to provide assistance to Dr A.G Jeetoo Hospital,
- (d) Arrange for armoured vehicles with driver to assist MoHQL in casualty evacuation, and
- (e) Send regular situation report to NEOC.

#### **Special Mobile Force (SMF)**

- (a) Mobilise and remain on Standby at Vacoas and Line Barracks,
- (b) Be prepared to activate alternate NEOC at SMF Vacoas at short notice,
- (c) Pre-Positioning of SMF troops with Engineer Squadron, GIPM and Divers at Line Barracks and other locations as would be directed. Composite QRTs ready for interventions,
- (d) Provide available skilled manpower, specialised equipment and technical support as and when needed for search and rescue,
- (e) Arrange for armoured vehicles with driver to assist MoHQL in casualty evacuation, and
- (f) Send regular situation report to NEOC.

#### National Coast Guard (NCG)

- (a) Mobilise with sufficient number of divers/ life-savers and remain on standby in Port-Louis (Port area and NCG Harbour Security Post) for quick interventions,
- (b) Maintain regular boats and vehicular patrols in harbour/port area and Port-Louis city, as long as it is safe to do so,
- (c) Position team of divers/life-savers at Port-Louis Waterfront underpasses North & South,
- (d) Divers and MARCOS Quick Response Teams fully equipped and with boats to remain on standby at NCG Harbour Security Post,

- (e) Arrange for dingies/inflatable crafts that can be used by other first responders on flooded areas,
- (f) Arrange for additional life-saving jackets and equipment to enhance safety of other first responders in flooding situations,
- (g) Arrange for sea route conveyance between coastal embarkation points using NCG crafts in case road traffic network is disrupted, and
- (h) Send regular situation report to NEOC.

#### **Police Helicopter Squadron (PHS)**

- (a) Mobilise and remain on Standby,
- (b) Provide maximum Helicopter service with life-savers at L-Barracks or other alternate/ improvised helipads/ for search, rescue and casualty evacuation,
- (c) Conduct aerial reconnaissance of the city of Port-Louis and suburbs, as long as it is safe and feasible to do so. Locate any persons/inhabitants in distress and to quickly organise for search/assistance/rescue through DOCR/PIOR,
- (d) Be prepared for conveyance/heli-dropping of GIPM/MARCOS personnel within city of Port-Louis and its suburbs, if required, for search and rescue,
- (e) Identify other suitable locations for helipad within Port-Louis, and
- (f) Send regular situation report to NEOC.

#### 8.4.2 Mauritius Fire and Rescue Service (MFRS)

- (a) Mobilise and preposition at strategic locations within Port-Louis for search and rescue of persons/animals.
- (b) Pumping of water in flooded areas, building, houses etc,
- (c) Assist in evacuation when and where required,
- (d) Neighbouring fire stations to be ready to assist in case required, and
- (e) Send regular situation report to NEOC.

# 8.4.3 Ministry of Health and Quality of Life, Medical Services and Hospitals (MoHQL)

- (a) All MoHQL hospitals, Area Health Centres and SAMU services to mobilise and remain on standby,
- (b) As Dr. A.G Jeetoo Hospital itself is located in flood-prone area:
  - i. MoHQL to keep watch on level of rain water rise/accumulation within hospital premises,
  - Monitoring of rain water level in below ground level facilities. To activate Hospital Emergency Preparedness, Response and Communications Plan.
     Otherwise to cause sanitisation/evacuation and close below ground facilities.
     Prohibit access until situation is normalised and safe again,
  - iii. Initiate necessary measures to protect key facilities of hospital such as pharmacy store, X-Ray, laboratories facilities, records. To execute emergency plans as applicable,
  - iv. In case of ground floor flooding, arrange for evacuation of out-patients and inpatients to safe location,
  - v. Arrange for availability of alternate medical facilities for region of Port-Louis in case the city experiences severe flooding situation,
  - vi. MoHQL to ensure that Hospital medical facilities remain available as per protocol,
- vii. Communicate to public alternate medical facilities available at nearby unaffected hospitals/area health centres,
- viii. Issue communiqué on public health and other related matters to the attention of general public,
- ix. Provide and pre-position as many ambulances as possible for casualty evacuation within the city of Port-Louis,
- x. Requisition for SMF/SSU armoured vehicles for casualty evacuation,
- (c) Activate Service Continuity Plan, and
- (d) Send regular situation report to NEOC.

#### 8.5 Other Stakeholders

#### 8.5.1 Prime Minister's Office,

#### \* National Development Unit

- (i) Keep watch of weather situation.
- (ii) Ensure that MMS bulletins (heavy rainfall/torrential rain bulletin and flood warnings) are circulated within all NDU departments.
- (iii) Mobilise and remain available, if required, at NEOC level.
- (iv) Advise and arrange for emergency remedial actions, as long as it is safe to do so.
- (v) NDU to carry out post disaster damage assessment for project under its purview and report to Ministry and NEOC with observations relating to any weaknesses of drainages network system, damage to public infrastructure and extent of immediate relief measure to be undertaken.
- (vi) Send regular situation report to NEOC.

#### 8.5.2 Ministry of Tourism and External Communications and Tourism Authority

- (a) Advise relevant stakeholders to ensure safety of tourists, tour operators, pleasure crafts and tourism enterprises,
- (b) Tourism Authority to
  - (i) Issue communiqué for the safety of tourists, tour operators, leisure craft owners tourism enterprises, restaurants,
  - (ii) Activate Service Continuity Plan,
  - (iii) Activate relevant protocols, and
- (c) To collect information and submit regular situation report to NEOC.

#### ✤ Mauritius Ports Authority (MPA)

- (a) All port operators including Cargo Handling Corporation Ltd to remain on the alert. Monitor and activate respective emergency plans.
- (b) Keep constant watch on level of flow of water in canals, drains, rivers and sea within port area. Report sea level abnormalities and obstruction to any passage of rain water flow in canals, drains, rivers to PIOR, DOCR, LEOC and NEOC.
- (c) Monitor port activities and implement appropriate measures as per prevailing situation.

- (d) Take appropriate measures to protect ports handling and warehousing facilities.
- (e) Monitor possible adverse effects of flooding on any Hazardous storage facilities and activate if necessary Emergency Plans.
- (f) Be ready to activate Port-Louis Oil Spill Response Plan.
- (g) Advise Port operators responsible of any below ground level facilities and other low facilities within port area to remain alert and to execute relevant emergency plans. Otherwise, sanitise/evacuate and close below ground and low level facilities. Prohibit access until situation is normalised and becomes safe again.
- (h) Activate Service/ Business Continuity Plan.
- (i) Be ready to extend services of Port Emergency Services if required to MFRS.
- (j) Send regular situation report to NEOC.

#### 8.5.3 Ministry of Energy and Public Utilities

#### Wastewater Management Authority (WMA)

- (a) Mobilise and remain on standby,
- (b) Issue communiqué for the attention of general public in consultation with NEOC,
- (c) Monitor effect of rain water level on sewerage system of Port-Louis,
- (d) Survey of sewerage system as long as it is safe to do so,
- (e) Activate Service Continuity Plan,
- (f) Be ready for any intervention required in case of sewerage malfunctioning reported, and
- (g) Send regular situation report to NEOC.

#### Electrical Services Division (ESD)

- (a) Mobilise and remain on standby,
- (b) Activate Service Continuity Plan,
- (c) Ensure uninterrupted power supply to key institutions and essential public services such as New Government Centre, New Treasury Building, Police, MoHQL, MRFS, Hospitals, Health Centres, Emergency Shelters, and
- (d) Send regular situation report to NEOC.

#### Central Electricity Board (CEB)

- (a) Mobilise and remain on standby,
- (b) Issue advisory communiqué on safety measures to public and subscribers through MBC and radios.
- (c) Cut off CEB power supply to ensure public safety where required in Port-Louis.
- (d) Monitor flooding adverse effects on CEB facilities and power plants (Fort George, Fort Victoria, Nicolay Power Station, St Louis and sub stations).
- (e) Activate Service Continuity Plan.
- (f) Be ready for any intervention required in case of faults reported.
- (g) Send regular situation report to NEOC.

#### Central Water Authority (CWA)

- (a) Monitor and ensure water supply.
- (b) Issue communiqué for public awareness.
- (c) Arrange for supply of water by tanker lorries, if required.
- (d) Activate Service Continuity Plan.
- (e) Monitor any adverse effects on CWA infrastructures.
- (f) Send regular situation report to NEOC.

## 8.5.4 Ministry of Finance and Economic Development

#### ✤ Bank of Mauritius

- (a) Keep watch of heavy flooding on facilities.
- (b) Advise clients/public present in bank to refrain moving out and remain inside until it becomes safe to move out.
- (c) Advise personnel responsible of below ground and low level facilities to remain alert and to execute emergency plan as applicable. Otherwise, sanitise/evacuate and close below ground and low level facilities. Prohibit access until the situation is normalised and becomes safe again.
- (d) Initiate measures to protect facilities, resources and documents/records.
- (e) Activate respective Service Continuity Plan.
- (f) Send regular situation report to NEOC.

#### 8.5.5 Ministry of Technology, Communication and Innovation

#### ✤ Mauritius Telecom

- (a) Keep watch of flooding on facilities,
- (b) Provide any technical support to alert the public of the prevailing situation
- (c) Ensure that Telmet and Auditex Services are updated to inform the public.
- (d) Advise operators/clients/public present in building to refrain moving out and remain inside until it becomes safe to move out,
- (e) Advise personnel responsible of below ground and low level facilities to remain alert and to execute emergency plan as applicable. Otherwise, sanitise/evacuate and close below ground and low level facilities. Prohibit access until the situation is normalised and becomes safe again,
- (f) Initiate measures to protect facilities, resources and documents/records,
- (g) Activate respective Business Continuity Plan, and
- (h) Send regular situation report to NEOC.

