

C. GUIDING PRINCIPLES OF THE DAMAGE AND NEEDS ASSESSMENT

Methodology Used for the Damage Assessment

22. The guiding principles for this evaluation are to: (a) identify the damage and losses incurred; (b) show the inter-relationship among the effects in the different sectors, highlighting the cross cutting elements among them; and (c) provide an appropriate framework for the recovery and reconstruction effort. This approach helps support a strategy that seeks to pursue three critical actions: sector prioritization, time sequencing, and resources required. This last element defines whether there is a resource gap to be filled.

23. The damage and losses assessment is intended to quantify the consequences of the disaster, and to provide a first attempt at identifying immediate and medium term reconstruction needs. The assessment's conceptual basis is the standard internationally accepted methodology developed by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC)⁹ which uses a stock/flow analysis that evaluates effects on: (i) physical assets that will have to be repaired/restored/replaced or discounted in the future; and (ii) income flows that will not be realized until the asset is repaired or rebuilt.

24. A sector-by-sector analysis of the damage and losses was undertaken, utilizing specific templates for information recording and gathering in order to ensure consistency of information, non duplication and comparability of the data. An effort has been made to distinguish between public and private sector damages and losses, and where relevant, reference is made to external components of both damage and losses.

25. Sectoral teams were organized with members from the three institutions (ADB, the United Nations, and the World Bank), with the appropriate mix of sectoral expertise (housing, agriculture, fisheries, infrastructure, livelihoods, social sectors, environment, as well as fiscal and financial aspects), that undertook field visits to the three affected states and union territory. Team members visited the severely affected districts and a sample of sites and locations that exemplified the type and extent of damage, losses and emerging needs. Meetings were held with the respective Chief Secretaries and their staff in each state and union territory and the visits had the valuable cooperation of the line departments, the district collectors and their teams. Community level organizations and NGOs, as well as local experts and relevant technical and scientific institutions were also contacted.

⁹ Reference: *Handbook for the evaluation of the socioeconomic and environmental impact of disasters* (LC/MEX/G.5, July 2003) available at the following web pages: www.eclac.cl/mexico, (“disasters”) www.worldbank.org/hazards/knowledge/other_res.htm and www.proventionconsortium.org/toolkit.htm.

Data covered (Damages, Losses and Reconstruction Needs)

26. The figures presented reflect in the first instance damage (direct impact) estimates. These refer to the effects on assets/stock/property, valued at agreed replacement unit values (as different from actual or possible reconstruction costs). The assessment considers the level of damage, i.e., whether an asset can be rehabilitated/ repaired, or was completely destroyed. The total damage and loss assessment also gives close attention to losses (indirect impact) which refer to income flows that will be affected, such as reduced or lost income, increased expenditures, etc. until the assets are recovered. These are quantified at the present value of such flows.

27. Given the short time available for the JAM, and the focus of local authorities on rapid emergency response with the need for a quick response in terms of reconstruction needs, the figures presented here should not be considered definitive, but rather a preliminary understanding to guide the recovery efforts. This quantification provides a basis for determining the impacts on relevant economic variables (by use of macroeconomic analysis and scenario modeling under different assumptions for the reconstruction potential and needs); and on the resource gap that these reconstruction scenarios imply.