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FACTSHEET

Disaster Risk Assessment and Monitoring

Fundamental steps towards effective disaster risk management

In view of expanding disaster risks in many Asian countries, there is a growing need to profile hazards along with associated exposure, vulnerability and risks to populations. Asian Disaster Preparedness Center (ADPC) offers services ranging from conducting risk assessment at various levels to building capacities of national agencies and universities in order to undertake risk assessment using multi-disciplinary teams of specialists as well as geographic information systems and remote sensing for data presentation and analysis.

ADPC conducts hazard, vulnerability, and risk assessments across the Asia-Pacific region including Bangladesh, Cambodia, Indonesia, Lao PDR, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Timor-Leste and Vietnam.

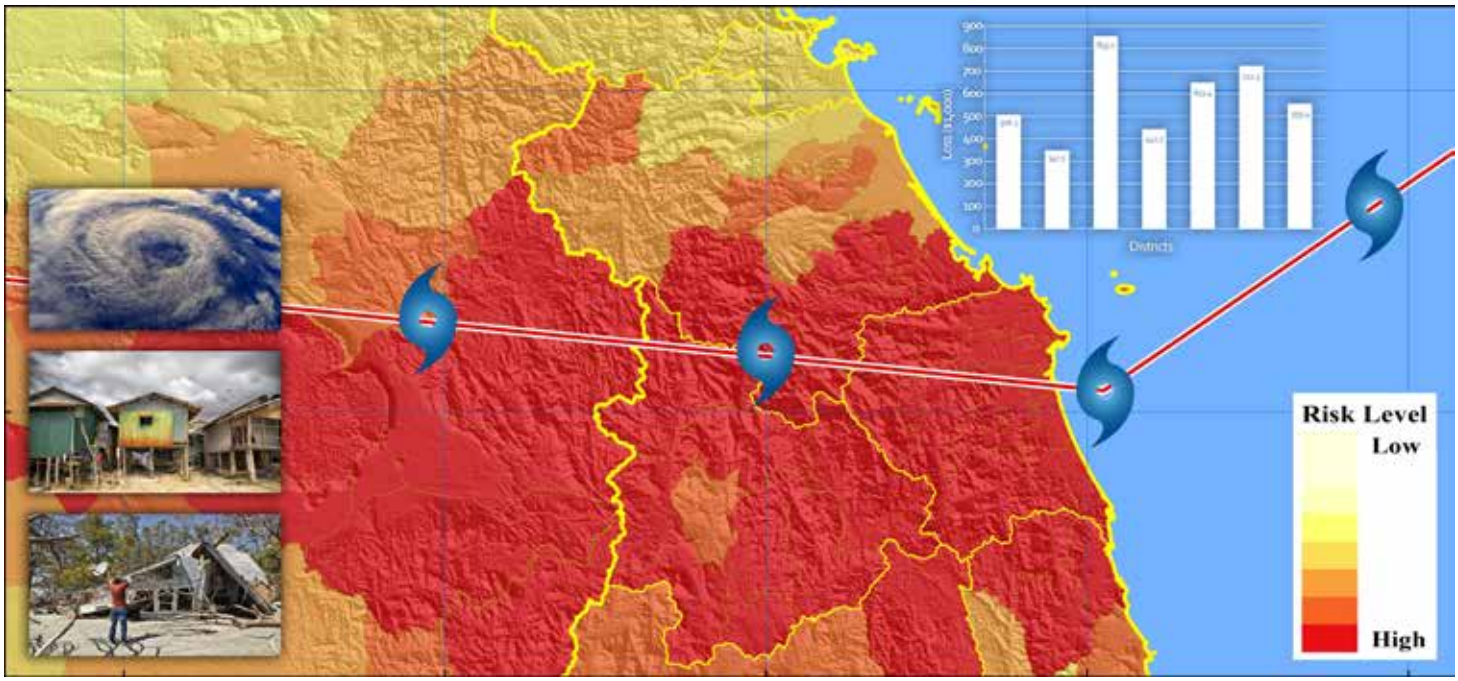
ADPC's Disaster Risk Assessment and Monitoring Department brings together advanced technology, sound scientific approaches, and multi-disciplinary expertise in quantifying the disaster risk. We undertake risk assessment activities at various geographical scales from the national and sub-national hazard risk profiling to the city- or community-specific estimation of vulnerability and risk.

Our Services

To better prepare government agencies, cities and communities for unexpected hazards, ADPC offers a wide range of services in disaster risk assessment and monitoring:

- Hazard assessments
- Development of spatial database of buildings and infrastructures
- Conducting vulnerability field surveys
- Deriving risk indices for cities and provinces
- Estimating damages of hypothetical event scenarios
- Conducting risk assessments at local, city, sub-national, and national levels
- Training on risk assessment and its applications

Asian Disaster Preparedness Center
SM Tower, 24th Floor 979/69 Paholyothin Road, Samsen Nai Phayathai, Bangkok 10400 Thailand
Tel: +66 2 298 0682-92 Fax: +66 2 298 0012 E-mail: adpc@adpc.net Website: www.adpc.net



Cyclone risk is quantified and mapped using meteorological science, engineering principles, and geographic information systems.

Quantifying disaster risk to achieve improved disaster risk reduction

The risk assessments can be based on probabilistic approaches or on a series of 'what-if' disaster scenarios that suit the purpose of emergency response planning. Additionally, risk assessments consider hypothetical development scenarios aiming to improve future planning.

ADPC's scope of work covers various hazard types including geological, meteorological, hydrological, technological, man-made, and health hazards. We also take up the assessments of the risk of both pre- and post-disaster events as well as establish mechanisms for technology transfer and knowledge-sharing through our training programs.

The work in risk assessment extends beyond the quantification of the risk from extreme disaster events for implementing risk reduction interventions, and is also often is used to assist in the development of early warning systems.

In Focus

Disaster risk assessment for informed policy decision-making

In Lao PDR, ADPC developed national, provincial, and district-level risk maps to be used by the local officials in the planning of public investment projects. With the help of the maps, they could ensure that the disaster risk would not increase as a result of the development plans.

In Mandalay, Myanmar, ADPC developed a series of earthquake risk maps to be used as a base for the guidelines to integrate disaster risk information in urban land-use planning process.

In Mymensingh, Bangladesh, seismic risk assessment outcomes have been used to develop guidelines on risk-sensitive urban land-use planning by the local government.

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