

The world, especially Asia has recently faced a sharp surge in the frequency of severe natural disasters, and the effects have been devastating. More than 7,000 major disasters have been recorded since 1970, causing at least \$2 trillion in damage, killing at least 2.5 million people, and adversely affecting societies (UN, 2008). And some 75% of the world's population lives in areas affected at least once by natural disasters between 1980 and 2000 (UNDP, 2004). These alarming statistics alone should make natural disasters an urgent and high priority task to deal with in order to sustain the development efforts of most developing countries, especially in the Asia-Pacific region.

Natural disasters have caused severe damage and losses that lead to new structural modes in the spheres of economics as well as politics. One of the problems observed in this connection is the lack of knowledge about the economic impact of natural hazards prior to the occurrence of events due to the unavailability of potential scenarios of natural disasters. A reliable forecasting mechanism on the potential impacts of natural disasters on the aspects of both short-run and long-run economic consequences would help countries in designing structural as well as non-structural measures; in particular, risk transfer mechanisms in addressing the needs as a proactive approach. Hence the most important factor is to assess the damages and losses proactively and plan the development program in such a way that the vulnerability as well as the risk is reduced or eliminated.

As an effort in mainstreaming disaster risk reduction measures into the economic development process, the Asian Disaster Preparedness Center (ADPC) in partnership with Centre for Economic and Public Policy (CEPP), Deakin University, Australia, with the financial assistance of the Royal Norwegian Ministry of Foreign Affairs (MFA), has taken up an initiative to develop a pre-disaster loss estimation methodology in order to achieve a paradigm shift from reactive response to a proactive risk reduction culture.

Objectives

Given the fact that economic impact analysis of natural disasters is an imperfect science, the proposed initiative will formulate a super-structural macro-econometric model that would not only quantify the potential losses in various economic sectors, but also prescribe optimal policy mix for ensuring effective reallocation of available resources in the economy.

The following activities are planned under the proposed initiative:

- Devise a methodology;
 - for the systematic and consistent collection of data and assessment of the damage caused to housing, buildings, infrastructure, the environment and social and economic systems.
 - for long term economic modeling based on the financial losses derived from damages identified.
- Deliver a comprehensive training package targeted at building the capacity of key specialists from selected priority countries, and deliver the training at regional and national levels.

Partner Countries

Bangladesh, China, Nepal, Philippines, Sri Lanka & Vietnam



Target Beneficiaries

Disaster management professionals, specialists in National planning departments/ ministries, Central Banks, sector-based development planning specialists, research institutes, development partners.

Methodology

A consultative process involving a small focus group of identified specialists from selected candidate countries. Steering Committee comprised of members from target countries would utilize platform for gathering of national level loss & damage data, validation of the material developed under the project as well as for dissemination of the project outcome effectively at national level.

A regional level capacity building program will be designed and the conduct of the course at regional level will help in developing instructors to help institutionalization of the course at national level. Delivery at national level will be carried out subsequently with the assistance of the Steering Committee members.

Outcomes/Benefits

- Structural macro-econometric model for incorporating natural hazard induced indicators that would enable estimating the potential damage and economic losses caused to different sectors of the economy
- Training package targeted at building the capacity of key specialists
- Experience sharing and capacity building of experts



Timeframe

Two and a half years time span from July 2009 to December 2011.

Financial Assistance

Ministry of Foreign Affairs (MoFA)
- Royal Norwegian Government

Contact

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