Executive Summary

The Training of Trainers (ToT) for the Implementation of the Sendai Framework workshop aimed to support the capacity development of the Mauritius National Disaster Risk Reduction and Management Centre (NDRRMC) and other relevant counterparts in implementing disaster risk reduction across various sectors at the national level, district and municipal levels. Furthermore, this second ToT aimed to support the sustainable advancement of capacity development initiatives from national to sub-national levels within Mauritius, and contribute to the development of an international cadre of disaster risk reduction professionals. Among the invited participants were three international counterparts from Uganda.

The workshop was co-organized by the Ministry of Social Security, National Solidarity and Environment and Sustainable Development, Environment and Sustainable Development Division, and UNISDR Global Education and Training Institute (GETI), and coordinated by the National Disaster Risk Reduction and Management Centre (NDRRMC). The workshop was arranged as a follow-up to the first NDRRMC-UNISDR
GETI Training of Trainers workshop in Mauritius, 4-6 May 2016, at the request of NDRRMC, as part of their disaster risk reduction action plan.

Thirty local participants represented various stakeholders, from Ministry of Public Infrastructure and Land Transport; National Development Unit (Prime Minister’s Office), Ministry of Health and Quality of Life; Ministry of Education and Human Resources, Tertiary Education and Scientific Research; Ministry of Energy and Public Utilities; Mauritius Police Force (Special Mobile Force); Ministry of Housing and Lands; Ministry of Social Security, National Solidarity and Reform Institutions (Social Security, National Solidarity Division); Ministry of Civil Service and Administrative Reform; Road Development Authority; Mauritius Ports Authority; Statistics Mauritius; Island Chief Executive, Rodrigues; Outer Island Development Corporation; University of Mauritius; and Municipal, City and District Council representatives from Port Louis, Beau Bassin - Rose Hill, Quatre-Bornes, Vacoas-Phoenix, Curepipe, Black River, Savanne, Grand Port, Flacq, Moka, Riviere du Rempart, and Pamplemousses. Three international participants represented the Ugandan Ministry of Education and Sports, and the Department of Relief, Disaster Preparedness and Management under the Office of the Prime Minister.

Overall, participants improved their knowledge of the Sendai Framework for Disaster Risk Reduction innovations, including the role of States and the activities required at national as well as local levels through use of corresponding Sendai Monitor Phase 1 indicators for Sendai Framework implementation. Through participation in the training, they were also introduced to the modules and tools for implementing their own capacity development initiatives with other national or sub-national sectoral focal points and other relevant stakeholders. The main workshop output is draft Disaster Risk Reduction Action Plans that contribute to the development of the national disaster management plan.

**About the Sendai Framework**

The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted by UN Member States on 18 March 2015 at the Third UN World Conference on Disaster Risk Reduction (WCDRR) in Sendai City, Japan. The Sendai Framework is built on elements which ensure continuity with the work done by States and other stakeholders under its predecessor, the Hyogo Framework for Action, and introduces a number of innovations as called for during the consultations and negotiations. Among the most significant innovations are a strong emphasis on the shift to disaster risk management from disaster management, the definition of seven global targets, the reduction of disaster risk as an expected outcome, a goal focused on preventing new risk, reducing existing risk and strengthening resilience, as well as a set of guiding principles, including primary responsibility of states to prevent and reduce disaster risk and shared responsibility calling for the engagement of all institutions and an all-of-society approach.

Sendai Framework outlines four priorities at global and regional, national and local levels: Priority 1. Understanding disaster risk; Priority 2. Strengthening disaster risk governance to manage disaster risk; Priority 3. Investing in disaster risk reduction for resilience; Priority 4. Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

The growth of disaster risk means there is a need to strengthen disaster preparedness for response, take action in anticipation of events, and ensure capacities are in place for effective response and recovery at all levels. The recovery, rehabilitation and reconstruction phase is a critical opportunity to build back better, including through integrating disaster risk reduction into development measures.

While the four Sendai Framework priorities define areas where action is needed, it is not an exhaustive list of measures. In practice, it means that the implementation of the four priority areas may require elaboration and planning of additional specific measures at national and local levels, and hence the relevance of the adoption of national and local strategies by 2020 (Sendai Framework target (e)) and plans (paragraph 27(b)) are a first critical step to achieving the other global targets by 2030. This workshop focused on understanding the Sendai Framework and its components, practical tools and methodology towards the development of DRR and/or disaster risk-informed plans and strategies at national and local levels.
National Background:

Mauritius is particularly vulnerable to hydro-meteorological disasters and the increasing impact of climate change. Frequent hazards include cyclone, storms, landslide, torrential rain, flood and flash flood. The policies adopted by Mauritius toward disaster risk reduction, preparedness and response are reflective of the actions being taken by governments and communities all around the world. This involves taking a broader view of managing disasters to extend to disaster risk management, often called disaster resilience.

Since 2013 in particular, Mauritius has played an important regional role in prioritizing the shift to disaster risk management and disaster resilience. As elaborated during the workshop opening by UNISDR and NDRRMC Officer-in-Charge Mr. K. Servansing, the National Disaster Risk Reduction and Management Centre (NDRRMC) was established in August 2013 as the operational and coordinating body responsible for implementing the national policy for disaster risk reduction and management, and so-named to emphasize both disaster risk reduction actions and disaster risk management (DRR&M) as a coherent process towards achieving disaster resilient development within the country.

