

Building Disaster Resilience to Natural Hazards in Sub-Saharan African Regions, Countries and Communities

Component 1: Enhancing risk information through the implementation of national disaster loss databases.

Improving risk knowledge through the implementation of national disaster loss databases

The UN Office for Disaster Risk Reduction (UNISDR) is the focal point in the United Nations system to ensure coordination and synergies among disaster risk reduction activities of the United Nations system and regional organizations and activities in socio-economic and humanitarian fields. As leading agency for the implementation of the Sendai Framework for Disaster Risk Reduction (2015-2030), UNISDR is providing technical support to countries for the establishment and maintenance of their disaster loss databases.

Hazard assessment and risk information are inadequate in many countries in Africa mainly due to the lack of capacity that results in a failure to inform decision-making processes. Risk information, as an output of effective monitoring, dissemination and analysis, is key to addressing disasters and disaster risks in the continent. This is not only considered to be important in terms of forming the basis for early warning systems and contingency planning, but also informing investment and development decisions.

The development of national disaster loss databases represents a low-cost, high impact strategy to systematically account for disaster losses. As such, this is the crucial first step to generate the information necessary for risk estimation and to inform public investment in Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR). As a second step, the physical losses recorded in the databases are translated into monetary/economic losses enabling an initial evidence-based estimate of recurrent losses.

Systematically accounting for losses and comprehensively assessing risks help governments categorize and stratify their stock of both extensive and intensive disaster risks. Cost-benefit and other analyses can then be used to assess economic and political costs and benefits of different prospective, corrective and compensatory adaptation and risk management approaches. A well-balanced portfolio of CCA/DRM investments can produce powerful incentives for governments, including the enhanced quality and sustainability of public spending, increased public safety and business continuity, strengthened financial protection and fiscal stability, and avoidance of political fallout in the event of a catastrophic disaster.

The Sendai Framework for Disaster Risk Reduction (2015-2030)

The Sendai Framework for Disaster Risk Reduction 2015-2030 is the first of several international agreements of the Post-2015 Development Agenda. Building on the Hyogo Framework for Action (2005-2015), this agreement was signed by all UN Member States in March 2015 in Sendai, Japan, with the following expected outcome over the next fifteen years:

“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.”

To achieve this outcome, the following targets were established:

- (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 the present Framework by 2030;
- (g) Substantially **increase the availability of and access to multi-hazard early warning systems and disaster risk information** and assessments to people by 2030.

As can be seen, four out of seven targets (a to d) point to the reduction of human, physical and economic disaster damages and losses as a crucial requirement for the achievement the Framework. This raises the importance of having disaster loss accounting systems. Accounting losses is an essential step for monitoring the progress against the Sendai Framework. Moreover, having a disaster loss accounting system equally helps countries and communities to build resilience based on reliable, nationally-sustained information that helps to take future risk-informed decisions for preventing and reducing disaster risk.

Strengthening capacities for national and regional loss accounting.

- **National/Regional workshop:** representatives of selected government agencies, UN and scientific and technical partners, will convene for a workshop in which they will be familiarized with the methodology and tools for building national disaster loss databases.
- **Data collection and entry:** national teams in each country will identify data sources (including government, media and other databases), collect historical disaster data covering a thirty (30) year period and enter the data into the database. On-line technical assistance (and if necessary on-site) will be provided to the national teams by UN and scientific and technical partners.
- **Data validation and cleaning:** the database will then be thoroughly checked for inconsistencies and errors (normally a subset of data entries are reviewed or eliminated in this process) in order to provide an accurate and reliable source of disaster data.

- **Using disaster loss data through DesInventar open-source software:** DesInventar is not only a disaster loss database that collects data in a standardized and rigorous way, but a software that allows to display, organize and extract data, facilitating its analysis and enabling risk-informed planning, policy and decision-making.

Objectives of the workshop:

- Develop national and institutional capacities for managing disaster risk information systems.
- Train participants in the concept, methodology and use of the National Loss Accounting System using the DesInventar methodology.
- Train national institutions in the implementation of the national database.
- Promote synergies between the institutions for data collection and sharing.
- Train participants for collecting and registering information in a methodical and rigorous way.
- Strengthen the capacities for developing temporal, spatial and event analysis based on the DesInventar methodology.