

# Status of Preparedness Planning in India for Disaster Mitigation

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## Abstract

*Disasters cause sudden disruption to the normal life of a society and cause damages to property and lives to such an extent, that normal social and economic mechanisms available to the society, all get dispersed. People and officials are both caught unawares and in the circumstances lose their sense of initiative and direction. Consequently, relief work is hampered and unnecessarily delayed. In the last few years, due to realisation by all the nations of the world there has been a paradigm shift from disaster management, post-disaster to action and strategies towards preparedness and prevention, before the disasters occur. This has been a major contribution of the United Nations General Assembly Resolution 44/236 of 1989 when the decade, 1990-2000 was declared as International Decade for Natural Disaster Reduction.*

## Introduction

As long as the memoirs of recent disasters are fresh, governments seem to be willing to develop long term strategies. However, long-term orientation is forgotten as memory fades, while other priorities take over under the pretext of scarcity of resources. The fact is that governments still do not recognize that disaster mitigation may be carried out at a minimal cost, simply by adjusting on-going development programmes. Nor the long-term implications of disasters, especially in relation to the national debt structure are ever recognized.

Another major flaw in the current disaster management process is that the broad range of issues that disaster management covers are not clearly conceptualized at the national level. Consequently, little emphasis is placed on institutional strengthening and more focus is on stockpiling and developing emergency response plans. Thus disaster mitigation is still seen as a civil defense activity or a para-military operation.

There is also a problem of inadequacy in development planning, with planners often lacking the essential technical information and expertise to integrate disaster risk into their models. It is important that modern technology be harnessed for designing information systems that enable analysis of natural and man-made hazards - their causes, effects, and consequences. It is equally important that results of this analysis be applied across the board to developmental project planning. Developmental resources are often wasted out of failure to consider disaster proneness.

Further, at times it is not realized that many development activities can in fact inadvertently lead to or exacerbate disasters. Sometimes, an analysis of alternative approaches or measures necessary to mitigate the adverse effects of ongoing developmental activity is essential.

A major problem with the current administrative set up is that centralized planning systems do not give sufficient weight to the view and concerns of regional and local government entities, which, after all, are operationally called upon to play disaster mitigation roles. The ideal strategy would be a two-pronged approach: building disaster prevention and mitigation concepts into overall policy at the Central Planning level and simultaneously assisting local governments in local initiatives.

Most importantly, there are attitudinal barriers that cut across a variety of stakeholders. Governments are sometimes reluctant to use the expertise and support potentially available from the NGOs and the private sector. Effective development necessarily involves people's participation. If the aim of disaster management is to save lives and resources, at the moment of crisis as well as in the future, then it follows that a community approach -

where the experience of NGOs is invaluable - needs to be incorporated.

It is important, therefore, to prepare for such a crisis. Of late it has been realised that preparedness is essential for proper and timely execution of post-disaster operations when there is no time to think.

## Concept of Mitigation and Preparedness

Mitigation embraces all measures taken to reduce both, the effect of the hazard itself and the vulnerable conditions to it, in order to reduce the scale of a future disaster and its impacts. Therefore mitigation activities can be focused on the hazard itself or the elements exposed to the threat. Mitigation includes measures that are aimed at reducing the physical, economic and social vulnerability to threats and the underlying causes for this vulnerability. Therefore mitigation may incorporate addressing community-related issues such as land ownership, tenancy rights, wealth distribution, etc.

Depending on their purpose, mitigation measures can be categorized as being either "structural" or "non structural" in nature. Mitigation measures for disaster reduction can be achieved by modifying or removing the causes of the threat or by reducing the affects of the threat, should it occur. The most effective mitigation measures address not only the nature of hazards but also the vulnerability.

## Active Preparedness Measures

Both structural or non-structural mitigation measures may be termed either "Passive" or "Active". "Active" measures are those which rely on providing incentives for disaster reduction. They are often more effective than "Passive" measures based in restrictive laws and controls. For example while codes and land use planning may provide a legal context for mitigation, they tend to be ineffective unless rigorously enforced. Instead measures, which provide incentives such as government grants or subsidies, a lessening of insurance premiums for safer construction, provision of government technical advice provide a framework for more sustainable mitigation.