Also in 2013, the national disaster loss database based on DesInventar methodology was launched down to the commune level. In 2015, policy that informs risk-informed financing was established, and an inception workshop on assessment of the capacity building needs of first response disaster management agencies was held. In 2016, the first Training of Trainers aimed to capacitate national authorities on Sendai Framework implementation, now in 2017 with a focus on capacitating the local level. In the same year, the National Disaster Risk Reduction and Management Act 2016 was established, including provisions for a National Disasters Scheme, the Flood Response Plan for Port Louis, and the development of a national strategy including enhanced early warning and emergency systems. Also in 2016, the NDRRMC hosted African stakeholders at the Sixth Africa Regional Platform and Fifth High Level Meeting on Disaster Risk Reduction; its two outcome documents were endorsed by the African Union in January 2017.

Workshop Content and Methodology

Overview: The first day of the training of trainers workshop introduced global trends in disaster risk reduction (DRR), the innovations of the Sendai Framework for Disaster Risk Reduction including, in particular, target (e) on the development of national strategies by 2020, coherence with the Agenda 2030 Sustainable Development Goals (SDGs) and Paris Agreement on climate change, took stock of risk and existing DRR plans and strategies in Mauritius, and introduced the draft Sendai Framework Monitor Phase 1 against existing plans by identifying any gaps or opportunities to strengthen national planning in Mauritius. During the second day, the Sendai priorities for action were presented via case studies to inspire potential solutions and options for implementation. Then the participants were introduced to the national resilience planning tools and used the outcomes of day one to identify objectives and actions that could be taken to address gaps and challenges in current planning. During the final day, participants were introduced to good practice in the development of SMART indicators for monitoring and evaluation. Then, they selected some of their objectives identified during the previous day to develop indicators, with timeframes and responsibility, for implementation.

Content: The workshop content was primarily based on the Sendai Framework for Disaster Risk Reduction
2015-2030, Reading the Sendai Framework, and the draft Sendai Framework Monitor Phase 1 published by the UNISDR, and selected peer-reviewed cases studies published by the International Recovery Platform (IRP). Such source content has been informed by consultations with Sendai Framework and former HFA national focal points as well as experts and practitioners representing local authorities, private sector, academia, scientific and disaster risk reduction networks. Additional references are based on relevant national policy, plans or strategies of the participating country.

**Methodology:** The training approach is based on principles of adult learning as a short and intensive (3-4 days) in-service training workshop for high-level government officials with a focus on combination of content presentations and group work exercises to master the use proposed tools and approaches as well as using peer-to-peer learning through sharing from own best practices, experience and lessons learned.

The course modules are provided to the trainees for their re-use and revision to fit a local and/or sectoral audience. The materials can also be implemented in variety of effective and interactive training methodologies to maximize group learning and sharing of case studies from developed and developing countries on the implementation the Sendai Framework, and tools for its monitoring, through demonstration, practice, discussion, brainstorming and assessment exercises.

**Structure:** The training course is composed of 6 Modules broken down into 3 main sessions over 3 days.

**Materials and Tools:** Each session includes an introduction, learning objectives, participatory methodologies, and activities. Tools introduced and used at the workshop include:

- **Concepts and Trends:** The Global Assessment Report on DRR and DRR Terminology
- **Reading the Sendai Framework:** the role of States
- **Global Sendai Framework Targets and Indicators in coherence with SDG indicators**
- **Draft Sendai Framework Monitor Phase 1**
- **UNISDR GETI Country/City DRR Action Planning Template**

<table>
<thead>
<tr>
<th>Section</th>
<th>Course Modules</th>
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<tbody>
<tr>
<td><strong>Section 1:</strong> DRR &amp; CCA Concepts</td>
<td><strong>Module 1:</strong> Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) Concepts and current trends in Mainstreaming DRR and CCA into development policies, programmes and plans</td>
</tr>
<tr>
<td><strong>Section 2:</strong> Understanding, Adapting and Using the tools to align National/Local plans and strategies with the Sendai Framework</td>
<td><strong>Module 2:</strong> Getting to know the Tools: Sendai Monitor</td>
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<td><strong>Module 3:</strong> Applying the Tools: Sendai Monitor to conduct assessment and analysis of disaster risk reduction readiness at national/local level</td>
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<td><strong>Module 4:</strong> Concepts and case studies of integrating SDGs, DRR and CCA for sustainable development in Sectoral Programs (i.e. Governance, Finance, Climate Change Adaptation, Environment, Land Use Planning, Infrastructure, Housing, Livelihood Protection, Health, etc.)</td>
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<td><strong>Module 5:</strong> Understanding how to develop Country/City DRR Action Plan. Proposed Methodology with Steps and the Approach.</td>
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<td><strong>Module 6:</strong> Setting Indicators for DRR Action Plan Monitoring, Evaluation &amp; Follow up</td>
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<tr>
<td><strong>Section 3:</strong> Planning the way forward</td>
<td><strong>Module 7:</strong> Next steps: Scaling up for Sendai Framework implementation and aligning your DRR and development plans and strategies</td>
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Overview of Training Sessions

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
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</thead>
<tbody>
<tr>
<td>- Concepts, Issues, Challenges and Trends</td>
<td>-Case studies for integrating SDGs, DRR and CCA into development policy</td>
<td>-Setting Indicators for Monitoring and Evaluation</td>
</tr>
<tr>
<td>- Using the Tools to review existing plans</td>
<td>-Developing the draft DRR Action Plan</td>
<td>-Developing a Strategy for further finalization, endorsement and implementation of the DRR Action Plan</td>
</tr>
<tr>
<td>- Group work output is draft gap assessment report</td>
<td>-Group work output is the first draft action plan</td>
<td>-Scaling up at National and Local level</td>
</tr>
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</table>

