



Facilitator of the Nairobi Work Programme

c/o: UNFCCC Secretariat  
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Subject **Views and information from Parties and relevant organizations and other stakeholders, taking into account the outcomes of the implementation of the work programme on loss and damage prior to the submission on the possible elements to be included in the recommendations on loss and damage in accordance with decision 1/CP.16. (Decision 7/CP.17, paragraph 9)**

The United Nations Development Programme (UNDP) thanks the SBI for the opportunity to comment on the implementation of the work programme on *approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change*.

UNDP recognizes the value of the work programme on Loss and Damage and congratulates the UNFCCC for successful organization of one global workshop and three regional workshops under this work programme in 2012. These workshops have provided the opportunity to capture the needs emerging in all regions and the experiences and lessons learned related to the issue of loss and damage associated with climate change. UNDP is also looking forward to participating as an active observer in the upcoming regional expert meeting to be held in Barbados.

As the international community moves forward with its discussions on this issue, it remains important to recognize the broad scope of challenges and approaches associated with loss and damage existing globally. The types of impacts being discussed include slow-onset events such as sea level rise, desertification and temperature increases, as well as extreme events such as drought, floods, flash floods, tropical cyclones, and increasing frequency of other hydro-met disasters. As a result, addressing loss and damage will look different depending on the national situation, due to unique climate impacts as well as distinct capacities and a unique development context.

In response to the increasing need to address the risks of loss and damage posed by climate change, work must continue at the national and sub-national level to assess risks associated with climate change and identify innovative strategies to addressing these risks. As such, UNDP has identified three key areas where further work can be focused. In the table below, each of these three areas are elaborated based on challenges and issues identified during the recent workshops held under the Loss and Damage Work Programme, as well as lessons learned from UNDP's extensive experience in-country. Finally, examples of ongoing work aimed to address some of these challenges are also included.



Data Needs		
Challenges and Needs identified during the Loss and Damage Work Programme	Lessons from UNDP's experience	Examples from UNDP's work
<p>Data on historical loss and damage is a key risk assessment input</p>	<p>Data on losses and damages associated with historical hazard events have been compiled globally and at country-level in over 45 countries. The quality of the latter is uneven, however. Areas for improvement include:</p> <ul style="list-style-type: none"> <li>• a need for greater institutionalization of data collection, reporting and use</li> <li>• data quality assurance including of primary loss and damage data</li> <li>• consistency in the way losses and damages are attributed to specific hazards on an event-by-event basis.</li> </ul>	<ul style="list-style-type: none"> <li>• UNDP has contributed to on-going country-level support on institutionalization of loss and damage accounting systems in 20 countries, including adoption and application of standards and quality control of data, in partnership with WMO, National Meteorological Services, UN CT members, IFRC and others.<sup>1</sup></li> <li>• UNDP leads on behalf of the UN system on the implementation of Post Disaster Needs Assessments (PDNAs) in partnership with the European Commission and the World Bank, contributing to the standardization of primary loss and damage data collection at country level.</li> <li>• The Regional Risk Reduction Initiative (R3I) is strengthening hazard mapping and vulnerability assessment capacities in the Caribbean by improving GIS technical skills and equipment, and tools and processes for data collection and management of national databases</li> </ul>

<sup>1</sup> Documentation on UNDP support to loss and damage accounting systems in Asia can be found at <http://www.gripweb.org/gripweb/?q=countries-risk-information/methodologies-tools/guidelines-and-lessons-establishing-and>.

Historical hazard event data is insufficient for assessing risks of future losses and damages; Additional data is needed on exposed assets, their vulnerabilities to specific hazards, and hazard event return periods factoring in future climate scenarios

Information on hazards, exposure and vulnerability are limited at the country-level and local scales. Locally-resolved, geo-referenced data on exposed elements such as agricultural areas, settlements and infrastructure, are needed as a basis for assessing risks of socio-economic impacts including loss and damage.

