

REFERENCE GUIDE FOR PREPARATION OF THE NATIONAL REPORT
FOR THE WORLD CONFERENCE ON DISASTER REDUCTION

Component I: Political Commitment and Institutional Aspects

No.	Questions / Answers
1.1	<p>Are there national policy, strategy and legislation addressing disaster risk reduction?</p> <p>If yes, please describe to what extent current national efforts and main priority areas of the policy, and mechanisms to enforce the implementation of the policy and legislation are applied (and/or attach any relevant documentation)</p> <p>Yes, there is established legislation.</p> <ul style="list-style-type: none"> • The Central Cyclone and Other Natural Disaster Committee is approved by Government, under the Prime Minister's Office. • It is the policy of Government to work through the local government network so as to reduce the suffering of the people and damage to the economy in ties of disaster.
1.2	<p>Is there a national body for multi-sectoral coordination and collaboration in disaster risk reduction, which includes ministries in charge of water resource management, Agriculture / Land use and planning, health, environment, education, development planning and finance?</p> <p>If yes, please give detailed information (name, structure and functions). Attach any documentation or indicate source of information.</p> <p>Yes, the Cyclone and Natural Disaster Committee, under the chairmanship of the Prime Minister's Office (PMO), and comprising representatives of various Ministries / Departments has been set up since 1968.</p> <ul style="list-style-type: none"> • The responsibility for disaster management rests primarily with the PMO, which monitors matters through the Committee. The primary task of the Committee is to coordinate activities before, during and after a natural disaster.

	<ul style="list-style-type: none"> • However different disasters are dealt by various organisations, e.g. <ul style="list-style-type: none"> - Torrential rains - Ministry of Local Government & Rodrigues, - Floods - Ministry of Environment & NDU (National Development Unit) - Oil/Gas Spill - Ministry of Environment & NDEU, - Fire - Government Fire Services, - Tidal Surge - Ministry of Fisheries, - Droughts - Ministry of Agriculture, FT & NR, (including Forestry Service and Irrigation Authority), Central Water Authority, Water Resources Unit - Epidemics - Ministry of Health & Quality of Life • There are also local Cyclone Committees, which are set up in each Municipal and District Council area. These Committees are presided by the Mayors or Chairmen of District Councils.
/3	<ul style="list-style-type: none"> • Are there sectoral plans or initiatives that incorporate risk reduction concepts into each respective development area (such as water resource management, poverty alleviation, climate change adaptation, education and development planning)? • If yes, please indicate some examples and challenges / limitations encountered. If no, does your government have any plans for integrating disaster risk reduction into development sectors? If no, please also specify the major difficulties. <p>Yes,</p> <p><i>Water resource management (Floods / Droughts) -</i></p> <ul style="list-style-type: none"> • An integrated plan has been prepared to harness additional water resources to meet the water requirement of the economy beyond 2020. • A National Water Drainage Programme is also under way to address the problem of flooding.

	<p><i>Oil Spill -</i></p> <ul style="list-style-type: none"> • The National Oil Spill Contingency Plan and the Port Louis Harbour Oil Spill Response Plan provide the framework for oil spill response. • There is also a Regional Oil Spill Planning Project for ongoing collaboration among the countries of the South Western Indian Ocean to intervene jointly in case of a transboundary spill. <p><i>Climate change adaptation -</i></p> <ul style="list-style-type: none"> • A Climate Change Action Plan has been prepared by the National Climate Committee, whereby the vulnerability and impacts of climate change on the economic and social sectors have been addressed. <p><i>Poverty alleviation -</i></p> <ul style="list-style-type: none"> • Various plans are in operation to alleviate poverty in localised areas. • In addition to the provision of welfare services such as free education and free health care, several types of assistance are offered to the poor. These include social aid as well as subsidised housing loans. • A latest initiative, which involves communities and NGO's is the setting up of the Trust Fund for the Social Integration of Vulnerable Groups (TFESIVG). • In addition to the activities of the TFESIVG, Government is funding an Action Plan for Poverty Alleviation. This programme is also playing an important role in the economic empowerment of vulnerable groups.
<p>L4</p>	<p>• <i>Is disaster risk reduction incorporated into your national plan for the implementation of the UN Millennium Development Goals (MDGs), Poverty Reduction Strategy Paper (PRSP), National Adaptation Plans of Action, National Environmental Action Plans and WSSD (World Summit on Sustainable Development) Johannesburg Plan of Implementation?</i></p> <p>• <i>If yes to any of these, who are the main contacts for these initiatives?</i></p> <p>Yes</p>