#### 8.5.6 Ministry of Public Infrastructure and Land Transport

#### ✤ Landslide Management Unit (LMU)/Civil Engineering Section

- (a) Mobilise and remain on standby,
- (b) Monitor landslide sites at Vallée Pitot, Chitrakoot, and other known landslides prone sites through the designated inhabitants and engineers,
- (c) Activate Service Continuity Plan,
- (d) Activate the landslide emergency plan, if required, and
- (e) Send regular situation report to NEOC.

#### \* Road Development Authority

- (a) Mobilise and ensure road worthiness of classified roads and motorways,
- (b) Survey drains, canals, and river blockages along main roads and motorways as long as it is safe to do so,
- (c) Activate Service Continuity Plan,
- (d) Advise and arrange for emergency remedial action, and
- (e) Send regular situation report to NEOC.

#### \* National Transport Authority (NTA)

- (a) As far as practicable, ensure availability of public transport on all bus routes in liaison with NEOC, LEOC and Police,
- (b) Arrange for additional transport facilities where needed,
- (c) Activate Service Continuity Plan
- (d) Identify alternate passenger collection points for the Northern and Southern bus traffic centres in line with traffic diversion plan of the Police, and
- (e) Send regular situation report to NEOC.

# 8.5.7 Ministry of Education and Human Resources, Tertiary Education and Scientific Research

- (a) Activate scheme as per page 78 para 2.6.9 of National Disasters Scheme (NDS),
- (b) In case classes in pre-primary, primary, secondary and technical vocational institutions located in Port-Louis have to close, the following would be applicable:
  - i. school population to move to safe place if exposed to rising water situation,
  - ii. the responsible officer of the Educational/Training Institution to liaise with the NTA for the provision of bus facilities in all routes as soon as possible,
- iii. the Education/Training Institutions will not be closed when classes have been dismissed until all the school population have left the school premises,
- the Officer-in-Charge of Education/Training Institution to inform respective parents/responsible parties in the event the school population is not in a position to leave school premises,
- v. cater for basic needs of students if situation warrants,
- vi. Head of Institutions/Managers/Teachers will remain in schools until all pupils/students have left the premises and properly accounted for
- (c) For Tertiary Educational Institutions located in Port-Louis which have to close, the following would be applicable:
  - i. Tertiary Educational Institution population to move to safe place if exposed to rising water situation,
  - ii. the responsible officer of the Educational/Training Institution to liaise with the NTA for the provision of bus facilities in all routes as soon as possible,

- iii. the Tertiary Educational Institutions will not be closed when classes have been dismissed until all the student population have left the premises,
- iv. Head of Institutions/staff will remain on premises until all the student population has left and properly accounted for.
- (d) Activate Service Continuity Plan, and
- (e) Send regular situation report to NEOC.

#### 8.5.8 Ministry of Foreign Affairs, Regional Integration & International Trade

- (a) Keep staff of Diplomatic Missions and International Organisations located in Port-Louis informed of local situation after consultation with NEOC.
- (b) Activate Service Continuity Plan.
- (c) Inform NEOC on any special requirement/assistance that need to be arranged.
- (d) Send regular situation report to NEOC.

#### 8.5.9 Ministry of Agro Industry and Food Security

#### \* Mauritius Cane Industry Authority, MCIA (Bulk Sugar Terminal)

- (a) Keep watch on effect of heavy rainfall/flooding upon infrastructure and products,
- (b) Initiate measures to protect site,
- (c) Activate internal contingency/ emergency plan as applicable, and
- (d) Send regular situation report to NEOC.

#### 8.5.10 Ministry of Social Security, National Solidarity and Reform Institutions

- (a) Ensure that all available Emergency Shelters within Port-Louis and in case needed, other nearby regions are ready to receive evacuees and to provide them with water and biscuits on the first day and food vouchers at approved rate on the following days **for maximum of three days**, in the event the flooding persists.
- (b) Monitor evacuation of the disabled/elderly by managers of Private Homes, elderly Day Care Centres and Charitable Institutions of Port-Louis in collaboration with Police and Fire Services Department.
- (c) Activate Service Continuity Plan.
- (d) Do not use emergency shelters located in flood prone areas.
- (e) Send regular situation report to NEOC.

#### 8.5.11 Ministry of Gender Equality, Child Development and Family Welfare

- (a) Assist MoSS NS & RI in ensuring that available Emergency Shelters within Port-Louis and in case needed, other nearby regions are ready to receive evacuees and to provide them with water and biscuits on the first day and food vouchers at approved rate on the following days for maximum of three days, in the event the flooding persists.
- (b) Assist in monitoring evacuation of the persons with disabilities/elderly by managers of Private Homes, elderly Day Care Centres and Charitable Institutions of Port-Louis in collaboration with Police and Fire Services Department.
- (c) Activate Service Continuity Plan.
- (d) Assist MoSS NS & RI in avoid using emergency shelters which are located in flood prone areas.
- (e) Send regular situation report to NEOC.

# 8.5.12 Ministry of Environment, Sustainable Development, Disaster and Beach Management

- (a) Monitoring of storage of hazardous materials in Port-Louis in consultation with the Ministry of Local Government, MFRS and MoHQL (Dangerous Chemical Control Board),
- (b) Coordinate response measures for significant hazardous spill due to flooding in collaboration with other stakeholders,
- (c) Activate Service Continuity Plan,
- (d) Monitor level of flow of water in cut-off drains along Signal Mountain which falls under the responsibility of the Living Environment Unit (LEU) as long as it is safe to do so, and
- (e) Send regular situation report to PIOR and NEOC.

#### 8.5.13 Ministry of Civil Service & Administrative Reforms

- (a) During normal working hours, public servants working in Port-Louis are to remain in office as long as it is safe,
- (b) In case public servants are to be released earlier than their normal working hours, then the following need to be taken into consideration:

(i) Prevailing weather conditions,

(ii) State of roads towards and proceeding away from the Port-Louis centre,

(iii) Availability of Public Transport,

(iv) Release of public servants to be carried out in a staggered manner to minimise traffic congestion and not to coincide with that of other sectors,

- (c) Activate Service Continuity Plan, and
- (d) Send regular situation report to NEOC.

#### 8.5.14 Mauritius Museums Council

- (a) Keep watch of water level and any infiltration of water inside their building,
- (b) Arrange for quick sand bagging,
- (c) Activate contingency/emergency plan, and
- (d) Send regular situation report to NEOC.

#### 8.5.15 Appravasi Ghat Trust Fund

- (a) Keep watch on effect of heavy rainfall/flooding upon historical site,
- (b) Initiate measures to protect site,
- (c) Activate internal contingency/ emergency plan as applicable, and
- (d) Send regular situation report to NEOC.

#### 8.5.16 Joint Economic Council (JEC) /Mauritius Employers Federation (MEF)

- (a) In case of employee release, the JEC and MEF to organise with Police and Traffic Branch for the orderly commuting of private sector employees from their work place in Port-Louis to their residence. Same to be performed in a staggered manner so as to minimise traffic congestion and in liaison with the Ministry of the Civil Service and Administrative Reforms,
- (b) Issue communiqué for the benefit of their members and employees,
- (c) Advise personnel responsible of private sector organisation having below ground and low level facilities to remain alert and to execute available emergency plans. Otherwise, sanitise/evacuate and close below ground and low level facilities. Prohibit access until situation is normalised and becomes safe again,

- (d) Advise private organisations to take necessary measures to protect their staff, employees, facilities, resources and documents/records as far as practicable,
- (e) Advise private organisations to apply their respective Business Continuity Plans as applicable, and
- (f) Send regular situation report to NEOC.

#### 8.5.17 Le Caudan Waterfront/Port-Louis Waterfront

- (a) Keep constant watch on flow of water in canals, drains, rivers and sea within port area. Report sea level abnormalities and obstruction to any passage of rain water flow in canals, drains, rivers to PIOR, DOCR and NEOC,
- (b) Advise owners/operators of shopping malls, food court outlets, cafes & pubs, restaurants, movie theatres, casino, Le Labourdonnais Hotel, Le Suffren Hotel, IBL House, and below ground/low level facilities within the Le Caudan Waterfront complex to remain on the alert and execute relevant emergency plans when required,
- (c) Sensitise/Advise operators, public and tourists within Le Caudan Waterfront to be cautious, refrain moving around and remain in secure places until it becomes safe to move out,
- (d) Activate Business Continuity Plan,
- (e) Cause sanitisation/evacuation and close any below ground/low level facilities.Prohibit access until situation is normalised and becomes safe again,
- (f) Locate any person or tourist in distress and organise for quick assistance/rescue through DOCR/PIOR, and
- (g) Send regular situation report to NEOC.

#### 8.5.18 Mauritius Turf Club (MTC)

- (a) Keep Police and NDRRMC/NEOC informed on any measures taken for any scheduled MTC activities,
- (b) Keep PIOR and NDRRMC informed on any cancellation of MTC activities,
- (c) Ensure that emergency flood plan is activated during any MTC activities whenever required,
- (d) Monitor situation at MTC,
- (e) Send regular situation report to NEOC

#### **8.5.19** State Property Development Corporation (SPDC)

- (a) Closely monitor parking, Granary House, North and South underpasses, esplanade, shops, food outlets and below ground or low level facilities under charge of SPDC,
- (b) Activate SPDC flood evacuation procedures,
- (c) Locate any person in distress and organise for quick search/assistance/rescue through DOCR/PIOR
- (d) Ensure that the underpasses are evacuated and properly closed well before the water level reaches the critical level in liaison with Police and the Harbour Security NCG Post,
- (e) Keep constant watch of level of flow of water in canals, drains cutting across the esplanade, rivers and sea level within port area. Report sea level abnormalities and obstruction to any passage of rain water flow in canals and drains to PIOR, DOCR and NEOC,
- (f) Prohibit access to underpasses, until situation normalises and is safe,
- (g) Seek police assistance to prevent pedestrians making use of underpasses,
- (h) Advise operators, public and tourists within Port-Louis Harbour/ Waterfront/ Esplanade to be cautious, avoid moving around and remain in secure place until it becomes safe to move out,
- (i) Activate Business Continuity Plan, and
- (j) Send regular situation report to NEOC.

