



## Understanding disaster management cycle - emerging trends

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### Abstract

This paper focuses the need of understanding disaster management phases. It is observed that providing primary knowledge about disasters will lessen the fatalities. There is a need for preparing people especially vulnerable communities towards better understanding of disasters and their impact, because this helps them to face the challenges posed by disasters. Majority of the disasters faced by man are manmade disasters and natural disasters also add to the increasing number of fatalities annually. The increasing number of hazards has made governments to make strategies to reduce the natural disasters occurrence. But it is impossible to trim down the number of disasters them but effective strategies can help communities to overcome the difficult times. A clear understanding of Disaster management cycle supports the process through which people and governments prepare for emergencies and disasters, respond to them when they occur, help people and institutions to recover from the influence of disasters, relegate their effects, reduce the risk of loss and prevent disasters from reoccurrence.

**Keywords;** disaster cycle, management sequence, phases,

### Introduction

The number of recorded disasters has doubled from 200 to 400 percent per year. Nine out of every ten of these disasters have been climate related. Current projections regarding climate change suggests this trend is set to continue and that weather related hazard events will become more frequent and more volatile. Patterns of drought and desertification are intensifying. Vulnerability is also growing due to

1. Increasing urbanization
2. Including growing concentration of people in unplanned and unsafe urban settlements
3. Exposed coastal areas
4. Poverty
5. HIV prevalence
6. Inadequate attention to changing risk pattern
7. Illiteracy

### Disaster management phase



1	<b>Preparedness</b>	It is a way of mitigating unwanted outcome and it is one of the crucial actions in achieving safety and security in the event of calamities, disasters and terrorism related disasters.
2	<b>Mitigation</b>	It is the effort to reduce loss of life and property by lessening the impact of disasters.
3	<b>Response</b>	An emergency response plan must provide the resources and information needed to evaluate the human and environmental health impact of the event , assess and reduce human exposures to contaminants , and develop science based strategies for remediation and rebuilding
4	<b>Recovery</b>	Once immediate life saving operations are accomplished , the focus changes to assisting the critical infrastructures involved in the incidents and recovery . Recovery efforts are primarily concerned with actions that involve rebuilding destroyed property re employment and the repair of other essential infrastructure.

1. **Preparedness** – includes activities prior to disasters national emergency declaration , tele communication response plans training early warning procedural frameworks
2. **Mitigation** – includes providing public education, awareness creation ,hazard and vulnerability assessment ,improvising infrastructure facility
3. **Response** –includes communication co-ordination saving lives
4. **Recovery** –includes restoring , telecom , infrastructure ,improving lives, recovery measures , rehabilitation , service providing

1	Risk appraisal
2	Analysis
3	Recommendation
4	Damage assessment
5	Humanitarian aid
6	Rescue training
7	Land use planning
8	Technical pursuit
9	Capacity building
10	Emergency planning
11	Early warning
12	Monitoring
13	Disaster information sharing
14	Disaster experience sharing

1. **Understanding disasters-** Understanding the concepts of definitions of disaster vulnerability risk capacity disaster and development pl
2. **Types of disasters Controlling disasters-**
3. **Disaster management cycle**
4. **The applications of science and technology** for avoiding disasters and management

**Types of disaster** - There are various types of disasters

1	<b>Geological disasters</b>	Earth quakes , landslides , tsunami , mining
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2	<b>Hydro -meteorological disasters</b>	Floods, cyclones ,lighting ,thunder storms, hail storms, avalanches ,droughts, cold and hot waves
3	<b>Biological disasters</b>	Epidemics, pest attacks, forest fire ,
4	<b>Technological disasters</b>	Chemical, industrial, radiological , nuclear
5	<b>Man-made disasters</b>	Building collapse , rural fire, urban fire , road and rail accidents,
6	<b>Global disasters</b>	Climatic changes, seasonal variations

**These above listed disasters are further short listed as**

- 1. Natural Disasters-** These disasters include floods , hurricanes , earth quakes volcano eruptions that can have immediate impact on human health as well as secondary impact causing further death and suffering from floods causing landslides earth quakes resulting in fires tsunamis causing widespread flooding and typhoons sinking ferries.
- 2. Environmental Emergencies-** These emergencies include technological and industrial accidents usually involving hazardous materials and occur where these materials are produced used or transported. Large forest fires are generally included in this definition because they tend to be caused by humans.
- 3. Complex Emergencies –** These emergencies involve a breakdown of authority, looting and attacks on strategic installations. Complex emergencies include racial conflict situations and war.
- 4. Pandemic Emergencies-** These emergencies involve a sudden onset of a contagious disease that affects health but also disrupts services and businesses bringing economic and social loss.