1.5	<p><i>Does your country have building codes of practice and standards in place, which takes into account seismic risk?</i></p> <ul style="list-style-type: none"> ▪ <i>If yes, since when. Which are the main difficulties in keeping with the compliances of the codes?</i> <p>Yes, the Ministry of Public Infrastructure, Land Transport & Shipping and local authorities such as Municipalities and District Councils are involved.</p>
1.6	<ul style="list-style-type: none"> ▪ <i>Do you have an annual budget for disaster risk reduction?</i> ▪ <i>If yes, is this commitment represented as part of the national budget or project based?</i> ▪ <i>Through which institutions?</i> ▪ <i>If no, what other financing mechanisms for risk reduction initiatives are available?</i> <p>Yes,</p> <ul style="list-style-type: none"> ▪ It is represented as part of the national budget. ▪ Financial allocation to social and welfare represents about 25 % of the national budget. ▪ Provision for poverty allocation has been increased by 14 % to Rs. 120 millions in the financial year 2003-2004
1.7	<ul style="list-style-type: none"> ▪ <i>Are the private sector, civil society, NGOs, academia and media participating in disaster risk reduction efforts?</i> ▪ <i>If yes, how?</i> ▪ <i>Indicate existing coordination or joint programming between government and civil society efforts in disaster risk reduction, or major difficulties or constraints for this to be effective.</i> <p>Yes,</p> <ul style="list-style-type: none"> • The private sector, civil society and NGOs are represented in the Central Cyclone and Other Natural Disasters Committee. • The media participate through warning systems. The warnings are disseminated through radio talks, television broadcasts, electronic and print media.

	<ul style="list-style-type: none"> • Through the NGO's, local communities are involved in the development of disaster plans and programmes. The Mauritius Red Cross Society (NGO) is involved in assisting injuries during disasters. • The Private Sector contributes to Disaster Management Funds. (Source: Paper prepared by Meteo in collaboration with PMFO) • Difficulties/Constraints: However, to secure active participation of the private sector in this area, government must put in place appropriate infrastructural, institutional and organisational frameworks.
	Component 2: Risk Identification
No.	Questions /Answers
2.1	<p>Has your country carried out hazard mapping / assessment?</p> <ul style="list-style-type: none"> ▪ <i>If yes, please describe for which hazards, when they were updated and for what geographical scale they exist?</i> ▪ <i>Do they include characteristics, impacts, historical data, multi-hazards approach?</i> ▪ <i>Which institutions are using the results of the hazard assessment?</i> ▪ <i>To whom are they available? (Attach any relevant documentation).</i> <p>Yes,</p> <ul style="list-style-type: none"> • For Oil Spill, a coastal sensitivity atlas for the coast of Mauritius is being updated electronically. The stakeholders for Oil Spill (Including MPA, NCG and SAF) use the atlas. • The National Development Unit is involved in the identification of flood prone areas throughout the island.
2.2	<p>Has your country carried out vulnerability and capacity assessments?</p> <ul style="list-style-type: none"> ▪ <i>If yes, please describe the methods used and major social, economic, physical, environmental, political and cultural factors considered in the assessment(s).</i> ▪ <i>Who are the main contacts for these assessments? (or attach any relevant documentation or contact information)</i> <p>Vulnerability study for sea level rise in the western coast of Mauritius (File en Flac)</p>