Day 1:

Expected Outcomes:

- Understand global and national trends in disaster risk reduction
- Understand the Sendai Framework and the role of States in coherence with the SDGs and Paris Agreement
- Take stock of Mauritius disaster risk reduction related policy, plans and strategies
- Understand and use the Sendai Framework Phase 1 Monitor indicators to identify gaps or challenges
- How to deliver the training modules

Main Discussion Outcomes

- The main innovations of the Sendai Framework for Disaster Risk Reduction were well understood to underscore a shift from disaster management to disaster risk management, noting the specific role of States complemented by that of local authorities and other relevant stakeholders.
- Among the seven (7) global targets of the Sendai Framework, target (e) - Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020 - was emphasized and understood to be a priority for undertaking actions if it is to be met.
- Advances in Mauritius since the first Training of Trainers workshop in 2016 were shared: the DRR&M structure has elaborated a multi-stakeholder process including the private and education sectors, among others, to “level III”; NDRRMC identified 13 actions to be taken, including cooperation, outreach and fostering research; and the National Disaster Scheme (NDS) now spells out roles and responsibilities for all.
- Updates on current priority projects were shared: Challenges were identified in implementing Multi-Hazard Early Warning Systems (MHEWS) which remain one-way, not two-way; the Community Disaster Response Programme (CDRP) which was originally UNDP-funded is now additionally included in the national budget; Monitoring for Environment and Security in Africa (MESA-SADC) will contribute to flood monitoring, though Mauritius remains too small to fully benefit without access to higher resolution images. Other projects in Education and Insurance have commenced.
- Ugandan participants also shared progress in DRR implementation, including: addressing conflict and disaster management together; mainstreaming DRR into curricula, including a guide for teachers at upper primary and lower levels; developing basic requirements and standards, adding indicators on safety and security; current review of the 2011 national policy with the Sendai Framework, as well as an NDRRM bill; and the multi-stakeholder National Platform for Disaster Risk Reduction meets monthly. Challenges and gaps in implementing disaster risk reduction at lower levels remain, which must reach district levels. At present, some are more active than others given to financing gaps.
Outcomes of working groups

Divided into four working groups – three groups from Mauritius and one group from Uganda, participants discussed gaps and highlighted strengths or opportunities for strengthening Sendai Framework implementation in country, including at sub-national levels. They identified gaps in particular, upon which they built draft action plans towards national resilience plans during days 2 and 3. The exercise was intended to strengthen their own understanding and required actions, but also as trainers to understand how to run a similar exercise with national and other relevant stakeholders. Below are the main points highlighted by the participants:

Mauritius Gaps and Opportunities

Sendai Framework Priorities 1 & 2

- Communication remains challenging
- The institutional framework exists, but there are still limited technical and human facilities to implement
- Disaster data sets are not [explicitly] within purview of national statistics office

Sendai Framework Priorities 3 & 4

- Shifting seasons
- Port Authority services continue to face many risks including tsunami and oil spill, but needs to assess other risks as well
- Guidelines are lacking, e.g. to ensure workers’ compliance to protocols
- Budget needs to be properly risk-assessed and allocated
- Preparedness training, national contingency planning, and simulation exercises are needed, e.g. addressing common hazards such as oil spill, increasing training to half-yearly

Uganda Gaps and Opportunities

Sendai Priorities 1 & 2

- Socioeconomic impact study is needed, with vulnerability indicators
- Appropriate data and information management requires data storage and information sharing, which requires the establishment of a strict data structure
- DRR Research and Development is needed: currently there are no specific DRR courses at university, DRR is not in mainstream curriculum, and climate change research is not linked to DRR
- DRR programmes and policies are required at local level

- DRR education, awareness raising and capacity development require resources: capacity is not yet good enough and it is required down to village level
- Both policy and legislative framework required: policy is in place, but an Act is required to back it up; policy is also inadequately disseminated
- Institutional arrangement exists, but there is no dedicated budget to include all agencies; at local level integration of district level still inadequate; capacity development gaps at local level are big, DRR indictors are also needed at local level.
DAYS 2 and 3:

Expected Outcomes:

- Review existing national and local DRR related plans against the draft Sendai Framework Monitor Phase 1 tool
- Understand how to develop and draft a national/local DRR Action Plan based on the gaps identified using the draft Sendai Framework Monitor Phase 1 tool
- Understand how to use the tool to conduct training workshops with other national stakeholders

Outcomes of working groups

The participants of the workshop worked in groups to consider existing DRR plans and strategies and identify the gaps and areas that can be further strengthened to ensure greater alignment with Sendai Framework, as well as develop a draft national DRR Action Plan on how and what they need to do for alignment.