Risk reduction can be seen as a culture that is shared by a variety of actors. Actors are organized at various levels in the community, in non-governmental, formal and non-formal organizations. Preparedness and mitigation efforts are arguably most effective at community level, be it in a city, a town or village. Human beings everywhere are organized at the community level to carry out collective tasks. Different social conditions in different societies might lead to a different order of priority, but in most cases the community level is a vital primary focus for disaster management effort particularly in the mitigation and preparedness process (Sanderson, 1997).

## Preparedness Efforts

Non-structural mitigation measures relate to those activities and decision making systems which provide the context within which disaster management and planning operates and is organized. They include measures such as:

- Preparation of Preparedness Plans
- Training and education
- Public education
- Evacuation planning
- Institution building
- Warning systems
- Land use planning

## Paradigm Shift from Disaster Response to Disaster Preparedness

Hitherto, the approach towards coping with the effects of natural disasters has been post-disaster management, comprising of problems concerning law and order, evacuation and warnings, communications, search and rescue, fire-fighting, medical and psychiatric assistance, provision of relief and sheltering, etc. After the initial trauma of the natural disaster is over, within the first few days or weeks, the phase of reconstruction and economic rehabilitation is taken up by the people themselves and by the government authorities. Thereafter, the occurrence of the disaster is relegated to historic memory till the next one occurs again, either in the same area, or in some other part of the country.

The UN General Assembly Resolution 236 of 1989 launched the International Decade for Natural Disaster Reduction (IDNDR, 1990-2000) to reduce, through concerted international action especially in developing countries, the loss of life, property damage, and social and economic disruption caused by natural disasters. This effectively set the trend in shifting the focus of attention from rescue and relief to preparedness and mitigation.

## Preparedness Plans – The Foremost Step

The existence of a disaster-preparedness plan is a blessing. The distraught officials then have at their hand, a complete set of instructions, which they can follow to the dot and also issue directions to their subordinates and the affected people. This helps not only in speeding up the rescue and relief operations, but also boosting the morale of victims.

Disaster plans are also useful pre-disaster operations, when warnings have been issued, for example that floods are imminent. The plan again serves as guidance to officials and precious time is saved which might otherwise be lost in consultations with senior officers and getting formal approval from authorities. It has been realised that it is extremely unpractical and uneconomical to protect everything and entire populations in the rare events of urban disasters. Response plans are formulated by different agencies that need to coordinate during emergencies. For example, the electricity-supplying authority would be responsible for preparing an action plan, which would be used following a disaster event, to restore full services in the least possible time.

The Contingency Action Plan (CAP) already exists at the national level that lists out in detail the actions to be taken at various levels of government at the time of calamity. There is however a need to carry out a comprehensive revision of CAP followed by clear cut operational guidelines. Recently, a high power committee has been established to prepare a disaster management plan at Central, State and District levels.

## Preparedness Plans at State Level

Being primarily responsible for managing disasters in the state, the state government needs to play the most important role of coordination. Often disasters are spread over several districts. In such a situation the state government is best suited to initiate counter measures. As a coordinator, the state government also needs to maintain close liaison with the central as well as the district authorities.

**Disaster Management Plans at the State Level are the most critical plans providing for roles both for the central as well as district level. Such plans have to be based on the disaster vulnerability conditions prevailing in the state.**

The state government on the basis of advance warnings available to it is the first to initiate preparedness activities. Identifying possible areas where disaster(s) may strike. The State government would have to inform the relevant district authorities and advise them on suitable line of action.

The Government of Maharashtra has prepared comprehensive Disaster Management Plans at both state and district levels. Some other states like Andhra Pradesh, Gujarat and Uttar Pradesh are in the process of preparing similar plans. Extra resources are required during the time of a disaster. The state machinery in its plan should be geared to mobilise such out of plan resources. The series of actions required and personnel responsible for executing the tasks would be laid out in the form of action plans called state preparedness plans.

## Short Term Initiatives Facilitation

Since the basic responsibility of managing disasters is that of the state government, the central government role becomes that of a facilitator. During the time of an emergency, the central government can facilitate provision of assistance to the relevant state government(s) in coping with the disaster.