2.3	<ul style="list-style-type: none"> ▪ <i>Does your country have any mechanisms for risk monitoring and risk mapping?</i> ▪ <i>If yes, who is responsible?</i> <p>No mechanism in place, only isolated cases, e.g. for climate change.</p>
2.4	<ul style="list-style-type: none"> ▪ <i>Is there a systematic socio-economic and environmental impact and loss analysis in your country after each major disaster?</i> ▪ <i>If yes, are the results available?</i> <p>Yes, especially for cyclones.</p> <ul style="list-style-type: none"> • Environmental impacts such as erosion are carried out for the coast. • Loss Analysis is also made after cyclones, floods, fires etc. • The Central Statistical Office usually revises the GDP and Social Security is also involved in socio-economic assessment.
2.5	<ul style="list-style-type: none"> ▪ <i>Are there early warning systems in place?</i> ▪ <i>If yes, for what hazards and for what geographical scope?</i> ▪ <i>Do you have any example when the system was activated lately?</i> ▪ <i>Which are the main institutions involved?</i> ▪ <i>Please indicate any relevant lessons-learned from the use and public reaction to early warnings issued.</i> <p>Yes, systematic Early Warning System (EWS) in Mauritius started in early 1960's and was initiated by the Mauritius Meteorological Services.</p> <ul style="list-style-type: none"> • Weather-related disasters include: Tropical storms, Floods (+ storm surges and tidal waves), Thunderstorms, Drought, Climate Change • Non-Weather-related disasters include: Fires, Pests and Diseases, Release of Hazardous Materials (gases, oil / chemical spills) • Geographical scope: whole island

- Examples of warning systems include Tropical Cyclone Warning System, Flood Warnings, Thunderstorms forecasts and Drought warnings.
- The various warning systems are now well established, operational and maintained by the Mauritius Meteorological Services and related departments. The Police, Government Fire Services, Water Resources Unit, Ministry of Agriculture, FT & NR and Ministry of Environment & NDU are also very much involved.
- Live interventions by the Police or the Meteorological Services have also become very common.
- Our laws make provision for a preventive system e.g. Police clearance, Fire clearance for buildings.
- Lessons learnt: The Early Warning System put in place by the Authorities has been effective. It has contributed to save lives, protect properties, secure livelihoods and support sustained development. However, it has to be strengthened at all levels and have to become people-centered and community-based.

Questions /Answers

3.1 *Does your country have disaster risk information management systems (governmental and/or non-governmental)?*

If yes, what kind of information on disaster reduction is available, how is it collected, how is the information disseminated and who are the main users? (Indicate relevant sources of information, if applicable)

- An Environmental Information System (EIS), with indicators which include some disasters (cyclones / fires) is under preparation by the Ministry of Environment.
- The Government Information Service is also available - It is responsible for distribution of information (through posters, film strips etc) on general preparedness, describing the warning system and advising protective actions to be taken before and during a cyclone, on dangers of floods and other disasters.

3.2	<ul style="list-style-type: none"> * Are the academic and research communities in the country linked to national or local institutions dealing with disaster reduction? * If yes, please describe the mechanisms for information sharing and indicate any example of usefulness and effectiveness. * Which are the main research and academic institutions dealing with disaster reduction related issues (please list, if available, and indicate how their research work is related to the country's disaster risk reduction needs.) <p>Yes,</p> <ul style="list-style-type: none"> * The Meteorological Services also deal with international organisations e.g. in naming of cyclones, following cyclones in the Indian Ocean and emitting warnings as per established procedures.
3.3	<ul style="list-style-type: none"> * Are there educational programmes related to disaster risk reduction in your public school system? * If yes, for what age-range? * Do you have any educational material developed to support the teachers in this area? (please attach any relevant documentation) <p>Yes</p> <p>In Primary school level (5-11 yrs), disaster risk reduction issues such as precautionary actions for cyclones, floods etc, are included in EVS.</p>
3.4	<ul style="list-style-type: none"> * Are there any training programmes available? * If yes, please list (if available indicate scope and target audiences of the courses). * Do you have any indication on how these courses have been useful to change any practices at local or national scale? <p>Yes,</p> <ul style="list-style-type: none"> * Talks in primary and secondary schools and other training programmes are organised on an ad-hoc basis.