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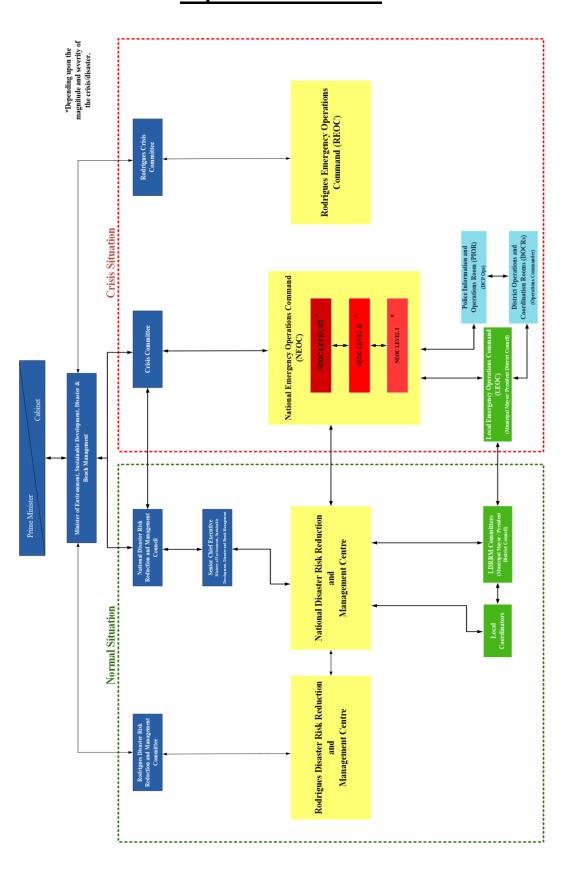
> National Disaster Risk Reduction and Management Centre (NDRRMC) Line Barracks, Port-Louis

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Souillac

Saint Martin

# Disaster Risk Management Structure for the <u>Republic of Mauritius</u>



#### LIST OF MEMBERS OF THE NATIONAL DISASTER RISK REDUCTION & MANAGEMENT COUNCIL

- 1. The Minister of Environment, Sustainable Development, and Disaster and Beach Management, who shall be the Chairperson;
- 2. The Secretary to Cabinet and Head of the Civil Service;
- 3. The Financial Secretary;
- 4. The Secretary for Home Affairs, Prime Minister's Office;
- 5. The Supervising Officer, Prime Minister's Office responsible for Rodrigues Division;
- 6. The Supervising Officer, Prime Minister's Office responsible for National Development Unit;
- 7. The Commissioner of Police;
- 8. The Permanent Secretary, Ministry of Tourism and External Communication;
- 9. The Senior Chief Executive, Ministry of Public Infrastructure and Land Transport;
- 10. The Permanent Secretary, Ministry of Public Infrastructure and Land Transport (Public Infrastructure Division);
- 11. The Supervising Officer, Ministry of Education and Human Resources, Tertiary Education and Scientific Research;
- 12. The Senior Chief Executive, Ministry of Health and Quality of Life;
- 13. The Senior Chief Executive, Ministry of Energy and Public Utilities;
- 14. The Permanent Secretary, Ministry of Local Government;
- 15. The Permanent Secretary, Ministry of Gender Equality, Child Development and Family Welfare;
- 16. The Permanent Secretary, Ministry of Social Security, National Solidarity and Reform Institutions;
- 17. The Permanent Secretary, Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Island;
- 18. The Permanent Secretary, Ministry of Environment, Sustainable Development, Disaster and Beach Management;
- 19. The Island Chief Executive, Rodrigues;
- 20. The General Manager, Outer Islands Development Corporation;

- 21. The Chief Fire Officer, Mauritius Fire and Rescue Service;
- 22. The Director, Mauritius Meteorological Services;
- 23. A representative of the Mauritius Employers' Federation;
- 24. A representative of the Joint Economic Council;
- 25. A representative of the Mauritius Red Cross Society;
- 26. 2 representatives from other non-governmental organisations, to be appointed by the Minister;
- 27. Director General NDRRMC;
- 28. The Council may, where it considers necessary, co-opt any other person with relevant expertise not already available to it so as to assist it in relation to any matter before it; and
- 29. A Deputy Permanent Secretary (DPS) from the Ministry of Environment, Sustainable Development, and Disaster and Beach Management to act as Secretary to the Council;

## LIST OF OFFICIALS TO BE INFORMED IN CASES OF DISASTERS

- 1. The President
- 2. The Vice President
- 3. The Prime Minister
- 4. The Minister of Environment, Sustainable Development, and Disaster and Beach Management
- 5. All other Ministers
- 6. The Secretary to Cabinet & Head of the Civil Service
- 7. The Senior Chief Executive, Prime Minister's Office, Home Affairs
- 8. Commissioner of Police
- 9. Commanding Officer, Special Mobile Force
- 10. Chief Commissioner and the Island Chief Executive, Rodrigues Regional Assembly
- 11. NDRRMC and RDRRMC
- 12. Mauritius Meteorological Services
- 13. Government Fire and Rescue Services
- 14. The Commissioner, Ministry of Social Security, National Solidarity and Reform Institutions.
- 15. Director, Water Resources Unit
- 16. Central Water Authority
- 17. Central Electricity Board
- 18. Local Authorities
- 19. University of Mauritius
- 20. Divisional Police Headquarters, which will in turn inform the Local Cyclone Commissioners and Chief Executives of Local Authorities.
- 21. The Senior Chief Executive/ Permanent Secretary of the following:
  - a) Ministry of Education and Human Resources, Tertiary Education and Scientific Research
  - b) Ministry of Environment, Sustainable Development, and Disaster and Beach Management
  - c) Ministry of Public Infrastructure and Land Transport (Public Infrastructure Division)
  - d) Ministry of Public Infrastructure and Land Transport (Land Transport Division)
  - e) Ministry of Social Security, National Solidarity and Reform Institutions

- f) Ministry of Gender Equality, Child Development and Family Welfare
- g) Ministry of Local Government
- 22. Director/ Deputy Director and Principal/ Senior Engineer (Civil Engineering at the Ministry of Public Infrastructure, National Development Unit, Land Transport and Shipping (Public Infrastructure Division), Phoenix or at their residence (outside normal office hours provided telephones are working), the General Manager/Deputy General Manager of the Road Development Authority.
- 23. Director of Civil Aviation
- 24. Road Transport Commissioner
- 25. Port Master, Mauritius Ports Authority
- 26. Director, Mauritius Oceanography Institute
- 27. Chief Executive Officer, MCML
- 28. AHRIM

# <u>List of members of National Emergency Operation Command</u> (NEOC)

S.No	Representatives from Ministry/ Department /Organisation	
1	Prime Minister's Office	
(i)	Mauritius Police Force	
(ii)	Mauritius Meteorological Services	
(iii)	Government Information Service	
2	Ministry of Tourism and External Communications	
(i)	Tourism Authority	
(ii)	Mauritius Ports Authority	
(iii)	Department of Civil Aviation	
3	Ministry of Housing and Lands	
4	Ministry of Energy and Public Utilities	
(i)	Energy Services Division	
(ii)	Radiation Protection Authority	
(iii)	Central Electricity Board	
(iv)	Central Water Authority	
(v)	Wastewater Management Authority	
(vi)	Water Resources Unit	
5	Ministry of Finance and Economic Development	
6	Ministry of Technology, Communication and Innovation	
(i)	Mauritius Broadcasting Authority	
7	Ministry of Youth and Sports	
8	Ministry of Public Infrastructure and Land Transport	
(i)	National Transport Authority	
(ii)	Road Development Authority	
(iii)	Landslide Management Unit	
9	Ministry of Education and Human Resources, Tertiary Education and Scientific Research	
10	Ministry of Health and Quality of Life	
11	Ministry of Local Government and Outer Islands	
(i)	Mauritius Fire and Rescue Service	
12	Ministry of Social Integration and Economic Empowerment	
13	Ministry of Foreign Affairs, Regional Integration and International Trade	
14	Ministry of Gender Equality, Child Development and Family Welfare	
15	Ministry of Social Security, National Solidarity, National Reform Institution	
16	Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Islands	
(i)	Mauritius Oceanography Institute	
(ii)	Outer Islands Development Corporation	
17	Ministry of Environment, Sustainable Development, and Disaster and Beach Management	
18	Ministry of Civil Service and Administrative Reforms	
19	Joint Economic Council	
20	Mauritius Employers Federation	
21	Mauritius Red Cross Society	

#### LIST OF MEMBERS <u>FOR THE</u> LOCAL DISASTER RISK REDUCTION & MANAGEMENT COMMITTEES

- 1. The Lord Mayor of a Municipal City Council, Mayor of a Municipal Town Council or Chairperson of a District Council, as the case may be, who shall be the chairperson;
- 2. A representative of the Ministry responsible for the subject of public infrastructure;
- 3. A representative of the Ministry responsible for the subject of social security;
- 4. A representative of the Ministry responsible for the subject of environment and sustainable development;
- 5. A representative of the Ministry responsible for the subject of education;
- 6. A representative of the Ministry responsible for the subject of local government;
- 7. A representative of the Mauritius Meteorological Services;
- 8. A representative of the Mauritius Police Force;
- 9. A representative of the Mauritius Fire and Rescue Service;
- The Chief Executive of the Municipal City Council, Municipal Town Council or District Council, as the case may be;
- 11. The Assistant Chief Executive of the Village Council, where appropriate;
- 12. A representative of the Central Electricity Board;
- 13. A representative of the Central Water Authority;
- 14. A representative of the Road Development Authority;
- 15. A representative of the Wastewater Management Authority;
- 16. A representative of the Water Resources Unit of the Ministry responsible for the subject of public utilities;
- 17. A representative of the Mauritius Red Cross Society.

