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Global Environmental Changes and Disaster Management for Sustainable Life on Earth – A Burning Issue

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ABSTRACT

Disasters are often sudden & intense. They not only disrupt the day-to-day life but also cause widespread destruction of life & property. Disasters vary in nature, intensity, duration & extent of destruction.

Hazard is a dangerous natural or man-made event. When these natural or man-made events result in large scale loss of life & property, it is termed as 'DISASTER'.

Disasters can be natural or man-made. We cannot stop the forces of nature, it is bound to take its own course. Eg- floods, droughts, earthquakes etc. Similarly man is a part & parcel of environment, but at the same time man is also responsible for destroying environment. A man-made disaster may strike in form of pollution, explosion, accidents, terrorist attacks, civil strifes etc. At these instances, Disaster Management plays a vital role. Preparedness, Response and Relief, Recovery and Rehabilitation and Prevention (PRRP) are the four elements of disaster management. For preserving the developmental gains, it is essential to evolve a disaster risk management plan.

Disaster Risk Management includes prevention, mitigation, preparedness, recovery etc.

- 1)- Preventive measures comprise steps taken to minimize the account of damage due to disaster.
- 2)- Preparedness involves measures for enhancing the coping-up capability of people.
- 3)- Recovery measures focus on rehabilitating the victims.

If these steps are taken in practice, we can minimize the fatal effects of disasters and can reduce disasters upto a certain limit so that there is least loss of health & wealth.

Keywords: Disaster, mitigation, Rehabilitation, pollution.

INTRODUCTION

“A disaster can be defined as any occurrence that cause damage , ecological disruption , loss of human life , deterioration of health and health services on a scale , sufficient to warrant an extraordinary response from outside the affected community or area.”

Types Of Disasters

Disasters may be categorized into two types:- Natural Disasters & Man-Made Disasters. These are further classified as follows:-

Natural Disasters

- Meteorological Disasters
- Topographical Disasters
- Environmental Disasters

Man-Made Disasters

- Technological Disasters
- Industrial Accidents
- Security Related Disasters

Factors Affecting Disasters

Host Factors

- Age
- Immunisation Status
- Degree Of Mobility
- Emotional Stability

Environmental Factors

- Physical Factors
- Chemical Factors
- Biological Factor
- Social Factors
- Physiological Factors

Characterstics of Disasters

- Predictability
- Controllability
- Speed of onset
- Length of forewarning
- Duration of impact
- Scope & intensity of impact

PRINCIPLES OF DISASTER MANAGEMENT

Disaster management is the responsibility of all spheres of government. Disaster management should use resources that exist for day-to-day purpose. Organisations should function as an extension of their core business. Individuals are responsible for their own safety. Disaster management planning should focus on large scale events.

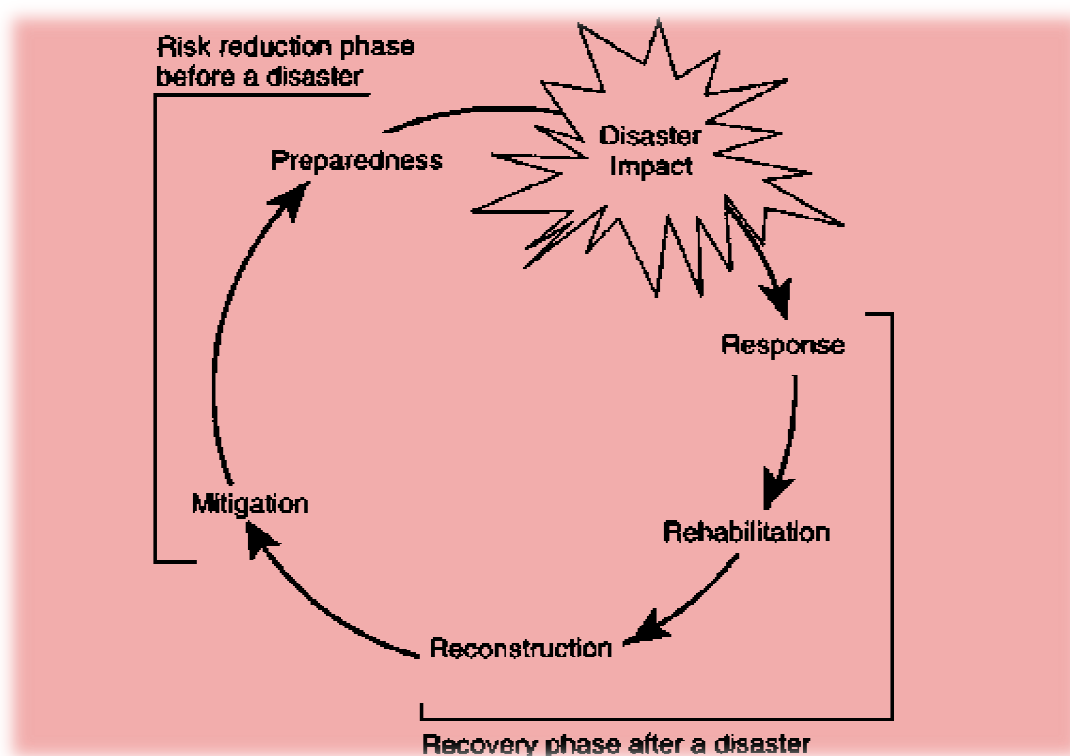
- Disaster management planning should recognize the difference between incidents and diasaters.
- Disaster management operational arrangements are additional to and do not replace incident management operational arrangements.
- Disaster management planning must take account of the type of physical environment and the structure of the population.
- Disaster management arrangements must recognize the involvement and potential role of non-government agencies.