	<ul style="list-style-type: none"> • Health care - in the field of Non-Communicable Diseases prevention, the concept of health promotion is getting wider recognition as a result of which health education/training programmes and community-based activities are being expanded. Education can prevent proliferation of epidemics.
3.5	<ul style="list-style-type: none"> • <i>What kind of traditional indigenous knowledge and wisdom is used in disaster-related practices or training programmes on disaster risk reduction in your country?</i> <p>N/A, they have given way to more specific approaches.</p>
3.6	<ul style="list-style-type: none"> • <i>Do you have any national public awareness programmes or campaigns on disaster risk reduction?</i> • <i>If available, who are the main players for raising public awareness?</i> • <i>How are the mass media and schools involved?</i> • <i>Who are the targeted groups and how do you evaluate the programmes?</i> <p>Yes, these are carried out mainly by government institutions and schools.</p> <ul style="list-style-type: none"> • Mass media is involved in early warning systems and in broadcasting public awareness programmes on cyclones and other disasters. • Health care - various units within the Ministry of Health & Quality of Life are responsible for public awareness campaigns (NCD Unit, Health Information, Education and Communication Unit, Nutrition Unit, National AIDS Control Unit, etc) • Pesticides / herbicides control - aggressive sensitisation campaigns and free advice to the farming community by the Agricultural Research Extension Unit (AREU) of Ministry of Agriculture, FT & NR and Farmers Service Centre

Component 4: Risk Management Applications/Instruments

No.	Questions /Answers
4.1	<p>Is there any good examples of linking environmental management and risk reduction practices in your country (key areas of environmental management may include coastal zone, wetland and watershed management, reforestation and agricultural practices, amongst others)?</p> <p>If yes, please indicate in what areas. (Attach any relevant document or references)</p> <p>Yes,</p> <ul style="list-style-type: none"> • Backfilling of wetlands is a factor, which contributes to floods. A study on Environmental Risk Assessment at Grand Bay was carried out to protect wetlands of the region. This will help to reduce flood risks in the north. • Forests and islets are also managed to prevent fire hazards and reforestation is practised to reduce drought risks. • Erosion - banning of sand extraction since 2001 <ul style="list-style-type: none"> - implementation of recommendations from Baird's report 'Sandy on Coastal Erosion', e.g. removal of hard structures in - the coastal dynamic zone and setback of 30 m
4.2	<p>Are financial instruments utilised in your country as a measure to reduce the impact of disasters (e.g. insurance/insurance, calamity funds, catastrophe bonds, micro-credit finance, community funds, etc.)?</p> <p>If yes, please describe what these instruments are and when they were established, who manages them and who are eligible to them.</p> <p>Yes, government is committed and a budgetary allowance is allocated in each Ministry.</p> <ul style="list-style-type: none"> • Government provides support to farmers through subsidised loans, free distribution of seeds and other relief assistance when a disaster strikes. • In the financial year 2003-2004, Government has provided for additional funds amounting to Rs. 10 million as Micro finance

4.3	<ul style="list-style-type: none"> • Please identify specific examples of technical measures or programmes on disaster risk reduction that have been carried out in your country. Oil Spill: State of preparedness / combat equipment available Cyclones: Buildings have to respect norms/standards prepared to withstand cyclonic conditions Droughts: the Midlands Dam was constructed to increase the capacity of water storage and water catchment areas have been increased (reforestation)
Component 5: Preparedness and Contingency Planning	
No.	Questions /Answers
5.1	<ul style="list-style-type: none"> • Do you have disaster contingency plans in place? • Are they prepared for both national and community levels? • If yes, please describe their main components, who is responsible for activating the plan(s)? • Are the plan(s) updated on annual basis? • Have you ever used the contingency plan(s) that was or were developed? • If yes, what was the results? • National Oil Spill Contingency Plan (Ministry of Environment) - drills organised twice yearly. The plan is updated following lessons learnt during the drills. • Port Disaster Management Plan (Mauritius Port Authority) - to be approved • Cyclone Contingency Plan for Mauritius Port Authority • Fire Management Plans (Government Fire Services) - regular drills organised • Company Contingency Plans - for fire hazards • Gas Spill Contingency Plan - under preparation by the Ministry of Environment & NDU