In the context of Mauritius, NDRRMC informed participants about the 2013 DRR Study Review Project that provided for comprehensive inland and coastal flood maps, including landslide risk; its strategy based on the HFA; the national and Port Louis risk maps produced; the identification of infrastructure impact, including hotels and schools, at 1-, 2.5-, 3.5-, 5- and 6-metre sea level rise; and the Action Plan that produced 9 areas of intervention and 28 actions. Among the 9 areas: national data infrastructure was set up; flood early warning sensors installed along river; insurance measures taken. Among gaps identified, it was noted that flood mapping is difficult to implement at district level. Further study to produce higher and vertical resolution is needed. Sub-committees have been established, now need 1:5,000 danger map preparation, use of drones for high resolution images and update of DRR plans. Another gap is the overall data collection, classification and accessibility. Discussions focused on solutions such as:

- Environmental Impact Assessment (EIA) as a use case to prevent unsustainable development
- Necessity for two-way information flow: national to local and local to national, as well as within and across NDRRMC, in particular to understand cascading risks
- The use of the central data agency for distribution of data and reviewing legislation to provide obligation for sharing
- Review DRR&M Act to provide for consultations, including among planner and community

Risk was also discussed in the context of:

- Potential for conflict
- Coastal erosion
- Wetland destruction and increased flooding
- Poor land use and building codes and zoning drafted by engineers without full risk knowledge
- Illegal construction
- Lack of enforcement of policy/regulations
- Epidemics
Mauritius Group Recommendations:

Sendai Priority 1

1. Capacity development: a central strategy to build capacities of persons and institutions is needed, not only for training and specific technology, but including sustainable technology transfer and network development down to grassroots level
2. Develop a culture of prevention through education: educate the general public, integrate use of media and NGOs, and educate children from primary school
3. Build awareness of infrastructure safety and resilience: targets hotels and hospitals in coastal zones, prepare and provide guidelines to community-at-large on how to do proper [risk-informed] planning.
4. Create visibility: a one-stop-shop at NDRRMC to:
   a. Collect all data across all ministries and authorities
   b. Establish methodologies on what and how data can be shared
   c. Ensure interoperability of data
5. Disseminate all data to all authorities once at sectoral level, MHRA at local level; organize a roundtable 1x/quarterly
6. Develop an open data platform: gov-gov agency
7. Establish a vulnerability rating
8. Assess risk and build a hazard inventory from the bottom up

Sendai Priority 2:

9. Review DRR&M Act: address loopholes, review enforcement, involve local government to become more proactive and decentralized
10. Adopt a Landslide Management Act
11. Revise Land Use regulation, consider earthquake and tsunami risk and other newly identified risks
12. Establish a professional body to regulate land use and construction work, require training to be mandatory for license renewal
13. Conduct [targeted] sensitization campaigns

Sendai Priority 3:

1. Invest in DRR: Ensure allocations for resource and logistics to programmes, e.g. SDGs and CC programme, Solid and Hazard Waste and Beach programmes, NDRR&M, Environment and SDGs
2. Promote proper [risk-informed] urban and rural development planning
3. Enhance capability in disaster medicine and among health professionals
4. Upgrade construction and building codes, including local code for engineers through public-private partnership, and in accordance with international standards

Sendai Priority 4

1. Address contingency planning gaps:
a. Stats Mauritius partnership is needed to identify households for evacuation planning and collect age, gender and disability data
b. Identify ‘Safe Havens’
c. Conduct drills and Training for each region Community Disaster Response Program (CDRP)

2. Set up MHEWS; install sensors in rivers for water level rise, landslide, etc.
3. Review, revise and capacitate on fire safety
4. Establish relocation programmes
5. Establish protocol to collect and disseminate disaster preparedness lessons learned

Uganda Group Recommendations:

Sendai Priority 1

1. Link disaster information management system to national systems
2. Conduct baseline data for all disasters; conduct baseline risk, capacity and exposure assessments
3. Build capacity of national and local government officials, civil society and communities
4. Conduct simulation exercise with focus on disaster prone areas
5. Promote and mainstream DRR into curricula, home management committees and boards of governance
6. Use generation- and culture-appropriate approaches: consider language, tone and actions of youth, and reading and listening habits of adults.

Sendai Priority 2

1. Mainstream DRR in line with education, health and culture sectoral policies to be in line with DRM policy; develop policies, training programmes and guidelines
2. Engage stakeholders and legislators in review of policy and draft DRM Bill
3. Understand and inform on shifting seasons: diversify crops and understand market levels

Sendai Priority 3:

1. Allocate necessary resources to ensure DRR is a priority in the national budget:
   a. Promote mechanisms to scale up DRR financing
   b. Consider disaster risk financing “cash for work” and safety net programmes: send financing to districts, public schools, roads and put people to work when crops fail
2. Promote [risk-informed] engineering and construction works:
   a. promote existing building codes
   b. certify buildings at different levels
3. Increase business resilience (livelihoods and productive assets): promote sector-specific business continuity planning (BCP), e.g. in agriculture

Sendai Priority 4

1. Promote and call for scientific research on causes of flooding, drought, etc.
2. Update contingency plans: promote in high-risk districts
3. International standards on EWS: Promote with local government; report in real time for impact; enhance IT use
4. Train on post-disaster needs assessment: update/refresh at national, introduce at local level
5. Conduct emergency response training and regularly refresh
Overall there is a strong commitment from officials and expert teams of the ministries and offices participating in the NDRRMC to support the harmonization of the existing plans and strategies with the Sendai Framework and be engaged in its implementation and training in Mauritius.

There is also clear understanding of the need of broader engagement of multiple stakeholders both at national and sub-national levels, in particular local authorities, Stats Mauritius, the finance ministry and sector, community groups, the media, and the private sector. Additionally, it is noted that various guidelines, protocols, policy and incentives for compliance on numerous areas – from data collection and dissemination to land use and construction, inter alia – are required.

**Workshop Feedback**

At the end of the workshop, participants provided feedback across nine areas in an end-of-workshop survey, summarized below.

