

COURSE : DISASTER MANAGEMENT (MA/ MSc PART I)

Paper : V

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Topic : DAMAGE ASSESSMENT

INTRODUCTION :

Damage assessment is an important tool for retrospective and prospective analysis of disasters to assimilate the extent of impact of a disaster. This forms the basis for future disaster preparedness and preventive planning. It is essential in determining: what happened, what the effects were, which areas were hardest hit, what situations must be given priority and what types of assistance are needed, for example, Local, State, or Union? Emergency response can be more effective, equipment and personnel can be better used, and help can be provided quicker if a thorough damage assessment is performed beforehand.

The **basic objectives** of damage assessment could be summarised as follows:

- To make a rapid assessment of areas affected to know the extent of impact for purpose of immediate rescue and relief operations;
- To prepare estimates for the amount of relief to be provided and the mode of relief, be it food, clothing, medicines, shelter or other essential commodities;
- To make a detailed assessment regarding requirements for long-term relief and rehabilitation planning; and
- To identify focus areas for the purpose of 'retrofitting' actions in similar future situations.

Damage Assessment is therefore a prerequisite for effective disaster response effort. For effective decisions, officials responsible for organising post-disaster relief operations should be properly informed of the damage/possible damage should the event repeat itself some time in the future, so that they can know the needs, current, as well as prospective, in precise terms. They must have appropriate and timely information about: what happened, what needs to be done, and what resources are available? Their decisions can save lives; minimise injury, damage and loss; prevent any further escalation; prevent secondary hazards and inform people who need to know. Well-organised response will also help in building confidence and enhancing the credibility of the administration. Relief operations are essentially about the management of information and resources, which is based on assessments and reports carried out from time to time. Information is needed at all levels of administration but the nature of the information required varies from one level to another. Good assessment and reporting require forethought; hence, the assessment and reporting system should be established during the preparedness planning stage. Damage assessment is also a multi-disciplinary exercise involving officials from a cross section of experts and administrators from police, fire, health, engineering, public works, social scientists, non-profit organisations, community et al to get a comprehensive account of losses for adequate future mitigation planning. Some of the data required is already available in the form of baseline data

(maps, population statistic etc.), which however must also be supplemented by real time information regarding the extent/nature of on going damage during a disaster event, from the damage site (mostly in the form of incoming reports from various sources after the disaster, (from the disasters scene) as pre- disaster estimates, however accurate, may not provide sufficient information.

ESSENTIAL FEATURES OF DAMAGE ASSESSMENT

Flow of Information There is a clearly defined sequence to managing information: Converting raw data to useful information; Information input; Sorting (grading, collating, discarding what is unreliable); Evaluation; Decision making; Information output (dissemination); and Action .

Utility of Damage Assessment

The information would enable: Quantified assessment of losses that would accrue to farmers and the likely impact on food supply in the market. Planning interim assistance like insurance needs of identified vulnerable segments, which are mainly, small-scale farmers, repairing irrigation systems, contouring, farmland repair etc. that would help further mitigation efforts. Alternate supportive projects; also possibly for how long; leading to articulation of long-term strategy for generating sustainable livelihoods and therefore achieving risk reduction in the area.

Levels of Assessment

Damage Assessment is required at two basic levels of intervention. Firstly, it is required for emergency relief measures in which quick assessment of damage is the basis for the amount of relief material and food stocks that reach the disaster area. This type of an assessment is called Rapid Damage Assessment. At the second level would be, a detailed technical analysis of damage for long-term restoration and rehabilitation works. From a long-term perspective, damage assessment scrutinises the mechanisms of failure that took place during the disaster. It is called Detailed Damage Assessment. These studies are very useful for all prevention and mitigation efforts for disasters in the future.

Rapid Damage Assessment

The official agency for reporting estimates of disaster damages is usually the Revenue and Relief Department of the state government, as they are also the authority for distributing relief to affected persons. As usual, there is a hierarchy of officials who report from the lowest level of Villages/Panchayats through Blocks/Revenue Circles, Tehsils/ Talukas, and Subdivisions and finally to the districts and then to the state headquarters. However, relief agencies including NGOs also have their own damage assessment systems and teams to carry out the assessments.