Data has been gathered over the past few decades by the Disaster Risk Reduction community, which can provide a baseline for future data collection

There is significant global experiences on damage and loss accounting, but more work must be done related to slow-onset events and the incremental costs of climatic changes and accounting of non-economic impacts

- Under the Africa Adaptation Programme (AAP) funded by the Government of Japan, UNDP supports 20 countries in Africa, including 10 LDCs, to generate, analyze and share diverse national and sub-national level data. Examples of activities include procuring, installing and maintaining high performance computer services, promoting open source data and content management systems, developing Action Intelligence to analyze socio-cultural data, assessing economic costs of climate change in key sectors, and setting up wireless networks to share data between Ministries.
- UNDP Supports disaster risk assessment capacity development in approximately 35 countries annually through its country programmes. This includes assisting countries to assess their current inventory of hazard exposure, vulnerability and loss data.<sup>2</sup>
- UNDP has actively supported the collection of data on slow-onset events. For example, at the request of CARICOM, UNDP has commissioned work to model the transformational impacts and costs due to sea-level rise in the Caribbean region. The study included recommendations on improving the information base for informed decision making on adaptation to climate change. Further work is now underway on a new study to assist Caribbean SIDS policy makers and negotiators to better understand the implications of slow onset events within the context of loss and damage.

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<sup>2</sup> see [www.gripweb.org/gripweb/sites/default/files/disaster\\_risk\\_profiles/mozambique\\_CSA\\_2012\\_04\\_25\\_WA.pdf](http://www.gripweb.org/gripweb/sites/default/files/disaster_risk_profiles/mozambique_CSA_2012_04_25_WA.pdf)

## Capacity Needs for Risk Assessments

### Challenges and Needs identified during the Loss and Damage Work Programme

### Lessons from UNDP's experience

### Examples from UNDP's work

There are serious capacity gaps at the national level to continually assess the risk of loss and damage from a changing climate. There is need for sustained support at the national level;

Understanding available risk assessment methodologies and how to apply them is a challenge in many countries. While many methodologies exist, the most appropriate approach must be identified for the specific context and the questions being asked.

Many risk assessments have ended up on the shelf with little or no demonstrable decision-support impact.

Active engagement of decision makers in risk assessment processes contributes to a better understanding of the results and, hence, to an increased use of risk assessment in policy and decision making processes. This includes capacity building which is essential in order to ensure country-owned and driven assessments.

- Through its country programmes, UNDP is actively engaged in supporting countries to develop capacity to not only undertake risk assessments but apply their results, expand and improve the documentation of disaster-related losses, coordinate the generation of evidence-based risk information and facilitate its applications to policies, decisions and investments at all levels.<sup>3</sup>
- UNDP has supported capacity building in the Caribbean in effectively capturing the impacts of natural and other hazards in a consistent and coherent approach using the UNECLAC Damage and Loss Assessment (DALA) methodology, a component of the PDNA methodology developed by the UN, EC and World Bank. This remains a priority in the Eastern Caribbean
- In Mexico, Tijuana, the UNDP Global Risk Identification Programme (GRIP) implemented a global pilot project to demonstrate the use of risk assessment and information to support humanitarian activities and enhance community preparedness. Risk mapping was utilized for pre-disaster shelter planning in a project implemented on behalf of the Global Emergency Shelter Cluster, together with international, national and local institutions. As a result of the project the city of Tijuana now has a clear plan of action in case of an emergency, which is being revised annually. In 2010 the city passed a new civil

<sup>3</sup>Examples include in Laos (<http://www.gripweb.org/gripweb/?q=countries-risk-information/documents-publications/national-risk-profile-laos>) and Myanmar (<http://www.gripweb.org/gripweb/?q=countries-risk-information/documents-publications/multi-hazard-risk-assessment-nargis-affected-areas>)

The Disaster Risk Reduction community provides experience and data which must be built on for climate-related risk and vulnerability assessments

Combining different methodologies which examine historical climate behavior, current trends, future scenarios and climate impacts on development will all contribute to identifying and prioritizing climate-related risk

protection law and these efforts are currently being replicated in the other 4 main cities of Baja California State, Mexico. This success highlights the need to ensure the involvement of local institutions and decision-makers in the risk assessment process.

