

Inputs provided by: *United Nations Office for Disaster Risk Reduction (UNISDR)*

Mapping of existing institutional arrangements that address loss and damage associated with climate change impacts, including extreme weather events and slow onset events

1. General description of mandates and objective(s) of your organization / associated network with institutional structure

The United Nations Office for Disaster Risk Reduction (UNISDR) serves as the focal point in the United Nations system for the coordination of disaster reduction (www.unisdr.org). The Office work to ensure synergies among the disaster reduction activities of the United Nations system; regional and national organizations; socio-economic and humanitarian fields. UNISDR's mandate includes supporting the implementation of the "Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters". The Hyogo Framework for Action (HFA) is the guiding document in strengthening and building international cooperation to ensure that disaster risk reduction be used as a foundation for sound national and international development agendas. UNISDR has also a major role in producing assessing global risk from natural hazards and promoting good practice for risk assessment.

2. Relevant operational framework(s)

UNISDR has four strategic objectives that will guide its work through to 2015: (i) lead and coordinate - strengthened support to the implementation and coordination of the ISDR and the Hyogo Framework of Action (HFA) and improved coherence with climate change adaptation and the Millennium Development Goals (MDGs); (ii) credible evidence - producing and disseminating credible evidence to strengthen decision-making at local, national and regional levels in support of disaster risk reduction, climate change adaptation and achievement of the MDGs; (iii) advocacy and outreach - increased public and private sector investments in disaster risk reduction and climate change adaptation through advocacy and outreach; and (iv) deliver and communicate results - more effective, results-driven UNISDR secretariat to carry out its mandate.

3. Focus areas of risk management for loss and damage associated with climate change impacts

(Please provide information on the areas of work in relation to the items included in decision 3/CP.18 as listed in the introductory note as well as any additional focus areas, that your organization/associated network has been mandated to address. These could include relevant institutional policy statements/operational guidance documents etc. Please provide web links where further details can be found.)

(a) Developing national Disaster Loss Databases

The need for systematic data for disaster mitigation and prevention is an increasing concern of both development and response agencies. In the past, data needs were addressed on an ad hoc basis, which included collecting the information at the time of the emergency. However, there is a growing importance and understanding that data collection, analysis, and management can help both short and long-term development goals and help to identify and address disaster risks. UNISDR has been supporting countries to develop disaster loss databases, through training and supporting governments to develop such databases, as well as to work with a variety of partners to share data, as well as promoting and contributing to the development of standard for data collection and storage.

For instance, UNISDR is supporting the development and application of DesInventar, the Disaster Information

Management System, which is “a sustainable arrangement within an institution for the systematic collection, documentation and analysis of data about losses caused by disasters associated to natural hazards” (www.desinventar.net). This is a tool for generating National Disaster Inventories and constructing databases that capture information on damage, loss and general effects of disasters. With increased understanding of disaster trends and their impacts, better prevention, mitigation and preparedness measures can be planned to reduce the impact of disasters on the communities.

(b) Developing and Producing the Global Assessment Report on Disaster Risk Reduction (GAR) and Global Risk Assessment

Under the strategic objective ii, the UNISDR produces a bi-annual UN publication on disaster risk, Global Assessment Report (GAR) (www.preventionweb.net/english/hyogo/gar/2013/). This report is based on a global assessment of risk from natural hazards. It constitutes a major instrument to provide global risk evidence to national governments, international organizations, practitioners with a direct impact on the policy engagement for disaster risk reduction and shaping DRR practices. This report provides a unique gateway for disseminating and advocating the effective use of the project’s results for developing national policies and practices on volcanic disaster risk reduction, particularly in low income countries.

The work of the GAR is linked with the UNISDR initiative to produce disaster risk assessments for the whole globe (www.preventionweb.net/english/hyogo/gar/2013/en/gar-pdf/Annex_1.pdf). These work has been carried out in collaboration with lead international experts on hazard and risk assessment, including ACSAD, FEWS-NET, CIMA Foundation, CIMNE and associates, GEM Foundation, Geoscience Australia, NGI and UNEP-GRID.