5.2	<ul style="list-style-type: none"> ▪ Has your Government established emergency funds for disaster response and are there national or community storage facilities for emergency relief items - mainly food, medicine, tents/shelters? ▪ If yes, please provide some details. <p>Yes,</p> <ul style="list-style-type: none"> • Disaster Emergency Funds have been set up to assist victims of cyclones. • A permanent fund, i.e. the Prime Minister Cyclone Relief Fund exists. • Ad-hoc funds are also set up as and when required in the aftermath of a major disaster. • Government, the Private Sector and the public in general contribute to these funds. • In community centres and a few shopping centres, storage facilities are provided when required. • Banks usually open special accounts (Solidarity Funds) after major disasters. • Local Cyclone Committees are also fully involved to provide assistance and support to the citizens.
5.3	<ul style="list-style-type: none"> ▪ Who is responsible for the coordination of disaster response preparedness and is the coordination body equipped with enough human and financial resources for the job? ▪ Please comment on the effectiveness of the coordination work done so far? <p>Prime Minister's Office. Coordination is effective</p>
Component 6: Call for good practices in disaster risk management	
No.	Questions / Answers
	<ul style="list-style-type: none"> ▪ Based on the above analysis and information provided, please provide at least two examples of any successful implementation of disaster reduction activities in your country (could be of local, national or regional scale); any project or community based experience, national policy, intersectoral cooperation between sectors, etc., would be welcome. Provide maximum one page on each example.

indicating area of work, institutions and actors involved, duration, impact of the activities, lessons-learn, and if the example have been replicated. You may also kindly direct us to relevant web-based information/organisation.

- Gas Spill (chlorine) at Albion (A brief is attached)

Component 7: Priorities you want addressed at World Conference on Disaster Reduction

- *What do you think are the priority topics to be agreed upon at the World Conference to enhance and strengthen national policy and practice to reduce risk and vulnerability to natural and technological hazards?*
 - *Please list any other thematic areas or specific topics of discussion that you consider of importance to increase the effectiveness of disaster risk reduction for your country.*
 - *Please also indicate any particular experience or project that your country would like to exhibit or present at the Conference.*
1. Training
 2. Capacity Building
 3. Sharing of expertise/experience
 4. Oil spill - cooperation among countries
 5. Gas/chemical spill
 6. Policy and legal framework for decision making
 7. Enlistment of stakeholders (Private, Public, NGO's, CBO's)
 8. Governments have to address the constraints, which prevent the achievement of a higher level of disaster preparedness. These constraints may exist in the form of shortages of financial resources, inadequate capacity building, lack of effective communication system, low stockpiles of emergency supplies, slow decision taking process, lack of strategic leadership, poor monitoring and absence of structural arrangements to deal with a post disaster situation.

Ministry of Environment

Gaseous spill of chlorine at Morcellement Raffray, Astrolab Street, Albion on Monday 26 May 2003

On Monday 26 May 2003 at around 15 30 hrs, the Ministry of Environment was informed of the emanation of a gas with a pungent smell at Morcellement Raffray. A team comprising of officers of the Ministry and Police de L'Environnement proceeded to the site to take stock of the situation. The gas was escaping from a cylinder of 800 kg capacity found on a bareland when two persons were attempting to chop the cylinder using an electric grinder.

Action initiated

1. The whole area was cordoned off, residents were sensitised on the risks and evacuated to a safer place out of the danger zone.
2. The Central Water Authority attempted to repair and seal the ruptured cylinder. The fire services poured water continuously on the cylinder to enable dilution of the emanating gas.
3. The cylinder was then submerged in the nearby river to enable complete dissolution of the gas and then transferred to CWA Treatment Plant at Pailles. The river was flushed with water for three hours after the transfer of the cylinder.

Follow up actions

1. The Ministry of Fisheries, CWA and NEL have carried out water analysis and found that the residual chlorine was within acceptable limits.
2. The Ministry of Agriculture and the Forestry Services was requested to survey the site and to undertake cleaning of the river.
3. The whole area was flushed regularly for 7 consecutive days. The buildings in the vicinity were washed thoroughly with the help of the Fire Services.
4. The trees were pruned and re-greening of same was observed.
5. Ministry of Health was requested to send the 'Caravane De La Sante' at Albion for a routine check-up.
6. Arrangements to be made by all institutions to have officers involved in the operation to go for a medical check-up.
7. The Ministry of Environment to consider the procurement of appropriate protective equipment to deal with all type of spill (mustard gas, nerve gas, etc) which is in process.
8. A training programme be organised jointly by Fire Services and SMF for the benefit of other institutions involved in a spill.
9. A door to door sensitisation was carried out to avoid consumption of exposed foodstuffs.
10. A communiqué was released in the press and on TV to reassure the public at large and also to indicate the state of the prevailing situation as well as to thank them for their kind cooperation.