A local committee may, where it considers necessary, co-opt any other person, including an officer from a relevant Ministry, to assist it in relation to any matter before it.

The Committee shall appoint a Local Disaster Management Coordinator on a full time basis who shall be the focal point of the NEOC for liaison with their respective Committees.

# List of Emergency Shelters

#### Port-Louis - Area No. 1

SN	Emergency Shelter	Tel No	Capacity
1	Camp Yoloff Community Centre, Route Militaire	241 9678	75
2	Cité Gabriel Martial Community Centre, Route Militaire	216 5108	100
3	Vallée des Prêtres Co-operative Credit Centre Complex, Vallee des Prêtres	217 5335	100
4	Roche Bois Social Welfare Centre, Rue Desperoux Roche Bois	240 9607	150
5	Ste Croix Social Welfare Centre, Ducray Road Ste Croix	2403329	100
6	Municipal Centre, Royal Road, Lower Vallée des Prêtres	Temporary Centre	
7	Municipal Boxing Gymnasium, Cotillon Street, Tranquebar		

# Port-Louis – Area No. 1(a)

SN	Emergency Shelter	Tel No	Capacity
1	Camp Chapelon Community Centre, Camp Chapelon, Pailles	2087596	20
2	Cité Vallijee Community Centre	2111664	30
3	Grand River North West Community Centre	2101682	40
4	Pailles Village Hall	2866591	15

## Beau Bassin – Area 2

SN	Emergency Shelter	Tel No	Capacity
1	Mont Roches Social Welfare Centre, Royal Rd Mont Roches	4548546	100
2	Barkly Community Centre Barkly, Boule de Neige St	4646405	100
3	Colonel Maingard Community Centre, C. Maingard St Beau Bassin	4676609	80

#### Rose Hill – Area 3

SN	Emergency Shelter	Tel No	Capacity
1	Beau Séjour Community Centre, Ave Tourterelle Res. Beau Sejour	4646987	80
2	S. Murday SSS (Vocational), Marcel Cabon St Stanley R. Hill	4655381	1650

# Quatre Bornes – Area 4

SN	Emergency Shelter	Tel No	Capacity
1	Shrimati Indira Gandhi Social Hall, Palma	4260226	50
2	La Source Community Centre	4253193	75
3	Nehru Community Centre, Bassin St	4244325	100

#### Vacoas – Area No. 5

SN	Emergency Shelter	Tel No	Capacity
1	Henrietta Community Centre, Nr Henrietta Govt. School	52941557	15 - 20
2	La Marie Community Centre, Nr Shiv Mandir, Royal Road, La	6841053/5	25
	Marie	2901348 6844671/5	
3	Hollywood Community Centre	2909730	15
4	Reunion Community Centre, Nr Winner's Supermarket	6863041	20
5	Cité La Caverne Community Centre, Jugarnath St, Cite La	6973605/5	20
5	Caverne	2907008	20
6	Solferino Municipal Complex, Solferino No. 1, Nr Football Playground	57387624	25

# Curepipe – Area No. 5A

SN	Emergency Shelter	Tel No	Capacity
	Prof. B. Bissoondoyal Community Centre, Lapeyrouse-Sterling		
1	St Eau Coulée	52922859	40 - 50
2	Robinson Community Centre, Robinson Rd, Curepipe Rd	59501070	40 - 50
3	Midlands Village Hall	57753775	40 - 50
4	16eme Mile Community Centre, 16eme Mile	6645166	60
5	Cité L'Oiseau Community Centre, Cité l'Oiseau, Floreal	52907099	40 - 50
6	Dubreuil Community Centre		50 - 60
7	La Brasserie Community Centre	6750640	40 - 50
8	Bananes Village Hall		50 - 60

# Phoenix – Area No. 5

SN	Emergency Shelter	Tel No	Capacity
1	Camp Fouquereaux SWC	6862242	75 - 100
2	Trianon Community Centre	6971692	60 - 75
3	Cinq Arpents Community Centre	2909732	100
4	Belle Terre Municipal Social Hall		100

# **Grand Port – Area No. 6**

SN	Emergency Shelter	Tel No	Capacity
1	Grand Sable Social Welfare Centre, Royal Rd Grand Sable	4176548	50
2	Old Grand Port Social Welfare Centre, Royal Rd, Old Grand Port	6345181	30
3	Bois des Amourettes, Village Hall, Royal Rd, B. des Amourettes		100
4	Anse Jonchée Sub- Hall, Royal No, Anse Jonchée		40
5	Mahebourg Social Welfare Centre, Hollandais St, Mahebourg	6319530	40
6	La Chaux Social Welfare Centre, Cité La Chaux, Mahebourg	52901208	150
7	Beau Vallon Community Centre, Royal Rd, Beau Vallon		25
8	St Hilaire Community Centre, Rue Cent Gaulettes	6335325	40
9	Petit Bel Air SW Centre, Royal Rd, Petit Bel Air		50
10	Grand Bel Air Multi Purpose Complex, School Lane, Grand Bel Air		80
11	Petit Sable Sub Hall, Royal Rd, Petit Sable		75
12	Bambous Virieux Multi Purpose Complex, Royal Rd, Bambous Virieux		75
13	Morc. Ferney Community Centre, Cité Longtill, Riv. des Creoles		80

# Grand Port - Plaine Magnien, Rose Belle – Area No. 6

SN	Emergency Shelter	Tel No	Capacity
1	Trois Boutiques Community Centre, Royal Rd Trois Boutiques	6373690	25
	Carreau Acacia Village Hall, Trois Boutiques, Royal Rd,		
2	Carreau Accacias	57866038	50
3	Camp Carol Sub- Hall, T. Boutiques	57574915	60
4	Plaine Magnien Social Welfare Centre	6377416	100
5	Mare D'Albert Social Welfare Centre, Royal Rd, M. D'Albert	6274034	80
6	La Rosa Social Welfare Centre, Royal Rd, La Rosa	6274911	100
7	Mare Tabac Social Welfare Centre, Royal Rd, Mare Tabac	6274941	100
		6770123/6	
8	Cluny Community Centre, Res. Beemanique, Cluny	770011	40
9	Rose Belle Social Welfare Centre, Royal Rd, Rose Belle	6274910	80
10	Mare Chicose Village Hall, Royal Rd, Mare Chicose	57543596	80
11	Nouvelle France Community Centre, Nouvelle France	6779007	80
12	Union Park Village Hall, Royal Rd, Union Park	57549049	20
13	New Grove Village Hall, Royal Rd, New Grove	6274533	20
14	Gros Billot Sub Hall, Samputh Lane, Gros Billot	57976107	20
15	Carreau Esnouf Community Centre, Pl. Magnien	6375991	60

SN	Emergency Shelter	Tel No	Capacity
1	Batimarais Community Centre, Flamboyant St, Batimarais, Riv./Anguilles	6262892	75
2	St Aubin Community Centre, Cité, St Aubin, R/Ang	6261490	75
3	Riv des Anguilles Community Centre, SSR Rd, R/Ang	6261467	75
4	Tyack Sub Hall Village Hall, Rd, Tyack, R/Anguilles		50
5	Camp Diable Community Centre, Mamad St Nr Dispensary, C. diable	6262046	60
6	Rivière du Poste Community Centre, Royal Rd, R/du Poste	6175240	80
7	Grand Bois Social Welfare Centre, Royal Rd, Grand Bois	6175409	100
8	La Flora Village Hall, Royal Rd (Savanne Rd), La Flora		50
9	Bois Chéri Village Hall, Royal Rd, Bois Chéri		80
10	L'Escalier Social Welfare Centre, Royal Rd, L'Escalier	6367538	100
11	Britannia Community Centre, Camp Berthaud, Poste Office Rd, Britannia	6262946	100
12	Nouvelle France Village Hall, Royal Rd, Nlle France		40
13	Benares Village Hall, Royal Rd Benares		30
14	Chemin Grenier Social Welfare Centre, SWC Rd, Ch. Grenier	6226535	60
15	Chamouny Community Centre, School Lane, Chamouny	6227197	65
16	Bel Ombre Village Hall, Cemetary Rd, Chamouny		70
17	Riviere des Galets Community Centre, Royal Rd, Riv/Galets	6227057	60
18	Surinam Social Welfare Centre, SWC Rd, Surinam	6255578	50
19	Gris Gris Community Centre, Cité Gris Gris, Souillac	6256808	100
20	Riambel Community Centre, EDC, Riambel, Surinam	6256292	60
21	Baie du Cap Community Centre, Royal Rd, Baie du Cap	6228673	60