PHASES OF DISASTER MANAGEMENT

- Disaster Preparedness:- Activities designed to minimize loss of life and damage , to organize temporary removal of people & property from a threatened location & facilitate, timely and effective rescue , relief and rehabilitation.
National & Internatinal agencies conduct activities like planning , organization , training & communicating , educating the people to provide prompt & appropriate responses to prevent & reduse adverse affects.
Ongoing multi-sectoral activity.
Integral part of national system & responsibility.
Difference in developed & developing countries (infrastructure , resources , management capacity , communication & logistic problem.)
- Disaster Impacts:- Search , rescue & first-aid , field care , triage , tagging , identification of dead.

- Disaster Response:- Response measures are usually those which are taken immediately. Typical measures includes- Implementation of plans , Activation of counter-disaster system , Search & rescue , Provision of emergency food, shelter, medical assistance , Survey & assistance & evacuation measures.
- Rehabilitation Phase:- Water supply , food safety , basic sanitation and personal hygiene , vector control.
- Disaster Mitigation:- This involves lessening the likely effects of emergencies. These include depending upon the disaster, protection of vulnerable population and structure.
For examples, improving structural qualities of schools, houses and such other buildings so that medical casualties can be minimized. Similarly ensuring the safety of health facilities and public health services including water supply and sewerage system to reduce the cost of rehabilitation and reconstruction. This mitigation compliments the disaster preparedness and disaster response activities .

DISASTER MANAGEMENT CYCLE



GENERAL EFFECTS OF DISASTER:-

- Loss of life
- Injury
- Damage to & destruction of property
- Damage to & destruction of production
- Disruption of lifestyle
- Loss of livelihood
- Damage to national infrastructure
- Disruption to essential services
- Disruption to governmental systems
- National economic loss
- Sociological & physiological after effects

DEADLIEST DISASTERS OCCURED IN INDIA

- The recent floods & landslides in Uttarakhand have been a rude reminder for India of its historical disasters. These disasters have had proved to be overwhelmingly intimidating for the country & also pointed at its incompetence to tackle such catastrophs on a massive scale.
- A Destructive Tsunami in the Indian Ocean,2004 triggered by a powerful earthquake measuring 9.0 on the Richter scale caught the attention of the world as it killed more than 10,000 people in India alone. Perhaps the most powerful tsunami in history , the disaster severely affected 150,000 people in 11 countries.
- A powerful earthquake , measuring 7.9 on Richter scale hit Gujarat state on 26 January,2001 killing atleast 30,000 people.

CONCLUSION

Hence we can conclude that disasters bring death & destruction which cause havoc to human lives , hence we should be alert & prepared and shall not play with the elements of nature. As this interference of man in forms of deforestation etc. brings calamities causing widespread mortality. By taking appropriate precautionary measures , we can minimize the fatal effects of disasters and can reduce them upto a certain limit so that there is least loss of health & wealth. In other words, man should not be a Destroyer but a Saviour of Mother Nature.

So,

LOVE NATURE & PRESERVE IT!!!!

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