![Average Overall Participant Feedback](image)

- **Q1**: Opportunity to discuss concepts and trends
- **Q2**: Better understanding of the Sendai Framework national/local tools
- **Q3**: New ideas gained on DRR & CCA approaches and experience
- **Q4**: Better understanding of process, steps and methodology for DRR plans
- **Q5**: Opportunity to set indicators for DRR planning
- **Q6**: Established new contacts and ideas
- **Q7**: Workshop materials and tools useful
- **Q8**: Overall rating of the workshop materials and content
- **Q9**: Overall event organization and logistics
Conclusion:

This Training of Trainers (ToT) was the second of two since 2016 co-organized by NDRRMC and UNISDR to help boost the implementation and understanding of Sendai Framework for Disaster Risk Reduction 2015-2030 in Mauritius. The training workshop was characterized by the high level of engagement of the participants and their commitment in aligning their National Action Plan and Strategies to the Sendai Framework for effective implementation in Mauritius, and dedication to building the capacity of other stakeholders. This training also helped to further harmonize the existing NDRRMC action plan with the Sendai Framework and develop capacities of national government officials to effectively engage and support Sendai Framework and national plans in Mauritius.

Actions developed during the first ToT were presented and their progress reported upon during this second ToT, and NDRRMC called for the consultation and validation of participants’ draft DRR Action Plans during one month following the workshop. Numerous plans had been received and are contributing to the refinement of national planning.

The workshop extended participation to three Ugandan officials responsible for implementing the Sendai Framework and benefited from their shared gaps, innovations and experience.

The workshop agenda, participant list and sample DRR plans are available in annex.
ANNEX

BRIEF ON SENDAI FRAMEWORK

The Sendai Framework is a 15-year voluntary, non-binding agreement which recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.

It aims for the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.

The Sendai Framework for Disaster Risk Reduction 2015-2030 outlines the followings seven targets and four priorities for action to prevent new and reduce existing disaster risks:

7 GLOBAL TARGETS
   a). Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020-2030 compared to the period 2005-2015
   b). Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020-2030 compared to the period 2005-2015
   c). Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030
   d). Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030
   e). Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020
   f). Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030
   g). Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030

4 PRIORITY AREAS FOR ACTION
   1. Understanding disaster risk
   2. Strengthening disaster risk governance to manage disaster risk
   3. Investing in disaster risk reduction for resilience
   4. Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction
## Workshop Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>08.30 – 09.00</td>
<td>Registration of participants</td>
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</tbody>
</table>
| 09.00 – 09.45 | **Opening Session**  
  *Welcome Address*  
  - Opening remarks by Dr. Animesh Kumar, Deputy Head of Office UNISDR - Africa  
  - Official opening speech by Mr. Khemraj Servansing, Officer in Charge, National Disaster Risk Reduction and Management Centre (NDRMMC) |
| 09.45 – 10.15 | Tea break and group photo                                                |
| 10.15 – 11.30 | **Overview of the Workshop: Objectives, Expected Outcomes**  
  - Ms Sarah Wade-Apicella, Capacity Development Officer, UNISDR GETI  
  **Participations’ Introduction**  
  **Introducing the Sendai Framework – Presentations by UNISDR:**  
  - Concepts and Trends in Global Trends in DRR  
  - Global Frameworks in Coherence: Reducing Risk for Resilient Development |
| 11.30-12.00 | Presentation by NDRRMC-Mauritius: “Overview of Disaster Risk Management Structure in Mauritius” and progress achieved further to workshop held in May 2016. |
| 12.00 – 13.00 | Lunch                                                                    |
| 13.00 – 14.00 | Presentations by UNISDR: Applying the Assessment and Diagnosis Tools  
  - Reading the Sendai Framework: Role of States  
  - Draft Sendai Monitor Phase I – Interim |
| 14.00 -15.00 | Working Group Discussion: “Using Sendai Framework indicators to assess risk management situation for Mauritius” |
| 15.00 – 15.15 | Tea break                                                               |
| 15.15 - 17.00 | Applying the Assessment and Diagnosis Tools  
  Working Group Discussions  
  Plenary Discussion: “Presenting Group Work Outcomes” |
<table>
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<tr>
<th>Time</th>
<th>Day Two 20 June 2017</th>
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<tbody>
<tr>
<td>09.00 – 09.30</td>
<td>Presentation by NDRRMCM - Mauritius: “Disaster Risk Reduction Study 2013”</td>
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<tr>
<td>09.30 – 10.30</td>
<td>Case Studies on Priority 1: Understanding Disaster Risk, and Priority 2: Strengthening Disaster Risk Governance to Manage Disaster Risk (Part 1) (Media, Governance, Climate Change)</td>
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<tr>
<td>10.30 – 10.45</td>
<td>Tea break</td>
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| 10.45 – 12.00 | Priority 1: Understanding Disaster Risk, and Priority 2: Strengthening Disaster Risk Governance to Manage Disaster Risk (Part 1) (Media, Climate Change, Governance)  
**Working Group Discussion:** To develop Draft version of National DRR Action Plan (PART 1 For Priority 1 and 2 only) |
| 12.00 – 13.00 | Lunch                                                                              |
**Working Group Discussion:** To develop Draft version of National DRR Action Plan (PART 2 For Priority Areas 3 and 4 only). |
| 15.00 – 15.15 | Coffee break                                                                       |