# Moka – Area 7

SN	Emergency Shelter	Tel No	Capacity
1	St Pierre Social Welfare Centre, Royal Road St. Pierre	4335658	50
2	Mount Ory Social Community Centre, Royal Road Mt. Ory	4332139	50
3	Quartier Militaire Social Welfare Centre, Royal Road Quartier Militaire	4357878	50
4	Providence Community Centre, Royal Road Providence	4355481	50
5	Montagne Blanche Social Welfare Centre, Royal Road Montagne Blanche	4375178	80
6	Melrose Village Hall, C. De Masque Road, Melrose		150
7	Deep River Social Welfare Centre, Deep River SWC	4193127	50
8	GRSE Community Centre, Post Office Road GRSE		75
9	Quatre Sœurs Village Hall		100
10	Deux Freres Sub Hall, Royal Road Deux Freres		50
11	Quatre Soeurs Community Centre, Royal Road Quatre Soeurs	4175400	100
12	Bel Air Social Welfare Centre	4192443	100

SN	Emergency Shelter	Tel No	Capacity
1	Laventure Social Welfare Centre, Royal Rd Laventure	4185533	100
2	Poste de Flacq Village Hall, Govt School Rd P. de Flacq	4132951	20
3	Argy Community Centre, Flamboyant St Argy	4130414	60
4	Mare La Chaux Social Welfare Centre, Royal Rd Mare la Chaux	4152398	100
5	Bramsthan Social Welfare Centre, Royal Rd Bramsthan	4132731	60
6	Camp Ithier Village Hall, Branch Rd Camp Ithier	5.8E+07	30
7	Trou d'Eau Douce Community Centre, Royal Rd Trou d'Eau Douce	4802231	75
8	Belle Mare Community Centre, Royal Rd Belle Mare	4151044	75
9	St Julien d'Hotman Social Welfare Centre, Royal Rd St Julien D'Hotman	4165779	50
10	Camp de Masque Social Welfare Centre, Royal Rd C. de Masque Pavé	4168410	100
11	Brisee Verdiere Social Welfare Centre, Royal Rd Brisée Verdière	4187764	75
12	Lallmatie Social Welfare Centre, Royal Rd Lallmatie	4183404	50
13	Grande Retraite Community Centre		
14	Bonne Mère Community Centre	Temporary Centre	
15	Queen Victoria Community Center		

#### Flacq – Area No. 7A

SN	Emergency Shelter	Tel No	Capacity
1	Goodlands Social Welfare Centre, Royal Rd, Goodlands	2859557	50
2	Fond du Sac Village Hall, Royal Rd, Fond du Sac	2669962	20
3	Plaines des Papayes Social Welfare Centre, Royal Rd, Plaines des Papayes	2668768	15
4	Vale Village Hall, Royal Rd Lower Vale		15
5	Poudre D'Or Community Centre, Bois D'Oiseaux Rd, P. D'Or Village	2820571	40
6	Triangle Community Centre, Triangle G. Lands	2838631	15
7	Roche Terre Community Centre Community Centre, Rd, Roche Terre	2888626	40
8	Grand Gaube Community Centre, Royal Rd G. Gaube	2882438	60
9	Petit Raffray Social Welfare Centre, Royal Rd Pt. Raffray	2838010	75
10	Sottise Community Centre, Reservoir Rd, Sottise	2635092	25
11	Grand Bay Social Welfare Centre, Royal Rd Grand Bay	2631279	75
12	Cap Malheureux Village Hall, Mosque Rd Cap Malheureux		50

#### Goodlands, Grand Gaube, Grand Baie and Morcellement St. Andre – Area No. 8-8A

## $Triolet \ and \ Pamplemousses - Area \ No. \ 8-8A$

SN	<b>Emergency Shelter</b>	Tel No	Capacity
1	Triolet Social Welfare Centre, Royal Rd 9th Mile Triolet	2616722	
2	Pte aux Piments Social Welfare Centre, Royal Rd Petite Pte aux Piments	2615206	100
3	Trou aux Biches Community Centre, Pte Pere Laval Trou aux Biches	2655685	75
4	Pamplemousses Social Welfare Centre, Royal Rd Pamplemousses	2433520	75
5	Khoyratty Community Centre, Royal Rd Khoyratty	2482551	50
6	Petite Julie Social Welfare Centre, School Rd, Petite Julie	4184707	45

## Terre Rouge and Long Mountain – Area No. 8 – 8A

SN	<b>Emergency Shelter</b>	Tel No	Capacity
1	Le Hochet Social Welfare Centre, Dr Manilall Rd Terre Rouge	2488078	70
2	Tombeau Bay Community Centre, Royal Rd Tombeau Bay	2471332	75
3	D'Epinay Village Hall, D'Epinay Rd D;Epinay		50
4	Congomah Village Hall Royal Rd Congomah		100
5	Long Mountain Social Welfare, CentreRoyal Rd, Long Mountain	2452526	50
6	Bois Pignolet Community Centre, Royal Rd Bois Pignolet	2480012	75
7	Bois Marchand Community Centre, Bois Marchand	2488978	50

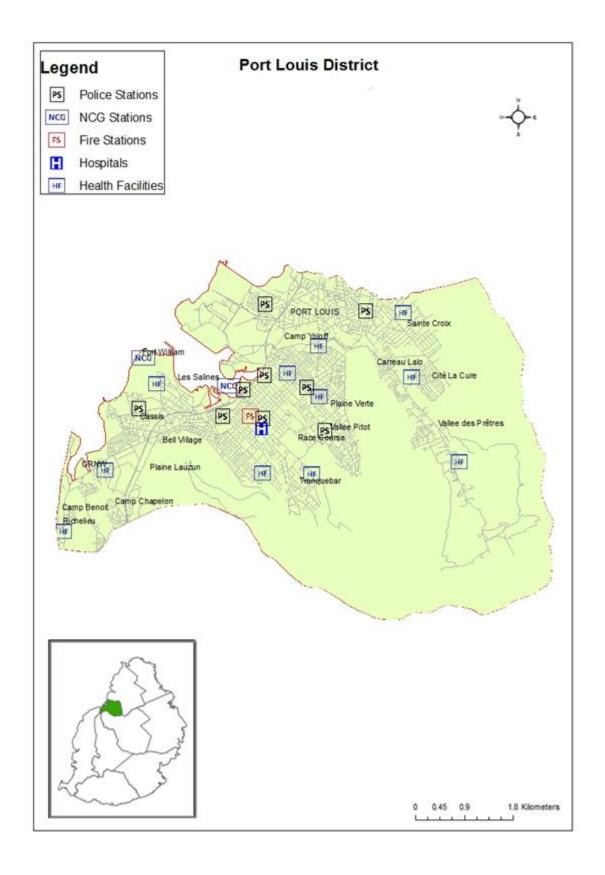
#### Riviere du Rempart and Piton – Area No. 8 – 8A

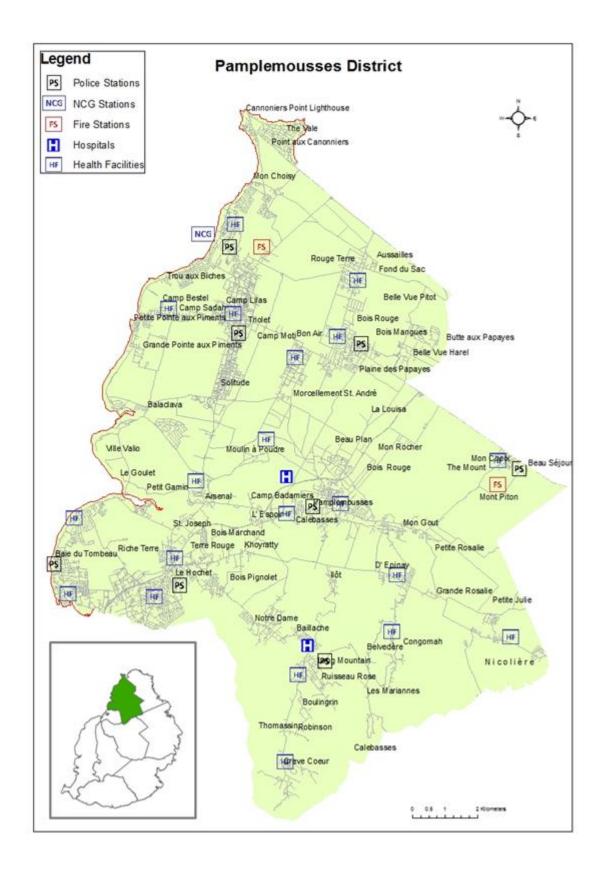
SN	Emergency Shelter	Tel No	Capacity
1	Plaine des Roches Community Centre, Dispensary Rd Pl. des Roches	4128505	110
2	Riviere du Rempart Social Welfare Centre, Maurel Rd Riv. du Rempart	4127252	100
3	Roches Noires Community Centre, Branch Rd Roches Noires	4115363	125
4	Barlow Community Centre, Royal Rd Barlow	4128598	80
5	Amaury Social Welfare Centre, Royal Rd Amaury	4127813	150
6	Pointe des Lascars Community Centre, Royal Rd Pte des Lascars	4128796	100
7	Hermitage Community Centre, Royal Rd Panchvati	4125750	100
8	L'Amitie Community Centre, Royal Rd Gokhoola	2648260	50
9	Mapou Community, CentreVis-a-vis rond-point Mapou	2666480	50