This assessment has been carried out by developing hazard and risk models that have followed and advanced the state-of-the art on probabilistic assessment. Risk is calculated by taking into account all the components of the risk: hazard, exposure and vulnerability. The hazard is produced basing on a stochastically generated set of all the events that could possibly occur, each associated with a frequency of occurrence. Climate-related (cyclones, flood, drought) as well as non-Climate-related (earthquake, volcanic, tsunami) hazards are included in this assessment. In this way the model is able to statistically represent the probability of events that have not yet occurred at a given location. Once the hazard is defined, it is then possible to calculate the losses related to each of the ‘possible’ events. Each of these losses is thus linked with their actual annual probability of occurrence (or frequency). Different events with the same probability of occurrence are modelled, to allow for a relevant spatial coverage but also to obtain a satisfactory spectrum of losses for each frequency. The key output of a fully probabilistic risk assessments are normally expressed as a loss exceedance curve, in other words the likelihood of having certain losses expressed in terms of their occurrence rate, usually expressed per year. Further details on this model can be found in www.preventionweb.net/english/hyogo/gar/2013/en/home/documents.html

This global risk assessment as well as the whole report constitute a major instrument to provide global risk evidence to national governments and international organizations, with a direct impact on the policy engagement for disaster risk reduction.

(c) Building capacities for increased public investment in integrated climate change adaptation and disaster risk reduction.

UNISDR is carrying out an initiative “funded by EC DEVCO” to support countries to understand and measure their risks by systematically accounting for disaster loss and developing probabilistic estimations, with an emphasis in weather and climate change related hazards. This initiative, extended to about 40 developing countries, has been providing technical assistance aiming to:

- build capability on risk assessment in countries
- improve knowledge of the risks that each country faces, including developing historical loss databases and probabilistic risk profiles at national level
- design a comprehensive risk management strategy
- establish risk financing and transfer mechanisms

(d) UNISDR "Making Cities Resilient" campaign

The UNISDR "Making Cities Resilient" campaign addresses issues of local governance and urban risk as well as on the sustainable urbanizations principles developed in the UN-Habitat World Urban Campaign 2009-2013. The campaign focuses on implementation support, city-to-city learning and cooperation, local action planning and monitoring of progress in cities. In addition, the campaign advocates widespread commitment by local governments to build resilience to disasters including adaptation and mitigation of climate change impacts. Cities are encouraged through the Campaign to assess and map their risk, vulnerabilities and record systematically the disasters and losses incurred with a view to minimize them through improved city strategies, land use planning, resilient infrastructure and people-centered preparedness measures.

(e) Global, Regional and National Platforms for Disaster Risk Reduction

UNISDR coordinate international efforts in DRR and guide, monitor as well as report regularly on the progress of the implementation of the Hyogo Framework for Action, which aims at building resilience of nations and communities and reducing losses from disasters.

UNISDR organizes and convenes a biennial Global Platform on disaster risk reduction with leaders and decision makers to advance risk reduction policies and support the establishment of regional, national and thematic platforms. Regional platforms are also organized by UNISDR as multi-stakeholder forums that reflect the commitment of governments to improve coordination and implementation of disaster risk reduction activities while linking to international and national efforts. The global and regional platforms are usually informed with trends of disasters and global and regional trends of risks, good [practices in disaster risk reduction and collective efforts to enhance capacities and knowledge on disaster risk reduction that covers and includes to a large extent climate change, its impacts, associated risk and potential losses.

National Platforms are nationally owned and led multi-stakeholder forum or committee working on disaster risk reduction. They reflect the commitment of its government to implement national and local disaster risk reduction activities while linking up to international efforts. Often national platforms for DRR represent the stakeholders working on national adaptation plans to climate change or supporting the efforts on CC adaptation.

4. Geographic coverage

The risk assessment carried out for the Global Assessment Report is at a global scale, including 208 countries and territories.

UNISDR in partnership with governments, NGO's and academic institutions in Latin America and the partnership UNDP-UNISDR in Asia and Africa have successfully applied the 'DesInventar' methodology and software to build more than 50 national disaster databases plus a regional Pacific database.

The initiative "Building capacities for increased public investment in integrated climate change adaptation and disaster risk reduction" targets 40 developing countries, among which four countries of the Indian Ocean Commission, at least four Caribbean countries and at least four West African countries.