- In Egypt, UNDP is supporting an initiative financed by the Special Climate Change Fund (SCCF), which has trained over 30 engineers and scientists from Shore Protection Authority, Coastal Research Institute and Marine Survey Authority on international/regional methodologies for climate change risk assessment and adaptation intervention measures and the fundamentals of risk assessment of Sea Level Rise on coastal zones. The training was a first step in introducing soft engineering solutions that will be followed by hands-on training during the design and implementation of the project pilots.
- Through the Climate Risk Management Technical Assistance Support Programme UNDP has worked with national governments in seventeen high-risk and climate sensitive countries to complete country reports on climate-related risks and risk management capacity. The climate risk assessments in these countries focus on assessing the risks and impacts on one key socio-economic development sector and on the overall risk profile especially the extreme events. The methodology entails compiling and analyzing climate data/information on three time-scales: historical data, current/observable trends, and projected scenario and multi-stakeholder interaction. The process is used to identify climate risk management options (risk reduction and adaptation options) for mitigating the risks and impacts.

Robust Institutions		
Challenges and Needs identified during the Loss and Damage Work Programme	Lessons from UNDP's experience	Examples from UNDP's work
An essential part of effective planning for loss and damage is robust institutions which are capable of planning and executing evidence-based decisions	In many countries, capacity development is needed to strengthen institutions' ability to manage risk, including strengthening local institutions that often serve as safety nets that help communities bounce back climate-induced impacts	<ul style="list-style-type: none"> <li>• Under the ERC, R3I and CRMI projects, work has been focused on investing in regional institutions to facilitate their sustained support to countries, particularly given that Caribbean countries are small and have limited resources. R3I has also sought to increase the engagement between national agencies (e.g. DM, GIS, Planning, Public Works, Met Services, Police, Fire) to improve their coordination on data sharing, development of risk mitigation measures, and response.</li> <li>• Through an initiative funded by the Least Developed Countries Fund (LDCF), UNDP is supporting Cambodia to reduce vulnerability of the agricultural sector to climate-induced changes in water resources availability. Through this project, all technical staff from the Provincial Department of water Resources and Meteorology have been trained on resilient irrigation systems. The initiative has also contributed to the formulation of the Ministry of Agriculture, Forestry and Fisheries (MAFF) climate change technical team through experience sharing from the field and involvement of the MAFF focal points in various knowledge and training events. In the long-run, this will have a significant impact on the sectoral policies and approaches that MAFF takes.</li> </ul>
With regards to risk transfer, several countries have recognized the need to strengthen capacities for institutions to engage with insurance schemes as a means for risk transferring	Several countries, primarily Middle Income Countries, have strengthened enabling environments to ensure institutional readiness to engage with market-based mechanisms. Several Caribbean countries have joined a parametric risk transfer mechanism,	<ul style="list-style-type: none"> <li>• UNDP in Peru has aimed to advance the risk management capacity of rural communities and the working poor in northern Peru to manage the consequences of catastrophic rainfall and flooding from severe El Niño events. UNDP and GlobalAgRisk are facilitating the market development process for index-based El Niño Insurance that can be utilized by households, producer associations, and the regional government in Piura to facilitate</li> </ul>

but face challenges with regards to understanding what is cost effective, what thresholds to adopt and how much insurance to purchase

To support risk assessments and their application for national policies, it is important to bring in all relevant actors at the national and sub-national level to inform the process.

Structures must be in place to support input from a range of line Ministries including planning and finance departments, national academic and research institutions, as well as non-governmental stakeholders and community based organizations which can provide valuable insight into risk trends, impacts and approaches to addressing such risks.

improved resilience and adaptation to El Niño and other climate risks within the community.

- UNDP is committed to supporting countries to strengthen coordination between government stakeholders and establish coordination mechanisms between Ministries. For example, UNDP is currently assisting Jamaica in the planning and design of an institutional coordination mechanism on climate change, learning from other countries' experiences.
- UNDP has provided technical support to the CARICOM Task Force for Climate Change and Development established by the CARICOM Heads of State and Government, which is responsible for coordinating a common regional approach to address the threats and challenges of climate change. UNDP also has helped to build the capacity of Caribbean diplomats on climate change and development issues. UNDP is currently working with UNISDR to advance the effective HFA monitoring and reporting to include national stakeholders