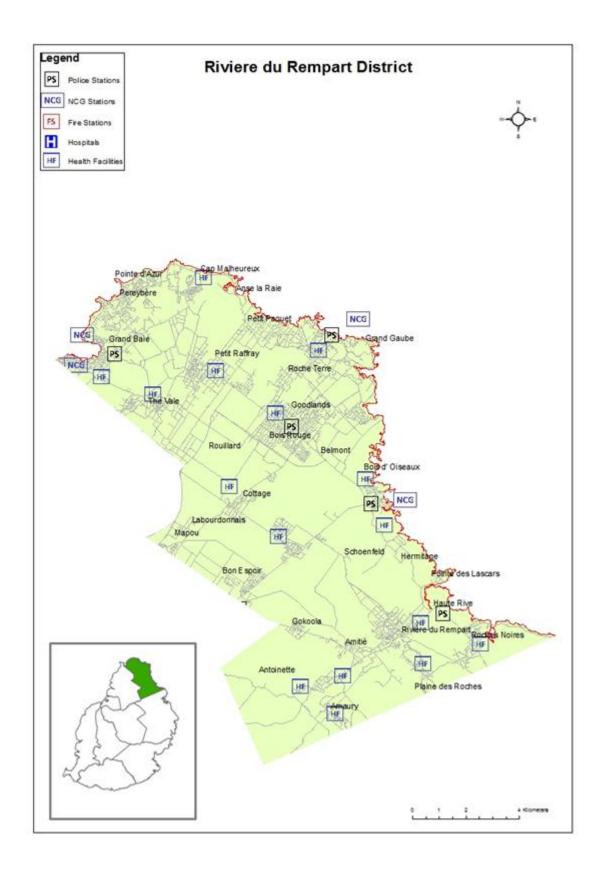
#### Black River – Area No. 9

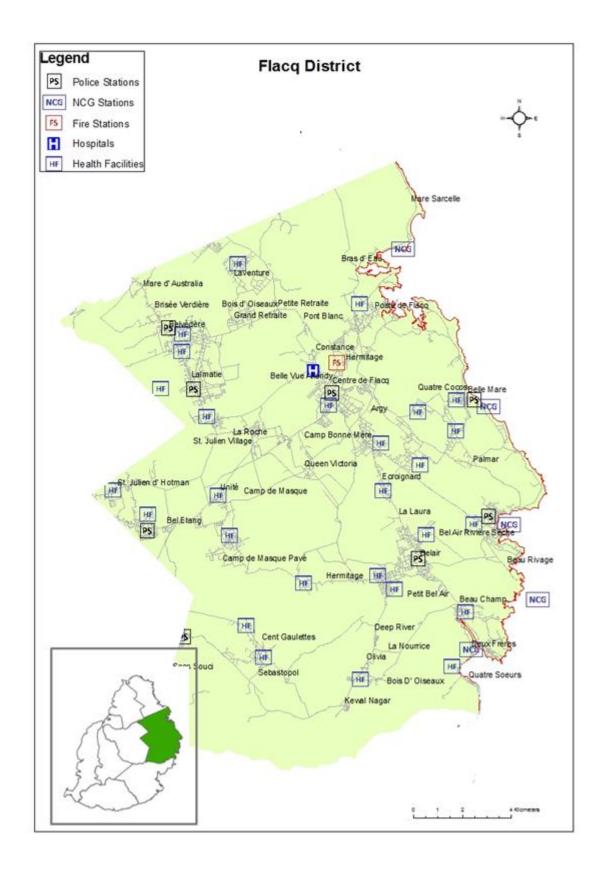
SN	Emergency Shelter	Tel No	Capacity
1	Pte aux Sables Community Centre, Coastal Rd Nr Post Office Pte aux Sables	2346016	30
2	Richelieu Community Centre, L. Churchill St Cite Richelieu Pte Riviere	2336684	60
3	Pte Rivière Social Welfare Centre, Royal Rd Vis-à-vis Police Station Pte Riviere	2331826	50
4	Albion Community Centre, Royal Rd Camp Creole Nr Police Station	2384347	50
5	Gros Cailloux Community Centre, Royal Rd Gros Cailloux	2385650	50
6	Canot Community Centre, Royal Rd Canot	2384936	50
7	Bambous Social Welfare Centre, Royal Rd Bambous	4520237	75
8	Cascavelle Village Hall, Camp Bombaye		30
9	Flic-en-Flac Community Centre, Mooneeram Lane	4538508	50
10	Beau Songes Community Centre, Beangali Rd		100
11	Tamarin Village Hall, Temple Rd Tamarin		100
12	Petite Rivière Noire Village Hall, Royal Rd, Petite Riviere Noire	4515977	60
13	Grande Rivière Noire Village Hall, Royal Rd , Grande Riviere Noire		40
14	Case Noyale Social Welfare Centre, Royal Rd, Case Noyale	4515063	50
15	Le Morne Community Centre, Royal Rd, Le Morne	4515423	60
16	Chamarel Village Hall		40
17	La Gaulette Community Centre		80

