



Damage and Reconstruction Needs Assessment Course

Session 1 - Introduction to Damage and Needs Assessment Methodology and Basic Concepts

This session briefly reviews the concepts associated with disasters: their nature and causes, phases and cycle. It elaborates on the causal link between exposure and vulnerability as they relate to the damage and reconstruction needs assessment. The session attempts to create a common language of basic terms and concepts that can be used by specialists from different disciplines who are involved in disaster assessment. It introduces the terminology used in ECLAC methodology and discusses the basic elements of disaster valuation. It also presents potential uses of the damage and reconstruction needs assessment in policy formulation.

Session 2 - Valuation of the Impact of Disasters

Disasters impact the welfare of people, in terms of lives and injuries that are difficult to quantify. Damage assessment therefore mostly focuses on socio-economic and environmental damages that occur as a consequence of natural catastrophes. These losses of assets and the impact on flows of goods and services vary according to local circumstances and the time, strength and duration of the disastrous event. Effects can be direct and indirect, and affect different sectors of the economy in distinct ways. Thus, assessment must be done carefully to avoid possible duplication. The session summarizes the methodology used to assess the overall impact of damages, in the short- and medium-term, on the main economic variables, social systems and the environment.

Session 3 – Prevention and Mitigation: Post-disaster Management

Post-disaster response is an opportunity to reconstruct in a way that makes the affected population and region less vulnerable to disaster risk. The choice of prevention and mitigation tools - structural, organizational, financial – and the process of choosing itself have long-term effects on vulnerability. The session reviews the mitigation and prevention measures that should be considered, the necessity of stakeholder involvement, the costs of mitigation and the challenges to its implementation.

Case Study 1 – El Salvador: Damages from 2001 Earthquakes

Using ECLAC methodology, the paper quantifies damages from the 2001 earthquake in El Salvador. According to estimates, the total damage was US\$1.6 billion. The damages are divided into direct damages and indirect losses, and the sectoral distribution of losses is also presented. The figures reveal that most of the damage was to physical infrastructure and equipment, followed by an increase in costs, losses in production, and diminished income in the provision of some services. Two thirds of the total damages was borne by private sector. These facts have implications for the specifics of the reconstruction program.

Case Study 2 – India: Gujarat Earthquake Recovery Program

Soon after an earthquake of magnitude 6.9 hit Gujarat on January 26, 2001, the Government of India requested the World Bank's urgent intervention to help address the unprecedented level of destruction. The Bank, along with the Asian Development Bank, immediately sent an assessment team to the devastated areas, and produced a joint damage and recovery assessment report in March 2001. The methodology used in the assessment is similar to that of ECLAC. This case study is based on the summary findings of the joint assessment.

Readings