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<thead>
<tr>
<th>Time</th>
<th>Day Three 21 June 2017</th>
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| 09.00 – 10.30 | Developing National DRR Action Plan and aligning existing Plans to Sendai Framework for DRR 2015-2030  
**Plenary Discussion:** “Presenting Group Work Outputs” |
| 10.30 – 10.45 | Tea break                                                                          |
| 10.45 – 12.00 | Action Plan Monitoring, Evaluation and Follow Up  
**Presentation:** “Developing SMART indicators” |
| 12.00 – 13.00 | Lunch                                                                              |
| 13.00 – 15.00 | Working Group Discussion to develop draft version of Action Plan (Completing M& E - Indicators Section of the Action Plan)  
**Working Group Discussion:** “Developing Action Plan with SMART indicators”  
**Plenary Discussion:** “Presenting Group Work Outputs” |
| 15.00 – 15.15 | Tea break                                                                          |
| 15.15 – 16.00 | Next Steps, Wrap Up and Evaluation  
Wrap up of Workshop and Evaluation  
Workshop closure |
# ANNEX # 2

MINISTRY OF SOCIAL SECURITY, NATIONAL SOLIDARITY, AND ENVIRONMENT AND SUSTAINABLE DEVELOPMENT  
ENVIRONMENT AND SUSTAINABLE DEVELOPMENT DIVISION  
NATIONAL DISASTER RISK REDUCTION AND MANAGEMENT CENTRE

Training of Trainers Workshop for the Implementation of the SENDAI Framework  
Le Voila Hotel, Bagatelle  
19-21 June 2017

Participant List

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<th>SN</th>
<th>Ministry/Organisation</th>
<th>Name</th>
<th>Designation</th>
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<tbody>
<tr>
<td>1.</td>
<td>NDRRMC</td>
<td>MOHIT Hemraj Kumar</td>
<td>Inspector of Police</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>CYPARSADE Smreetee (Mrs)</td>
<td>Disaster Monitoring Officer</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>OOCHT Rushmee (Ms)</td>
<td>STM Intern</td>
</tr>
<tr>
<td>4.</td>
<td>Municipal City Council of Port Louis</td>
<td>ENOUF Jean Francois Michael</td>
<td>Acting Principal Health Inspector</td>
</tr>
<tr>
<td>5.</td>
<td>Municipal Council of Beau Bassin – Rose Hill</td>
<td>RAMASAMY Marveen</td>
<td>Deputy Chief Executive</td>
</tr>
<tr>
<td>6.</td>
<td>Municipal Council of Quatre-Bornes</td>
<td>BHOLOH Christnaduth</td>
<td>Office Superintendent</td>
</tr>
<tr>
<td>7.</td>
<td>Municipal Council of Vacoas-Phoenix</td>
<td>REEMUL Mohamad Nasser</td>
<td>Chief Inspector of Work</td>
</tr>
<tr>
<td>8.</td>
<td>Municipal Council of Curepipe</td>
<td>SOOPAL Janeeta</td>
<td>Chief Welfare Officer</td>
</tr>
<tr>
<td>9.</td>
<td>District Council of Black River</td>
<td>CHADEE Mahattam</td>
<td>Civil Engineer</td>
</tr>
<tr>
<td>10.</td>
<td>District Council of Savanne</td>
<td>TEEWAREE Pramod Ramodhin</td>
<td>IT Officer/Systems Administrator</td>
</tr>
<tr>
<td>11.</td>
<td>District Council of Grand Port</td>
<td>BAZERQUE Marie Alix Bernarde (Ms)</td>
<td>Assistant chief Executive</td>
</tr>
<tr>
<td>12.</td>
<td>District Council of Flacq</td>
<td>LUCHAN Indulal</td>
<td>Ag Deputy Chief Executive</td>
</tr>
<tr>
<td>13.</td>
<td>District Council of Moka</td>
<td>MIGALE Noel</td>
<td>Deputy Chief Executive</td>
</tr>
<tr>
<td>14.</td>
<td>District Council of Riviere du Rempart</td>
<td>MADHUB Ravichand</td>
<td>Principal Health Inspector</td>
</tr>
<tr>
<td>15.</td>
<td>District Council of Pamplemousses</td>
<td>RAWOO Koondan Kumar</td>
<td>Health Inspector</td>
</tr>
<tr>
<td>16.</td>
<td>University of Mauritius</td>
<td>MATTAN-MOORGAWA Sushma (Mrs)</td>
<td>Lecturer</td>
</tr>
<tr>
<td>17.</td>
<td>Ministry of Public Infrastructure and Land Transport</td>
<td>GOBIN Mukteshwar</td>
<td>Engineer/Senior Engineer</td>
</tr>
<tr>
<td>18.</td>
<td>Prime Minister’s Office (National Development Unit)</td>
<td>CHING KEE YOUNG Mary (Ms)</td>
<td>Deputy Permanent Secretary</td>
</tr>
<tr>
<td>19.</td>
<td>Ministry of Health &amp; Quality of Life</td>
<td>Dr. SOOCANDRAM Nitish Raj</td>
<td>Emergency Physician</td>
</tr>
<tr>
<td>SN</td>
<td>Ministry/Organisation</td>
<td>Name</td>
<td>Designation</td>
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<tr>
<td>20.</td>
<td>Ministry of Education and Human Resources, Tertiary Education and Scientific Research</td>
<td>SANASY Deyvindrah</td>
<td>Assistant Director</td>
</tr>
<tr>
<td>22.</td>
<td>Mauritius Police Force (Special Mobile Force)</td>
<td>DURBARRY Rajiv</td>
<td>Chief Inspector of Police</td>
</tr>
<tr>
<td>23.</td>
<td>Ministry of Housing and Lands</td>
<td>SHAIK JOOMUN Naim Ahmad</td>
<td>Cartographer</td>
</tr>
<tr>
<td>24.</td>
<td>Ministry of Social Security, National Solidarity, and Environment and Sustainable Development (Social Security, National Solidarity Division)</td>
<td>CALEECHURN Navin Kumar</td>
<td>Assistant Commissioner</td>
</tr>
<tr>
<td>25.</td>
<td>Ministry of Civil Service and Administrative Reforms</td>
<td>COOLEN Seeneevassen</td>
<td>Director, Safety and Health Unit (DSHU)</td>
</tr>
<tr>
<td>26.</td>
<td>Road Development Authority</td>
<td>TEELUCK Nishal</td>
<td>Safety and Health Officer/ Senior Safety and Health Officer</td>
</tr>
<tr>
<td>27.</td>
<td>Island Chief Executive, Rodrigues</td>
<td>AZIE Louis Degonzaque</td>
<td>Administrative Officer</td>
</tr>
<tr>
<td>28.</td>
<td>Mauritius Ports Authority</td>
<td>PAMCHURUN Pirthiveeraj</td>
<td>Superintendent, Port Emergency Services</td>
</tr>
<tr>
<td>29.</td>
<td>Statistics Mauritius</td>
<td>RUGHOOBUR Chandranee</td>
<td>Statistician</td>
</tr>
<tr>
<td>30.</td>
<td></td>
<td>BALGOBIN Devika</td>
<td>Statistician</td>
</tr>
</tbody>
</table>