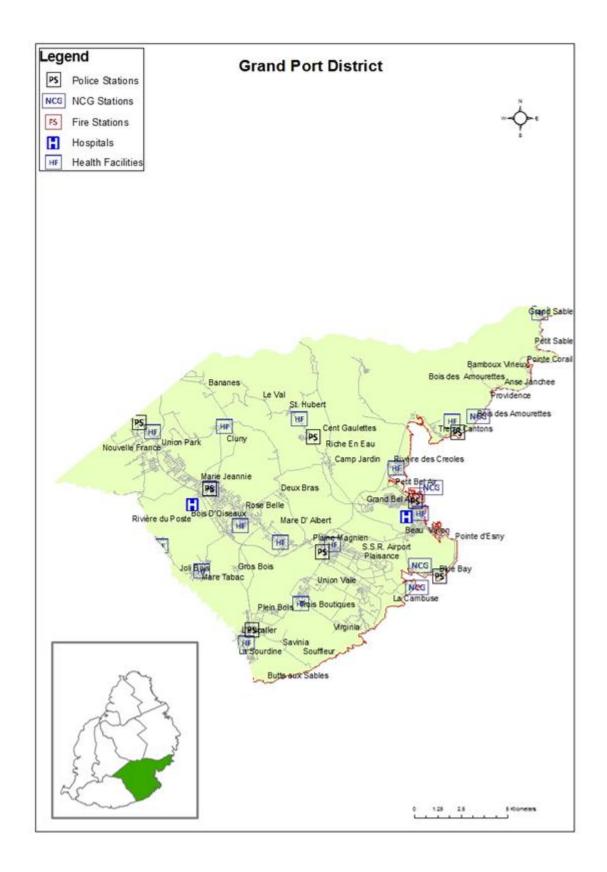
# Annex IX: District Maps of Mauritius

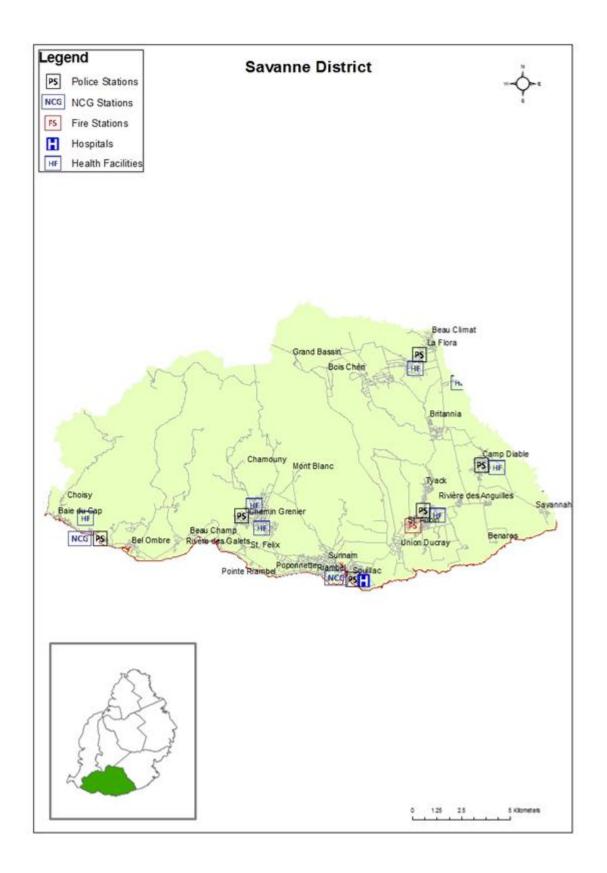


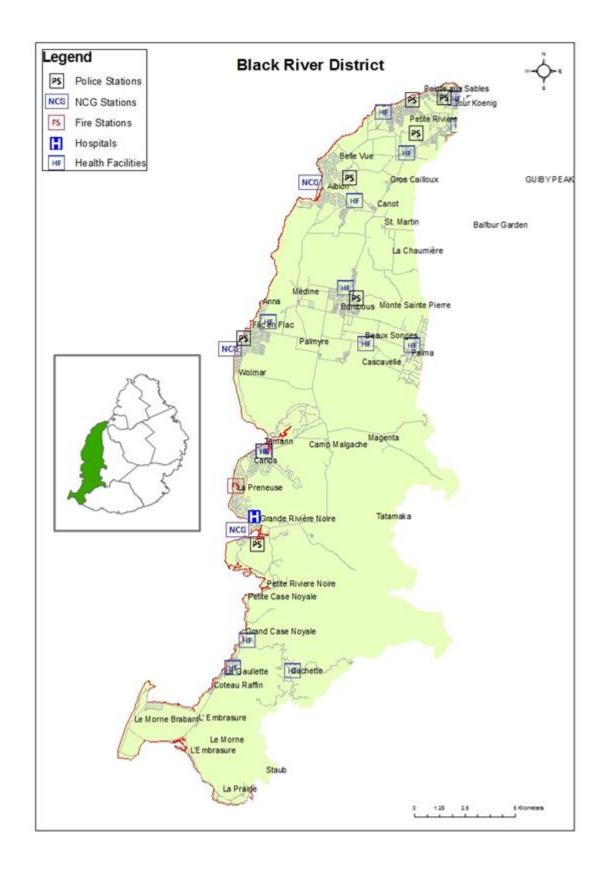


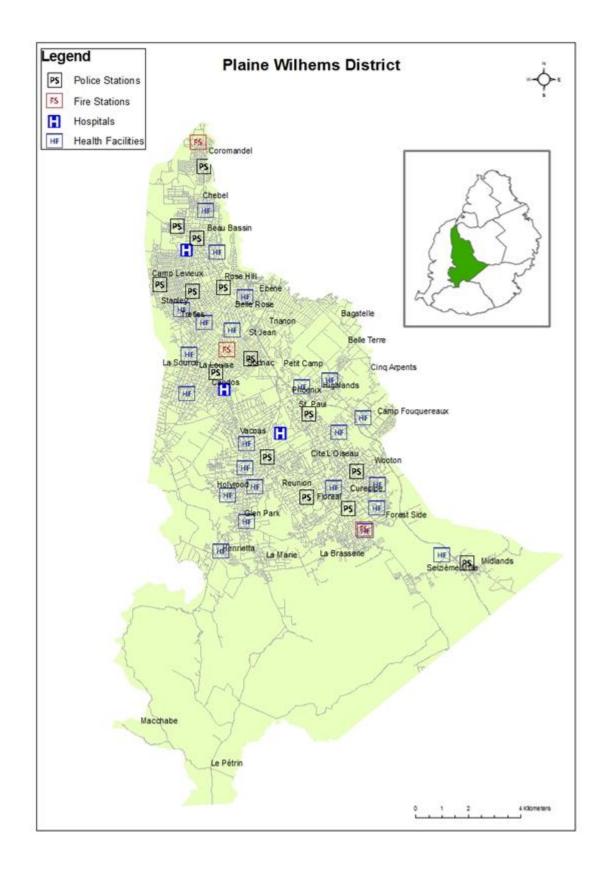


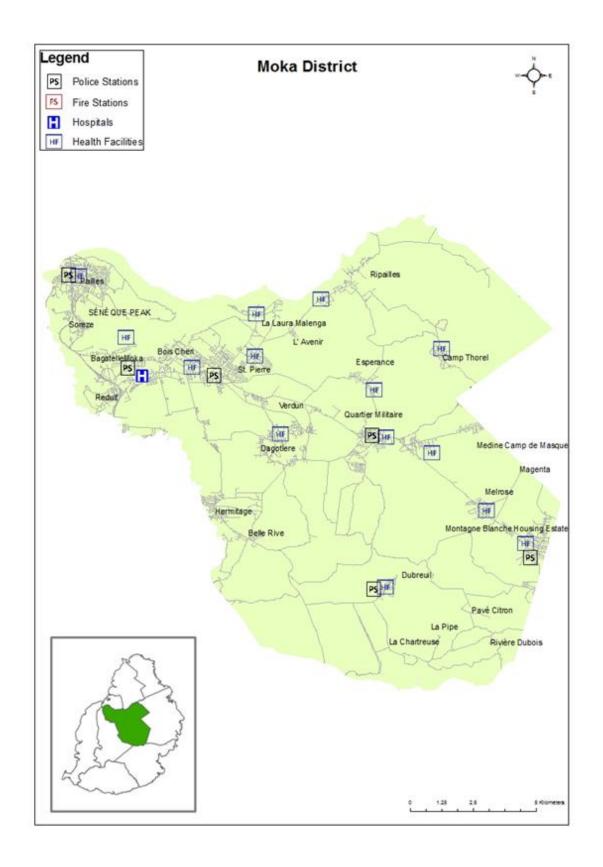


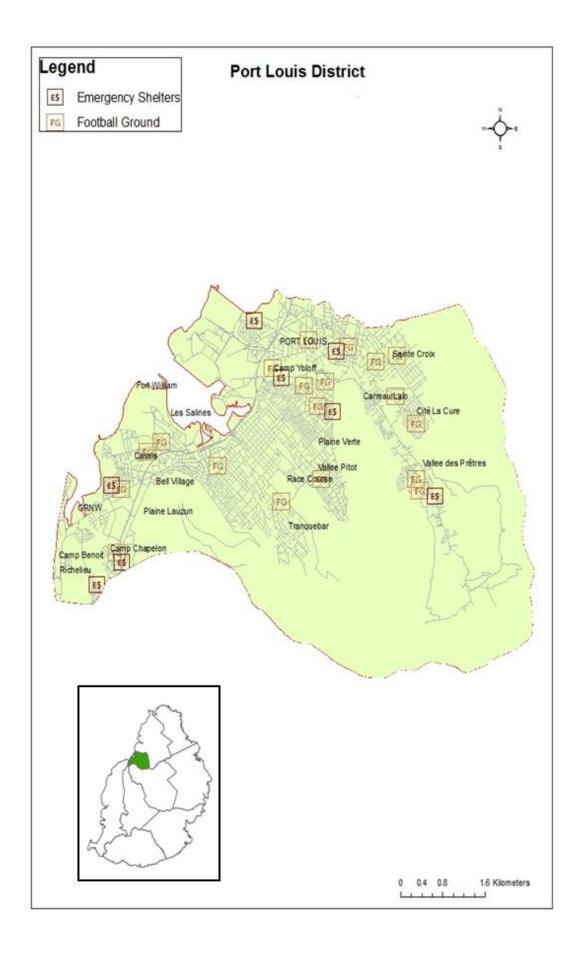


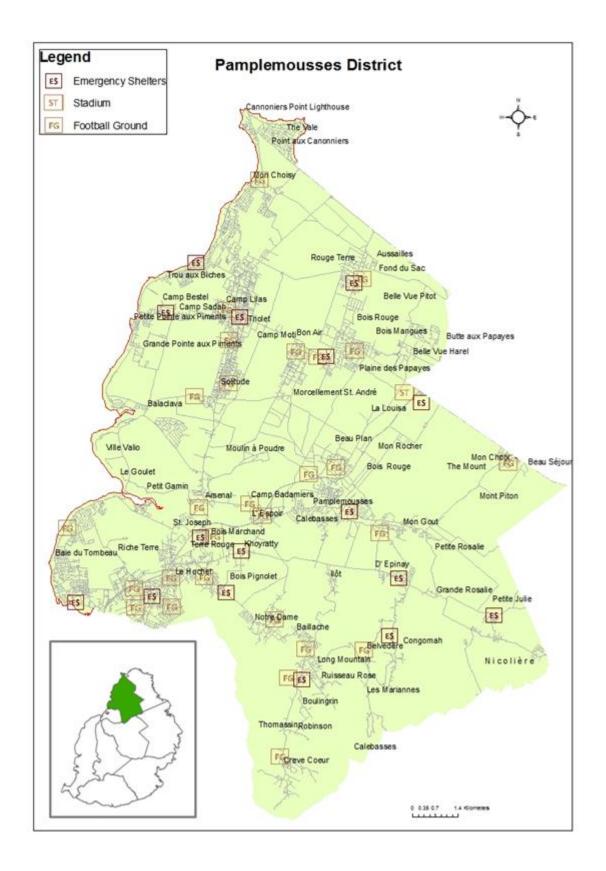


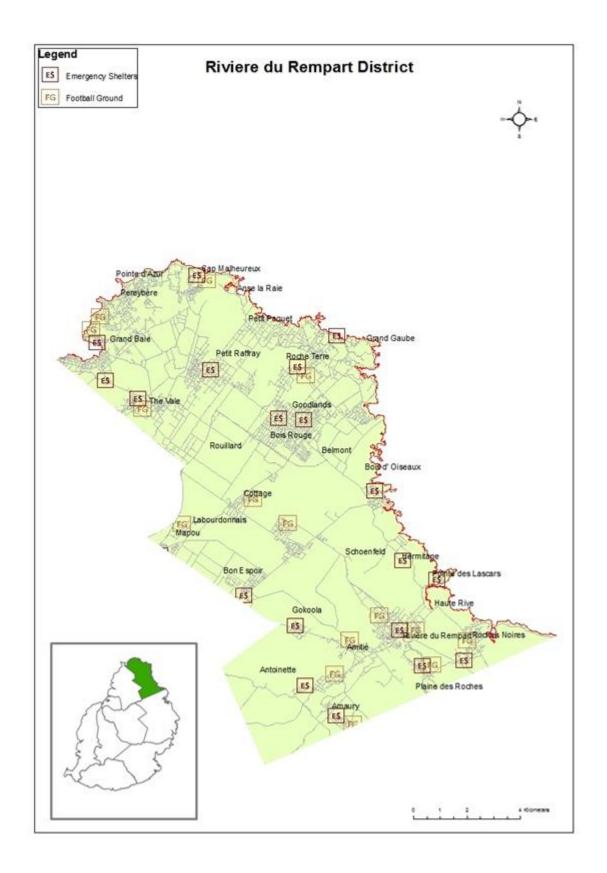


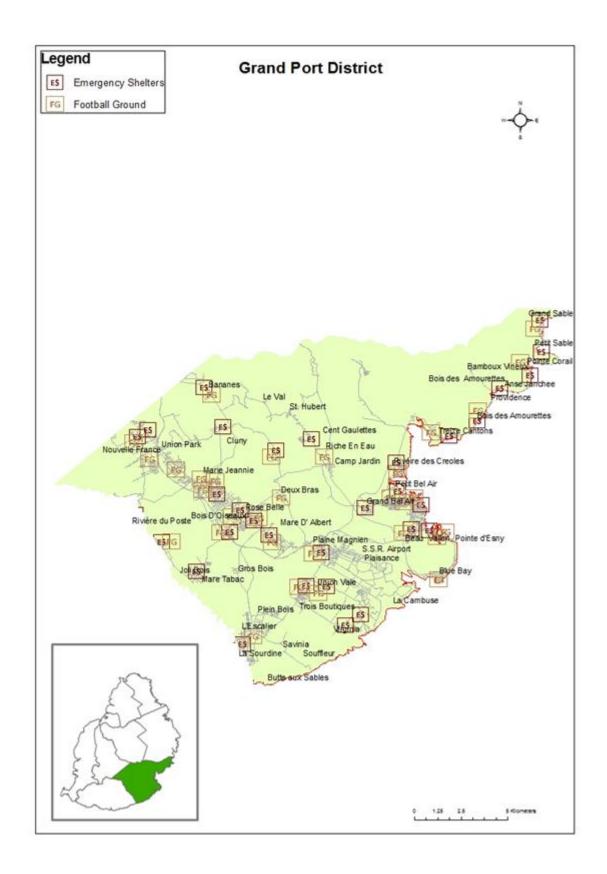