Disaster preparedness helps to save lives and livelihoods. IN 2005 shortly after the Asian Tsunami over 168 governments pledged to implement the Hyogo framework three strategic goals To integrate disaster risk reduction into sustainable development policies and planning to develop and strengthen institutions mechanisms and capacities to build resilience to hazards and to systematically incorporate risk reduction approaches into the implementation of emergency preparedness response and recovery programmes. To achieve them , outlined priorities includes

1. Making disaster risk reduction a priority
2. Improving risk information and early warning
3. Building a culture of safety and resilience
4. Reducing the risks in key sectors
5. Strengthening preparedness for response

The strategies from government of India needs to stress that disaster risk reduction is addressed by humanitarians, scientists , and environmentalists alike. But it is also critical to sustainable social and economic development process. India is a developing country hence recurring disasters undermine development achievements, impoverishing people and communities. In the absence of concerned efforts to address root cause disasters represent increasingly serious obstacles to the achievements of the millennium development goals.

- 1. Effective disaster risk reduction requires community participation –** Disaster mitigation needs to start form community. The involvement of communities in the design and implementation of activities helps to ensure that they are well tailored to meet those actual vulnerabilities. Effective disaster risk reduction relies on the efforts of many different stake holders including regional and international organizations civil society including volunteers the private sector the medical and scientific community.

2. **Integration into development activities** – Disaster undermine hard won development gains destroying lives and livelihoods and trapping poverty stricken people.
3. **Multi hazard approach** – Disaster A multi hazard approach involves translating and linking knowledge of a full range of hazards into disasters and risk management. The policy needs to look at factors including political strategies technical analysis and operational capabilities and public understanding . This will lead to greater effectiveness and cost efficiency.
4. **capacity development** - capacity development is needed to build and maintain the ability of people organization and societies to manage their risks successfully themselves This requires not only training and specialized technical assistance but also the strengthening of capacities of communities and individuals to recognize and reduce risks in their localities.

## Conclusion

Thus Disaster Management awareness is to be disseminated through higher education and curriculum based on can be a very . Thus Disaster preparedness need to be prioritized , measures have to be planned to prepare for and reduce the effects of disasters. That is to predict and where possible prevent disasters mitigate their impact on vulnerable population and respond to and effectively cope with their consequences. There is a need for studying recent disasters at local, state and national level and prepare community for preparing towards disasters. The role of engineers in designing disaster lessening technologies in construction of residential houses and big apartments can be very supportive.

## References:

1. A Manual on Natural Disaster Management in India New Delhi , 2016
2. A report on J C Pant Committee - report on the High power committee appointed to Government of India Publication , New Delhi, 2006
3. A report on Disaster Management Act of 2005 , Government of India Publication , New Delhi, 2006
4. An assessment of National Disaster Management policy of 2009 Government of India Publication , New Delhi ,2009
5. Coppola D.P. –Introduction to Inter National Disaster management , Elsevier Science Journal publication , London , 2007
6. David Alexander - Natural disasters, Academics London Journal publication 1999
7. Harsh K Gupta -Disaster management , University press 2018
8. R K Bhandani -An over view on natural and manmade disasters and their reduction, CSIR , New Delhi , 2009
9. S L Goyal- Encyclopaedia Of Disaster Management Vol . II Disaster Management - Policy and Administration , Deep and deep Publication , New Delhi , 2006
10. Singh B K -A handbook of Disaster management - techniques and guidelines , 2018
11. Srivatsava H. N. and GD Gupta -Management of Natural disasters in developing, Day Publishers Delhi ,2006
12. The Report of the American Red Cross Organization report for Disaster Management and disaster preparedness , 2010
13. The report of the National Disaster Management Authority Govt. of India Publication, New Delhi, 2006
14. The report of World disasters , Inter National Federation of Red Cross and Red crescent Switzerland , 2009
15. Vishwambhar Prasad sati -Disaster management and risk reduction , 2018