Within the "Making Cities Resilient" campaign, 113 cities worldwide have reported progresses on the 10 essentials and HFA between March 2012 and April 2013.

5. Key stakeholders

National and local governments, civil protection agencies, planning agencies, ministry of finance, sectorial ministries in some cases, NGOs, international organizations, business sector, private citizens, academic, scientific and research institutions, Intergovernmental Regional Organizations

6. Implementation modality / delivery mechanisms

The Global Assessment Report is developed by UNISDR Risk Knowledge Section, a team of international experts in physical sciences, risk modelling, economics, social sciences, political sciences, information technologies and communication. The UNISDR team is supported by over 30 world leading academic institutions, which produce bespoke research to answer specific issues for the Global Assessment Report.

The Disaster Loss Databases training and support to countries is provided by the UNISDR Risk Knowledge Section as well as the experts from UNISDR's Regional Offices in collaboration with national government DRR/HFA focal points.

The national risk profiles and the capacity building program within the EC DEVCO initiative "Building capacities for increased public investment in integrated climate change adaptation and disaster risk reduction" have been carried out by the experts from the UNISDR Risk Knowledge Section, in collaboration with WB GFDRR and UNDP.

Please provide information related to the technical, financial and institutional support mechanism

UNISDR counts on the technical support of lead international experts on hazard and risk assessment, including ACSAD, FEWS-NET, CIMA Foundation, CIMNE and associates, GEM Foundation, Geoscience Australia, NGI and UNEP-GRID.

Technical support to the DesInventar platform is mostly from the team of UNISDR Risk Knowledge Section.

UNISDR also counts of a highly capable Information Management Unit and Communication teams, which provide technical support for most of the visual and dissemination products, including websites and publication. The visual products of the Global Assessment Report have been developed in collaboration between UNISDR team and the "Earth Literacy Program", a non-profit organization whose scope is the communication and dissemination of information on the environmental challenges currently facing our planet through using cutting edge design and technology (<http://www.elp.or.jp/en>)

UNISDR work is fully supported by voluntary contributions to the UN Trust Fund on Disaster Risk Reduction. More info on UNISDR donors is available here: (<http://www.unisdr.org/who-we-are/donors>).

Please provide information related to reporting, if any

Besides the Global Assessment Report, the UNISDR activities are fully reported in the UNISDR Annual Report series. (www.unisdr.org/who-we-are/programme-and-reports). Further than this, UNISDR has produced over 500 publications, guidelines and reports in collaboration with various partners <http://www.unisdr.org/we/inform/publications>

UNISDR regularly receives independent evaluations to assess the effectiveness of the organization in performance and its functions and responsibilities.

7. Key activities / outputs to date

Global Assessment Report on Disaster Risk Reduction issued biennially since 2009. All editions available online at <http://www.preventionweb.net/gar>

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UNISDR in partnership with governments, NGO's and academic institutions in Latin America and the partnership UNDP-UNISDR in Asia and Africa have successfully applied the 'DesInventar' methodology and software to build more than 50 national disaster databases worldwide plus the Pacific region database. All databases are available at <http://www.desinventar.net>

The initiative "Building capacities for increased public investment in integrated climate change adaptation and disaster risk reduction" has already started in 4 countries of the Indian Ocean Commission and 4 Caribbean countries.

Within the "Making Cities Resilient" campaign, 113 cities worldwide have reported progresses on the 10 essentials and HFA between March 2012 and April 2013.

8. Any additional information and contact details

<http://www.preventionweb.net/english/hyogo/gar/2013/en/home/index.html>

http://www.preventionweb.net/english/hyogo/gar/2013/en/gar-pdf/Annex_1.pdf

http://www.preventionweb.net/english/hyogo/gar/2013/en/gar-pdf/Annex_2.pdf

<http://www.desinventar.net>

<http://www.desinventar.org>

<http://www.unisdr.org/campaign/resilientcities/about>

<http://www.elp.or.jp/en>

<http://www.unisdr.org/who-we-are/donor>

<http://www.unisdr.org/we/inform/publications>