**Invited participants**

<table>
<thead>
<tr>
<th>SN</th>
<th>Ministry/Organisation</th>
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<tbody>
<tr>
<td>31.</td>
<td>Ministry of Education and Sports, Uganda</td>
<td>KAJUMBA Joseph</td>
<td>Principal Education Officer</td>
</tr>
<tr>
<td>32.</td>
<td>Department of Relief, Disaster Preparedness and Management, Office of the Prime Minister, Uganda</td>
<td>AHIMBISIBWE Catherine (Ms)</td>
<td>Principal Disaster Management Officer</td>
</tr>
<tr>
<td>33.</td>
<td>Department of Relief, Disaster Preparedness and Management, Office of the Prime Minister, Uganda</td>
<td>NYANGOMA Immaculate (Ms)</td>
<td>Disaster Preparedness Officer</td>
</tr>
</tbody>
</table>
## SFDRR Priority Area 1: Understanding Disaster Risk:

Policies and practices for disaster risk management should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment.

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</thead>
<tbody>
<tr>
<td>1</td>
<td>Create Visibility of data available</td>
<td>Setting up of a One Stop Shop at the NDRRM to collect information from all institutions/Authorities/Ministries and other stakeholders.</td>
<td>Data collected set up at the NDRRM</td>
<td>6months to set up</td>
<td>NDRRMC and all relevant stakeholders.</td>
</tr>
<tr>
<td>2</td>
<td>Reluctance by Public to understand risks associated to disaster (e.g. chitrakoot)/ People to understand the various natural &amp; man made hazards</td>
<td>1. Education – develop culture on Disaster management since primary 2. Sensitisation of general public on regular basis - Integrate media in sensitisation, NGOs, Training of 100% students would be done on Disaster and risk reduction programme in school through extra-curriculum.</td>
<td>First &amp; Second Term Year 2018</td>
<td>Ministry of Education/NDRRMC</td>
<td></td>
</tr>
</tbody>
</table>
|   | To carry out a detailed Multi Hazard Risk & Vulnerability Assessment at local level | Carry out a HRV assessment | Creation of a Base Map which comprises a Hazard Layer, Exposure Layer and Vulnerability Layer  
- Hazard Map Creation  
- Survey of exposed asset  
- Assign vulnerability ratings to specific areas | 12-18 months depending on resources to be allocated | By NDRRMC & Ministry of Housing and Lands, Local Authority |
|---|---|---|---|---|---|
| 4 | Infrastructure Development & Assets in risk areas (hotels on coastal areas & hospital in flood prone areas) | 1. Sustainable Development to consider impact of disaster risk- proper planning  
2. Guidelines to be provided by local authorities (e.g Guidelines from Fire Service) | | | |
| 5 | Provide an Open Data Platform among the relevant Government Agencies for better risk assessment and Mitigation / Avoidance Planning | Setting up a Government to Government Platform which will allow the agencies to consult data from other agencies which will help in better plan for risk management. | All government agencies connected to the platform and the relevant information within their database is shared. | 12 months | Central Informatics Systems Division  
the concerned agencies (Mauritius Police Force, Road Development Authority etc) |
| 6 | Mobilisation of local people to promote the idea of self-help, preparedness and effective response to disaster | - To conduct regular sensitisation campaigns in village councils, schools and other educational institution | DRR Seminars/ talks to cover 50% of education institutions in each educational zone divisions. | 12 to 24 months | -Local Authorities  
-Ministry of education |
|   | Establish a proper Methodology-  
  - Validation of Data Collected  
  - Type Of Data to be shared [GIS]  
  - Interoperability of data  
  - Information dissemination | - To ensure correctness/ accountability/ authenticity of Data  
  - Create Platform to share Spatial type of Data  
  - Roundtable/meeting with all stakeholders to meet monthly to discuss/update/review the information to be shared.  
  - Dissemination to all institutions/ Authorities/ Public | DRR seminar/talks to cover all village councils by local authorities |
|---|---|---|
| 7 | - Local People  
- NDRRMC | Creation of a GIS based platform for sharing of disaster risk information/data  
Type of data that can be shared with public and to be decided by NDRRMC | NDRRMC  
LDRRMC & Members  
Statistics Mauritius  
MPA, University of Mauritius, Ministry of Housing & Lands etc...... |
Priority Area 2: Strengthening disaster risk governance to manage disaster risk:
Disaster risk governance at the national, regional and global levels is of great importance for an effective and efficient management of disaster risk.

