DISASTER MANAGEMENT IN JAMMU AND KASHMIR

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ABSTRACT

The State of Jammu and Kashmir has a long history of natural disasters. The State has witnessed many natural disasters especially in the 19th and early 20th centuries. Owing to its peculiar topography, rugged terrain, extreme weather conditions and underdeveloped economy, the State has suffered a lot on account of natural disasters. Hazards like earthquakes, floods, fires, droughts, avalanches and landslides often convert into disasters leading to loss of human lives as well as public and private property. Enhanced vulnerabilities of the built environment make the State highly prone to natural disasters. The State Government identifies a strong need to have a State Policy on Disaster Risk Reduction and Management. The State Policy recognizes that hazards are inevitable but these need not convert into disasters. This paper highlights the measure shortcoming, measures taken for the mitigation of the disaster.

Keywords

Mitigation, Rehabilitation, Prevention, Relief, Disaster Management

INTRODUCTION

State of Jammu and Kashmir covers the northern most extremity of India. The State occupies a strategic position in India with borders touching Pakistan in the west, China & Tibet in the north & east and the States of Punjab and Himachal Pradesh in the South. The State Government identifies a strong need to have a State Policy on Disaster Risk Reduction and Management. The State Policy recognizes that hazards are inevitable but these need not convert into disasters. The State DM Policy envisages a pro-active, holistic, comprehensive, multi-hazard approach towards disaster risk reduction and management. The Policy is based on the twin principles of minimizing human suffering during disasters and reduction of financial losses through integration of disaster risk reduction activities into development planning. The Policy has given high priority to capacity-building of all stakeholders including the community which is also the first responder to any disaster situation. To achieve the Policy objectives, all stakeholders have been entrusted with clear, necessary responsibilities. The State Disaster Management Authority (SDMA) along with the Divisional and District Disaster Management Authorities will manage the whole gamut of disaster risk reduction and management. The Policy has indeed taken due consideration of all stages of disaster management cycle encompassing pre-disaster management phase, situation during the time of disaster as well as the post-disaster management phase including the long-term recovery and reconstruction.

Hazard Profile of Jammu and Kashmir

Owing to a unique geographical and geo-climatic setting, the State of J&K has witnessed a number of disasters, ranging from incidents of fires to destructive floods and catastrophic earthquakes.

The State has witnessed many natural and manmade disasters especially in the 19th and early 20th century. In the wake of recurring disasters, the State has always paid heavily in terms of loss of life and property. The state is a multi-hazard prone State. Hazard profile of the state has been shown in Table 1.

S.No	HAZARDS	AREAS COVERED
1	Earthquakes	Most parts of the Kashmir Valley (11% of the area of the state) covering the Districts of Srinagar, Ganderbal, Baramulla, Kupwara, Bandipora, Budgam, Anantnag, Pulwama, Doda, Ramban, Kishtwar come under Seismic Zone V, where around 50% of the population of the State lives. Rest of the State including whole of Ladakh region and Jammu Division (90% of the total area of the state) are under the Seismic Zone IV
2	Floods	Low-lying areas of the Kashmir Valley, especially Sonawari, Awantipora, Srinagar, alongwith parts of Jammu are prone to floods. Upper catchments of all the tributaries of the Jhelum, Indus, Chenab and Tawi rivers are prone to flash floods.
3	Avalanches & Snow Blizzards	Higher reaches of Kashmir including Anantnag, Kulgam, Gurez, Kargil, Leh, Doda, Ramban, Kishtwar, Banihal etc. face avalanches.
4	Landslides	Areas along major highways particularly Ramban, Panthial, Banihal, Doda, Kishtwar, Gulmarg, Dawar, Gurez, Tangdhar, Rajouri etc. are landslide prone.
5	Drought	Most parts of Jammu division including Doda, Udhampur, Kathua, Jammu etc. are drought prone.
6	Wind storm	Occasional wind storms destroying crops, horticulture and roof-tops of houses. Ladakh has been identified as prone to high speed winds but there are hardly any damages due to wind storm, perhaps due to the sparse population and traditional house construction practices.
7	Fires	All District Headquarters/ densely populated towns and especially Gurez, Doda, Kishtwar and other inaccessible areas are prone to fire incidents. However, incidents of fires are equally high in the plains as well as in Srinagar city.
8	Rail & Road Accidents	Hilly roads especially in Doda, Ramban, Udhampur, Rajouri, Reasi, Poonch, Kishtwar, Ramban, Baramulla, Anantnag, Pulwama, Budgam, Jammu, Kathua, Zojila, Kargil, Leh etc. are prone to road accidents.
9	Cloudbursts	All hilly areas of the State are prone to cloudbursts
10	Human induced disasters	All Districts are vulnerable to man-made disasters
11	Others	Several parts of the state face hazards like thunderstorms, cloud burst, hailstorms, forest fires, dam bursts, heavy snowing, human epidemics and livestock epidemic, etc. from time to time; few of which occasionally convert into situations like disaster

MAJOR DISASTER EVENTS IN THE STATE OF JAMMU & KASHMIR

1. **Snow Blizzard at Waltengu Nad (Kulgam district) February, 2005:**

On 18th Feb 2005 a snow blizzard occurred in villages Waltengu Nad, Pachgam and Nigeenpora affecting 128 families consisting of 618 souls. During the incident 175 lives (54 men, 48 women and 73 children) were lost. In many cases full families were wiped out. 183 sheep/goats, 308 cows, 54 buffaloes and 5 horses perished.