Various committees at the Central Level - the crisis management group, the National Crisis Management Committee which are essentially inter ministerial bodies are supposed to help in providing necessary expertise.

## Resource Mobilisation

The central government mobilizes additional funds from the CRF or the NCFR depending on the severity of the disaster. Additional funds to supplement state government efforts too can only be provided by the Central Government.

## Special Inputs

There are various national/international institutions/agencies doing specialised work in disaster management. Inputs from such sources are of vital importance during the time of a disaster. While state governments may have limited knowledge and access to these sources, the central government plays the role of provider to the state.

## Long Term Initiatives

### International Assistance

International Assistance in form of loans for disaster response/rehabilitation can be identified and facilitated by the central government.

### Monitoring Preparedness & Prevention Measures

Central government can provide necessary support to the various hazard prone states in the country through special nation wide initiatives on disaster preparedness and prevention. Expertise and experience of dealing with disasters in one region can most appropriately be used in another region with the central government acting as the viable medium.

### Development Initiatives

Development Initiatives through Five-year plans and other special development schemes initiated by the central government have identified and incorporated disaster management as one of the essential components of development programmes.

### Integrated Approach Combining Relief and Development

Successful disaster management involves addressing a host of complex issues. While analyzing these issues, one should keep in mind those disasters that occur when hazards interact with vulnerable populations. Vulnerability, as explained earlier, is frequently a reflection of poverty and consequently vulnerability reduction is largely a product of economic and social development. Thus any development projects which for instance enhance income levels and economic diversification, as well as improved awareness, skills, crop varieties, livestock breeds, irrigation, drainage and communication networks in the rural sector, automatically affect the vulnerability of the rural population to temporary disruption of economic activities caused by a natural disaster.

While the case seems compelling, the emerging conceptual framework is yet to be translated into viable policies and practices. A process has been started which seems promising but which also takes us into uncharted territory.

### Capacity Building

The Ministry of Agriculture has established the National Centre for Disaster Management at the Indian Institute of Public Administration. Similarly, a Disaster Management Faculty is proposed in all state-level training institutions, out of which 16 states have already started Disaster Management Cells for providing training to the district level officers. Some of the NGOs and organisations like Indian Adult Education Association and Council of Boards of School Education in India (COBSE) are engaged in disaster awareness programmes at school and community levels. Indira Gandhi National Open University (IGNOU) has started a six-month Certificate Programme in disaster management. They are also preparing a community-based disaster management plan in 6 states.

### Government of India - NGO Committee

A committee of GOI-NGO has been set up by the Ministry of Agriculture under the chairmanship of the Additional Central Relief Commissioner which is being coordinated by CARE-India. This is to have a better coordination in disaster preparedness between various governmental organizations and NGOs.

*"Every sector from government levels of households must recognize that disaster mitigation is an integral part of national development and is the responsibility of every sector"*

Mustafa Erdik  
IDNDR Scientific and Technical Committee

### Vulnerability Atlas

A vulnerability Atlas of India has been prepared by the Building Material and Technology Promotion Council (BMTPC) under the aegis of the Ministry of Urban Affairs and Employment.

### UNDP-Assisted Programme on "Strengthening Disaster Management Capacity in India"

The Ministry of Agriculture is presently involved in a UNDP-assisted project for enhancing the disaster management capacity and capability in India. The outcome of the project will be developing human resource in the National Centre for Disaster Management and state-level training institutes as well as preparation of disaster management plans at various levels.

### References

1. Ministry of Agriculture, Government of India . 1994. *Natural Disaster Reduction - South Asian Regional Report*.
2. Kumar Ajay .1997. "The Role of Government of India in Natural Disaster Response". Mimeo
3. Sharma V.K. 1997. "Natural Disaster Management in India". Mimeo
4. Ministry of Agriculture, Government of India. 1990. *Contingency Action Plan for Natural Calamities*.
5. International Federation of Red Cross and Red Crescent Societies. Geneva. 1995. *World Disaster Report 1994*.
6. Khan Amir Ali, Sharma Anshu & Manu Gupta. 1996. "Role of NGOs in Disaster Management in India". Mimeo.
7. Army Training Command. 1996. *Policy Approach and Role of Various Organizations for Disaster Management in India*.