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<tbody>
<tr>
<td>1</td>
<td>Building Capacity of local and National Levels</td>
<td>Provision of financial resources and equipment to relevant Authorities</td>
<td>Provide for fixed installations on site such as Water Canons, Fire Hydrants etc.</td>
<td>6-12 months</td>
<td>Government Fire Services/ Ministry of Environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Investment in terms on better equipment, fire fighting systems, intervention teams as first response etc...</td>
<td>No. of equipment to be determined after survey</td>
<td>12 months</td>
<td>Ministry of Local Government &amp; MOE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Setting up of fire station in each Local Authority to attend to fire outbreaks more promptly.</td>
<td>Set up a fire station in the local authority.</td>
<td>12 – 24 months</td>
<td>Ministry of Local Government &amp; Ministry of Finance to provide funds and land.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training for personnel at Landfill Site e.g on how to stack wastes in smaller piles.</td>
<td>50 personnel trained per year</td>
<td>6-8 months</td>
<td>Ministry of Labour, H&amp; Safety Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ensure personnel safety on site</td>
<td>2-3 Trainings per year for personnel.</td>
<td>2-6 months</td>
<td>Ministry of Environment &amp; Private Contractor, Ministry of Labour &amp; MFRS</td>
</tr>
<tr>
<td></td>
<td>Training and sensitisation on national disasters</td>
<td>To Train people in simulation exercises</td>
<td>Two drills in a year while involving district councilors, village/town heads, neighbourhood officers (police) who are close to sensitize and persuade people to evacuate will be conducted.</td>
<td>6 months</td>
<td>district councilors, village/town heads, neighbourhood officers, police who are close to sensitize and persuade people to evacuate</td>
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<tr>
<td>2</td>
<td>More interactions between stakeholders and professionals in the domain of Disaster Risk Reduction</td>
<td>Conduct regular working sessions to develop new strategies, means and ways to adopt to new risks</td>
<td>Regular Simulation Exercises for each disaster to staff and inhabitants residing within area every 12 months</td>
<td>Central Government, Local Authorities, NGO's, MPF, Private, SAMU</td>
<td></td>
</tr>
</tbody>
</table>
**Priority Area 3: Investing in disaster risk reduction for resilience:**

*Public and private investment in disaster risk prevention and reduction through structural and non-structural measures are essential to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets, as well as the environment.*

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<tbody>
<tr>
<td>1</td>
<td>Better Infrastructure Maintenance</td>
<td>To have further investment on sites, to be in line with international standards</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Insurance for infrastructures to be looked into for risk transfer.</td>
<td>% to be maintained</td>
<td>4-6 months</td>
<td>Ministry of Environment &amp; ATICS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Protocole in case of Disaster to be disseminated to stakeholders.</td>
<td>Maintenance Programme</td>
<td>6 months</td>
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<td></td>
<td></td>
<td>Disaster Recovery to be properly carried out at landfill site.</td>
<td>to be devised</td>
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<td></td>
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<td></td>
<td>Members of the public to be informed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Budgeting for local Authorities and Ministries for implementing project related to disaster</td>
<td>1. To increase budget within the local authorities annually to include response to DRR</td>
<td>Budget for addressing DRR issues at Local district level (Construction and upgrading of drains, bridges, rivers etc across island) will be increased by 25 % in one year</td>
<td>Annually- To complete over a period of 4 years</td>
<td>MPI/NDU/RDA/Local Govt.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. To increase budget at the Ministry level (MPI/Env.) to include response to DRR.</td>
<td>Budget for addressing DRR issues at National level (Construction and upgrading of drains, bridges,</td>
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<tr>
<td>3</td>
<td>Early warning system</td>
<td>Acquisition of modern equipments, water pumps, systems</td>
<td>Early warning system should be already installed in identified risk areas</td>
<td>24 months</td>
<td>Central Government</td>
</tr>
</tbody>
</table>

**Priority Area 4:** Enhancing disaster preparedness For effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction:

*Strengthened disaster preparedness for response, recovery, rehabilitation and reconstruction are critical to build back better.*
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<tbody>
<tr>
<td>1</td>
<td>Proper management of Ecosystem</td>
<td>Environmental restoration/conservation Assess need for relocation Climate Change scenarios to be taken into consideration</td>
<td>Minimal impact on ecosystem Study to determine impact on Community and Environment.</td>
<td>18 months</td>
<td>Ministry of Environment &amp; University of Mauritius, Ministry of Housing and Lands.</td>
</tr>
<tr>
<td>2</td>
<td>To rebuild any damaged structure/facility</td>
<td>To rebuild bridges, roads/facilities</td>
<td>50% of damaged roads, buildings, any other facilities will be rebuilt/restored post disasters</td>
<td>12 months (roads) 6 months (others)</td>
<td>MPI/NDU/RDA/Local Govt.</td>
</tr>
<tr>
<td>3</td>
<td>Evacuation exercise of disabled, aged person in event of disaster</td>
<td>Each village council should elect a councillor who will identify residences of disabled, aged persons and act as resource person for evacuation.</td>
<td>Registration of all residencies of disabled, aged persons in disaster prone villages.</td>
<td>12 months</td>
<td>Local authority</td>
</tr>
</tbody>
</table>