2. **Kashmir Earthquake, October, 2005:**

On 8th October, 2005 a devastating earthquake of magnitude 7.6 resulted in 953 deaths and 418 injuries in J&K (also more than 80,000 deaths in PoK. This was one of the deadliest earthquakes in the sub-continent. 23,782 houses were fully damaged in the quake in J&K. 40.3% of the deaths comprised children below 10 years of age, thereby depicting their vulnerability and signifying the importance of school safety. The presence of Army in the affected areas proved to be a great healer for the people, as Army was among the first responders who, with the help of IAF, managed to airlift hundreds of injured people to different hospitals in Srinagar and Baramulla.

3. **Leh Cloudburst and Flash floods, August 2010:**

On the intervening night of August 5 - 6, 2010, Leh witnessed a devastative cloudburst followed by flashfloods. The unprecedented event resulted in the death of over 250 people and damage worth crores of rupees. The areas in and around Leh, especially Choglamsar, where people had constructed houses along the dry water course had no idea that the stream could get flooded and wash away everything whatever came in its way. The Relief and Rehabilitation activities carried out in the affected villages by the Army, Civil Administration and the NGOs were appreciable, as there was total harmony and no duplication of activities. The courage, dedication and zeal of the local community including the Ladakh Buddhist Association and the Islamic Trust revealed that human relations were at its peak during the disaster. However, the need for greater cooperation between Army and Civil Administration was felt during search and rescue operations. The traditional village-level institutions through the village-head played a crucial role in the recovery of the affected areas.

4. **Cloud burst at Bagger (District Doda), June 2011:**

A cloud burst occurred at Bagger in District Doda on 8th June 2011, where 17 structures got washed away and three people died. The dead bodies got washed away and have not been traced till date.

5. **Traffic Accidents:**

In the recent years J&K has recorded more deaths in traffic accidents than due to militancy. The death toll in road mishaps is almost double the number of people killed in militancy last year. In the year 2011 alone 889 people died and 7,178 were injured in 5,053 accidents (till ending July 2011). A large number of traffic violations have also taken place for which 3,29,651 vehicles have been fined for violations this year.

MAJOR SHORTCOMINGS/WEAKNESSES IN DISASTER MANAGEMENT EFFORTS

We have no policy on systematic disaster Management. It is only after a disaster strikes that the wheels of the government, both at the centre and at the states, move and that too slowly. Despite the need to build up capabilities to meet the challenges of disasters, the thrust has unfortunately been on alleviation and relief. Even the relief has not been quick and adequate, as few disasters such as Uri Earthquake 2005, Kashmir flood 2014, etc experiences has shown. Jammu & Kashmir's response to and tackling of these two major disasters has thrown up the following Weaknesses in our disaster management efforts.

1. **Inadequate Early Warning System**

Though, there is beautiful articulation of disaster forecasting, monitoring and warning on paper in practice, but the warnings are not early enough and do not reach the affected communities. In case of the above two mentioned disasters, etc for example, communication facilities were inadequate. Better communication could have resulted in better co-ordination of warning and reduction of damage to life and property.

2. **Lack of Pre-disaster Preparedness**

With disasters striking the state with increased regularity, there should be a plan in place to tackle the disaster and reduce its impact. On the contrary, people are caught unaware time and again. We lack a proper planned information system which can inform public as to what needs to be done when disaster strikes.

3. **Inadequate and Slow Relief**

Relief is an important aspect of the disaster management to provide help to the affected people. The relief operations like providing food, medicine, reducing sufferings of the affected people are often haphazardly handled and addressed inefficiently and improperly. Even days after the Flood 2014, many people could not be provided with safe drinking water, temporary shelter, and medicines. On the other hand rotting dead bodies gave rise to epidemics and other severe problems.

4. Lack of Co-ordination

Disaster management requires concerted efforts from Central Government, State Government, NGOs, International agencies and private sectors etc. Relief material is not properly distributed among the affected people and is mis-utilized because of the lack of the co-ordination.

5. **Slow Rehabilitation and Reconstruction**

Relief and rescue operations are always taken as hectic mission. Restoration of infrastructure, hospitals, schools, houses, and sources of living of the people needs to be given proper attention. But this area is often ignored and the progress remains very slow once the disaster strikes and attention fades away.

6. **Proper Administration**

Proper administration is necessary to recover from disasters. For proper planning of relief and rehabilitation work, a quick assessment of the extent of the damage is necessary. It has been seen that even months after earthquake, flood etc in Kashmir, government was not in a position to finish the preliminary survey of assessing total impact of the damage caused due to these disasters.

