

Understanding Disasters

As per the Oxford dictionary a disaster is “a sudden accident or a natural catastrophe that causes great damage or loss of life”¹.

A Disaster is an event or series of events, which gives rise to casualties and damage or loss of properties, infrastructure, environment, essential services or means of livelihood on such a scale which is beyond the normal capacity of the affected community to cope with. Disaster is also sometimes described as a “catastrophic situation in which the normal pattern of life or ecosystem has been disrupted and extra-ordinary emergency interventions are required to save and preserve lives and or the environment”².



The United Nations defines disaster as “the occurrence of sudden or major misfortune which disrupts the basic fabric and normal functioning of the society or community”.³

A disaster is an event of nature or man-made that leads to sudden disruption of normal life of a society, causing damage to life and property to such an extent that normal social and economic values available are inadequate to restore normalcy after a disaster.

Disaster may be defined as a “catastrophic situation in which the normal patterns of life have been disrupted and extraordinary emergency interventions are required to save and preserve human lives and the environment”.

A disaster is a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community’s or society’s ability to cope using its own resources. Though often caused by nature, disasters can have human origins (UNISDR)⁴

As per the Disaster Management Act 2005, a disaster is defined as “a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made cause, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area”⁵

Disasters produce a range of impacts; these include direct, secondary and indirect effects. Direct effects include deaths, injuries and physical damage. However, secondary disaster impacts such as releasing fire or hazardous material that is triggered by disasters. Finally, impacts include the ripple effect resulting from the flow of goods, services, unemployment etc.

Disaster Management:

As per Disaster Management Act, 2005, “disaster management” means a continuous and integrated process of planning, organising, coordinating and implementing measures which are necessary or expedient for:

- (i) Prevention of danger or threat of any disaster;
- (ii) Mitigation or reduction of risk of any disaster or its severity or consequences;

- (iii) Capacity-building;
- (iv) Preparedness to deal with any disaster;
- (v) Prompt response to any threatening disaster situation or disaster;
- (vi) Assessing the severity or magnitude of effects of any disaster; evacuation, rescue and relief;
- (vii) Rehabilitation and reconstruction;

Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.⁶

Disaster management includes⁷ administrative decisions and operational activities that involve

- Prevention
- Mitigation
- Preparedness
- Response
- Recovery
- Rehabilitation

Disaster management involves all levels of government. Nongovernmental and community-based organizations play a vital role in the process. Modern disaster management goes beyond post-disaster assistance. It now includes pre-disaster planning and preparedness activities, organizational planning, training, information management, public relations and many other fields. Crisis management is important, but is only a part of the responsibility of a disaster manager. The newer paradigm is the Total Risk Management (TRM) which takes a holistic approach to risk reduction.

Disaster Management Cycle

The traditional approach to disaster management has been to regard it as a number of phased sequences of action or a continuum. These can be represented as a disaster management cycle.

The basic disaster management cycle consists of six main activities



Key Phases of Disaster Management

There are three key phases of activity within disaster management:

1. **Pre – Disaster:** Before a disaster to reduce the potential for human, material or environmental losses caused by hazards and to ensure that these losses are minimized when the disaster actually strikes.
2. **During Disaster:** It is to ensure that the needs and provisions of victims are met to alleviate and minimize suffering.
3. **Post Disaster:** After a disaster to achieve rapid and durable recovery which does not reproduce the original vulnerable conditions

Traditionally people think of disaster management only in term of the emergency relief period and post disaster rehabilitation. Instead of allocated funds before an event to ensure prevention and preparedness. A successful disaster management planning must encompass the situation that occurs before, during and after disasters.

Pre – Disaster Phase

Prevention and Mitigation

Reducing the risk of disasters involves activities, which either reduce or modify the scale and intensity of the threat faced or by improving the conditions of elements at risk.

Although the term ‘prevention’ is often used to embrace the wide diversity of measures to protect persons and property its use is not recommended since it is misleading in its implicit suggestion that natural disasters are preventable. The use of the term reduction to describe protective or preventive actions that lessen the scale of impact is therefore preferred. Mitigation embraces all measures taken to reduce both the effects of the hazard itself and the vulnerable conditions to it in order to reduce the scale of a future disaster.

In addition to these physical measures, mitigation should also be aimed at reducing the physical, economic and social vulnerability to threats and the underlying causes for this vulnerability. Therefore, mitigation may incorporate addressing issues such as land ownership, tenancy rights, wealth distribution, implementation of earthquake resistant building codes, etc.

Preparedness

This brings us to the all-important issue of disaster preparedness. The process embraces measures that enables governments, communities and individuals to respond rapidly to disaster situations to cope with them effectively. Preparedness includes for example, the formulation of viable emergency plans, the development of warning systems, the maintenance of inventories, public awareness and education and the training of personnel. It may also embrace search and rescue measures as well as evacuation plans for areas that may be ‘at risk’ from a recurring disaster. All preparedness planning needs to be supported by appropriate rules and regulations with clear allocation of responsibilities and budgetary provision.

Early Warning

This is the process of monitoring the situation in communities or areas known to be vulnerable to slow onset hazards, and passing the knowledge of the pending hazard to people in harm’s way. To be effective, warnings must be related to mass education and training of the population who know what actions they must take when warned.

The Disaster impact

This refers to the “real-time event of a hazard occurring and affecting elements at risk. The duration of the event will depend on the type of threat; ground shaking may only occur in a matter of seconds during an earthquake while flooding may take place over a longer sustained period.

During disaster Phase

Response

This refers to the first stage response to any calamity, which include for examples such as setting up control rooms, putting the contingency plan in action, issue warning, action for evacuation, taking people to safer areas, rendering medical aid to the needy etc., simultaneously rendering relief to the homeless, food, drinking water, clothing etc. to the needy, restoration of communication, disbursement of assistance in cash or kind.

The emergency relief activities undertaken during and immediately following a disaster, which includes immediate relief, rescue, and the damage needs assessment and debris clearance.

The Post- disaster Phase

Recovery: Recovery is used to describe the activities that encompass the three overlapping phases of emergency relief, rehabilitation and reconstruction.

Rehabilitation: Rehabilitation includes the provision of temporary public utilities and housing as interim measures to assist long-term recovery.

Reconstruction: Reconstruction attempts to return communities to improved pre-disaster functioning. It includes such as the replacement of buildings; infrastructure and lifeline facilities so that long-term development prospects are enhanced rather than reproducing the same conditions, which made an area or population vulnerable in the first place.

Development: In an evolving economy, the development process is an ongoing activity. Long-term prevention/disaster reduction measures for examples like construction of embankments against flooding, irrigation facilities as drought proofing measures, increasing plant cover to reduce the occurrences of landslides, land use planning, construction of houses capable of withstanding the onslaught of heavy rain/wind speed and shocks of earthquakes are some of the activities that can be taken up as part of the development plan.

References:

¹<http://www.oxforddictionaries.com/definition/english/disaster>

^{2,3,5}Ministry of Home Affairs, Govt. of India, Disaster Management in India

⁴http://unisdr.org/files/7817_UNISDRTerminologyEnglish.pdf

⁶<https://www.ifrc.org/en/what-we-do/disaster-management/about-disaster-management/>

⁷Module 4 - Capacity Building in Asia using Information Technology Applications (CASITA) - Asian Disaster Preparedness Center (ADPC),Bangkok .

⁸<http://www.unisdr.org/we/inform/terminology>

⁹<http://www.emdat.be/>