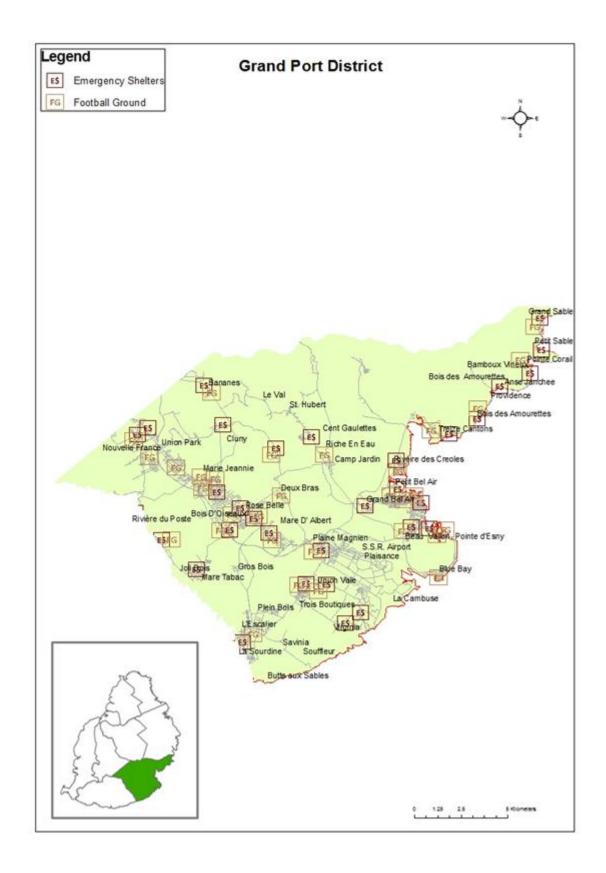


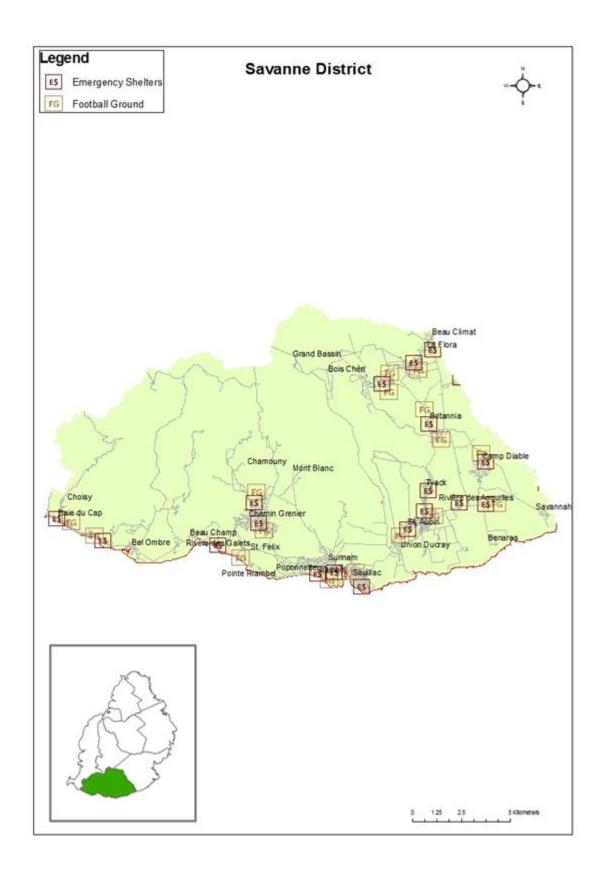


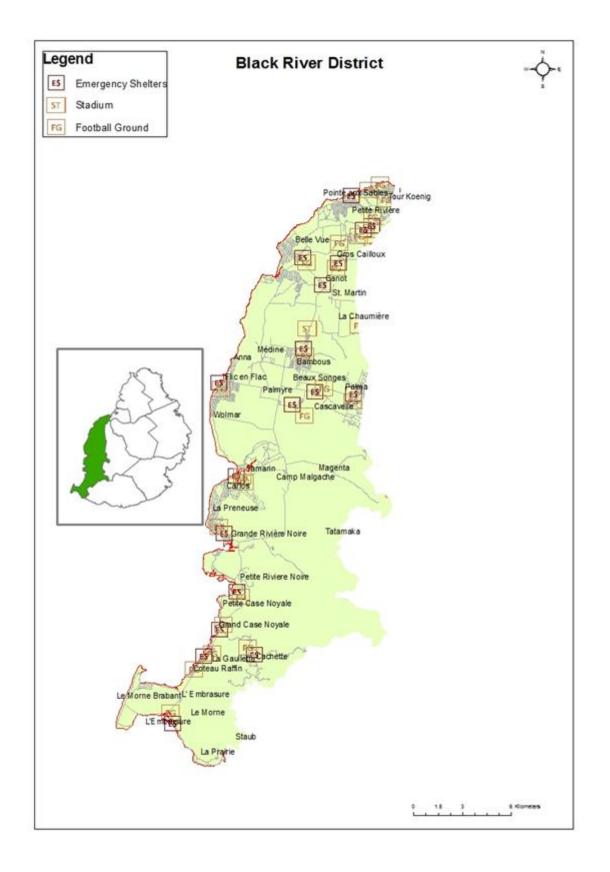


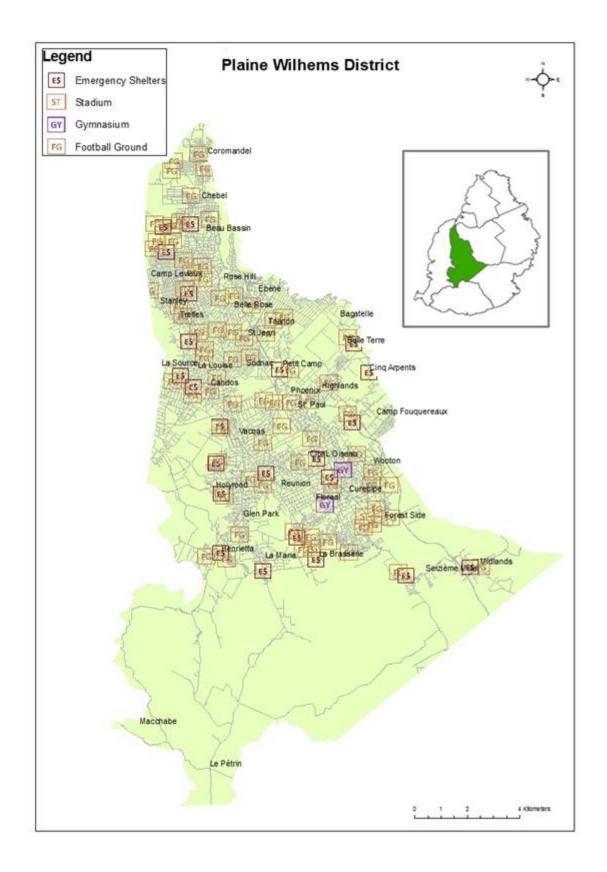


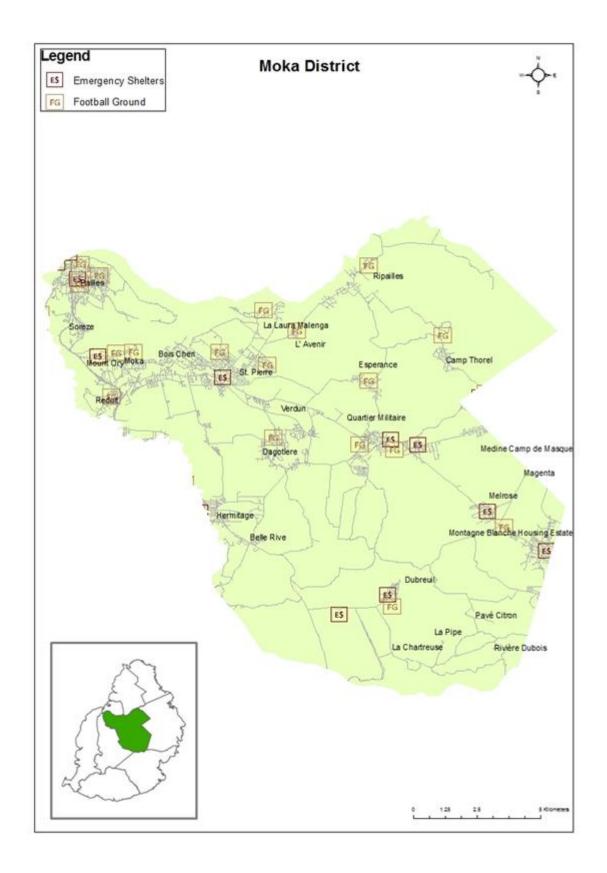












**Contact Information:** 

# Ministry of Environment, Sustainable Development, and Disaster and Beach Management

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