7. **Poor Management of Finances for Post-disaster Relief**

Not only there is lack of proper administration, lack of coordination at all levels about relief and rehabilitation but there is mismanagement and mis-utilization of funds that are provided for disaster affected communities. There have also been reports of relief and rehabilitation funds being utilized for paying salary arrears of the state government employees.

8. **Symbolism Rather than Relief**

Our government is expert in making symbolic gestures like helicopter survey of disaster affected areas etc but do not make a serious effort at planning and management for tackling huge disasters.

9. **No Instruction for Pre-seismic Period**

After the disaster strikes any particular area large number of officials visits the affected people with food, medicine, cloths and compensation funding but there is no instruction for the pre-seismic period. No information is provided prior to the occurrence of the disaster. The scenario has been repeated after Uri Earthquake (2005), Kashmir Flood (2014).

NECESSARY MEASURES TO BE TAKEN TO IMPROVE DISASTER MANAGEMENT IN JAMMU & KASHMIR

1. **Hazard, Vulnerability and Risk Assessment**

13 districts in J&K out of 100 in the Country have been identified as Multi Hazard Districts. State Disaster Management Authority shall coordinate assessment of hazards, vulnerabilities and risks prevailing in the state at various levels in association with Divisional DMA and District DMAs. The construction work and other activities that affect the environment shall be monitored by relevant departments in vulnerable regions particularly in landslide, earthquake and avalanches-prone areas and in areas where dams/power projects are located.

2. **Linking Development with Disaster Risk Reduction**

In order to make sustainable development, all the activities shall be carried out sensitively towards disaster risk reduction. SDMA shall update and modify all the tools available for handling disasters keeping DRR into consideration.

3. **Preparation of Disaster Management Plans**

SDMA shall ensure preparation of disaster management plans such as State Disaster Management Plan, Divisional Disaster Management Plans (Divisional DMP) and District Disaster Management Plans (DDMP) in order to mitigate the impact of disasters and cater to the disaster risk reduction needs.

4. **Disaster Management Information System**

SDMA shall ensure that state must have Disaster Management Information System in hand. This information should be made available to the relevant authorities in order to facilitate quick service at the onset of disasters.

5. **Early Warning**

SDMA shall ensure that a speedy system must be available to forecast the occurrence of disasters accurately. Early warning system is very must to predict and forecast untoward events so as to prevent negative impacts of the disaster.

6. **Incident Response System**

Effective chain of command is necessary to prevent effects of disasters. SDMA shall ensure establishment of proper response system at the time of disaster that can combine all the departments together with assigned responsibilities for the management of resources.

7. **Funding Mechanism**

SDMA shall produce a budget that can allocate funds to all the activities related to risk reduction and ensure proper mitigation, preparedness and prevention of disaster. Disaster Mitigation Fund and Disaster Response Fund shall be constituted at State, Divisional and District levels as per the provisions in the Disaster Management Act, 2005.

8. **Essential Services**

Essential services must be provided with immediate effect to the disaster hit area or community. All the essential services like medicine, sufficient food, temporary shelter, sanitation etc must be made available to the disaster hit population by the Divisional and District Disaster Management Authorities, in conjunction with respective line departments.

9. **Restoration of Essential Services**

Not only essential services be provided to the effected population but essential services like basic infrastructure facilities like road, transportation, power supply, etc must be restored immediately.

10. **Immediate Relief**

The Divisional and District Disaster Management Authorities, in association Divisional and District Administration, shall ensure immediate relief (in terms of ex-gratia, packets and payouts to the victims) to all the affected families without any discrimination of caste, creed, domicile, religion or gender.

11. **Post-disaster Management**

Post disaster management phase involves all those activities that help the affected communities in the restoration of economic and social well-being as well as reconstruction of the physical infrastructure and facilities. The State Policy shall ensure return to normalcy in the disaster- affected areas, effective recovery from the economic and social consequences of the disaster and mitigation of the long-term effects of disaster with speedy effect. Post disaster management activities ensure reduction of vulnerability of effected population by the following ways:

1. Reducing vulnerabilities through rebuilding-back- better,
2. Introduction of new technologies for improved housing and infrastructure to prevent future disasters,
3. Estimation of Funds and need assessment before commencing the rehabilitation and reconstruction activities,
4. Restoration of life by improving socio-economic status of affected community.

CONCLUSIONS

Jammu & Kashmir is trying to make significant development in the area of disaster management. State is streamlining its administrative framework to deal with various disasters. SDMA is making strategies to get participation of people in order to make disaster management a community movement. Still a lot is to be done to make disaster management a mass movement in near future.

RECOMMENDATIONS

In the view of the frequency of disaster striking the state of Jammu & Kashmir, there is a need for preparedness and conscious efforts to reduce the occurrence of disasters and for mitigation of impact of natural disaster. A planned approach to disaster management is required. The following suggestions can be offered for effective disaster management system in the state:

1. Identification and prediction
2. Preparedness
3. Focused and coordinated responsibility at divisional, district level.
4. Early warning system
5. Evacuation
6. Relief
7. Rescue
8. Rehabilitation
9. Compensation
10. Reconstruction
11. Sharing experience and expertise
12. Training personnel to face natural disasters.

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