

## **Disaster risk reduction plan**

**Disaster risk reduction :** Disaster risk reduction is defined as the concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse effects. Disaster reduction strategies include, primarily, vulnerability and risk assessment, as well as a number of institutional capacities and operational abilities. The assessment of the vulnerability of critical facilities, social and economic infrastructure, the use of effective early warning systems, and the application of many different types of scientific, technical, and other skilled abilities are essential features of disaster risk reduction.

$$\text{Disaster risk (R)} = \frac{\text{Vulnerability (V)} \times \text{Hazard (H)}}{\text{Capacity (C)}}$$

OR

Disaster risk = function of H and V/C

The Disaster Risk Reduction (DRR) Programme assists Members in developing and delivering services that are directed at protecting lives, livelihoods and property from natural hazard in a cost-effective, systematic, and sustainable manner. This ultimately contributes to resilient and sustainable development under a changing climate.

The scope of the Programme encompasses strengthening the National Meteorological and Hydrological Services' (NMHSs) capacities to:

- support preparedness through early warning systems;
- provide hazard information for risk assessments, prevention, response and recovery, and risk transfer across sectors;
- mitigate existing risks and prevent the creation of new risks;
- respond to user requirements; and,
- cooperate and engage in disaster risk governance structures at all levels.



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**Spatial planning:** Disaster risks should be taken into consideration when development master plans are being prepared or revised and updated. The focus should be on the different risk factors and the incorporation of multi sectoral aspects such as water and sewerage systems management, environmental management, infrastructure development, flood mitigation, zoning and land use

**Modification and enforcement of building codes:** Another significant component of this pillar is the introduction of mandatory building codes and their enforcement in all areas. Building codes should incorporate the concept of essential infrastructure (i.e. assets that are critical for the operation of society and the economy). Essential infrastructure, particularly that related to food storage and the supply chain, health, education, water, energy and telecommunications, must be properly designed and constructed to withstand the most common hazards

**Management of public investment:** It is highly advisable for any new public investment in infrastructure to be based on a country's development plan and for it to incorporate a multi-hazard assessment component that can contribute to DRR efforts. Ministries responsible for project approval should include investment and infrastructure protection measures throughout the project, starting with the feasibility and design phases. Public and private investments in structural and non-structural measures for disaster prevention and DRR are needed to increase

the economic, social, health and cultural resilience of people, communities, countries and their assets along with the resilience of the environment itself. These factors can drive innovation, growth and job creation.