

# Disaster Management

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## Introduction

God has created everything including land, water, air etc. Nature has several manifestations - benign as well as hostile. Sometimes, it is soothing, sometimes it is ferocious. Whenever it turns to be in its bad temper, it can bring about devastation which is known as disaster.

A disaster is a serious disruption in the functioning of a community and society as a fall-out of widespread human, material, or environmental losses that exceed the ability of the affected population to cope with its own resources.

India is a disaster prone country. In fact, there is no country which is immune from disasters which can be classified as-

## Types of Disasters

There are two majorly two types of disasters:

1. Natural disasters
2. Man-made disasters

Natural disasters are the disasters caused due to natural reasons which are beyond the control of humans including floods, hurricanes, earthquakes and volcano eruptions that have immediate impacts on human lives.

Man-made disasters also known as the complex emergencies are the disasters caused due to major accidents like fires, the breakdown of authority, looting and attacks, including conflict situations and war.

Disaster management is a continuous phenomenon of mitigating the impact of the disasters. Disaster management calls for collective and co-ordinated efforts. A number of activities need to be undertaken

in the event of disaster. These include co-ordination, command and control, rapid assessment of damage, restoration of power, tele-communication and surface transport, deployment of search and rescue teams, medicals and Para-medical teams, arrangements for drinking water and food material, setting up of temporary shelters, sanitation and hygiene identification and earmarking of resources, last but not the least, maintenance of law and order is equally important.

The most vulnerable sections in these disasters are the poor. Hence it is necessary to mobilize them towards preparedness for any emergency. Quick and timely response is the essence in providing immediate relief and rescue operations, to save human lives and mitigate miseries as soon as possible.

India has set up many departments and organizations for the same i.e. National disaster management authority (ndma), national remote sensing centre (nrsc), central water commission (cwc) etc. And due to the presence of so many authorities it is not feasible for all of them to take steps in a single direction.

## Definition

A catastrophic situation in which normal pattern of life and or ecosystem gets disturbed and extraordinary emergency interventions are required to save and preserve lives or environment can be termed as a disaster. Natural disasters are the manifestation of nature and they can take place anywhere anytime.

## Classification of disasters

The disasters can be classified as-

**Natural disasters:** A natural hazard is a natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Various disasters like earthquakes, landslides, volcanic eruptions, hurricanes, floods, blizzards, tsunamis, and cyclones are all natural disasters.

**Human instigated:** Human-instigated disasters are the consequence of technological hazards. Examples include fires, transport

accidents, oil spills and nuclear explosions/radiation. War and terrorist attacks may also be put in this category.

Disasters in India: There is no country which is completely free from disasters and so is India. India, due to its geographical locations & geological formations, is a highly disaster prone country.

India has faced a number of disasters, ranging from flood, earthquakes, cyclones, tsunami, drought, landslides. A few recent disasters faced by India include floods in Uttarakhand, cyclone "vardah" in Chennai, recurring earthquakes in northern India, charna earthquake in Gujarat, super cyclone in Orissa in 1999, bhuj earthquake in Gujarat in 2001, tsunami in 2004 and Mumbai-Gujarat flood in 2005. Besides, India has had to suffer technology-related tragedy in the form of gas tragedy in Bhopal in 1984. India also faced the problem of plague in Gujarat.

#### About disaster

Land, water, air etc are some of the beautiful creations of the almighty. Nature has several manifestations - smooth as well as hostile. Sometimes, it is soothing while sometimes it is ferocious. Whenever it turns to be in its bad temper, it can bring about devastation or destruction which is known as a "disaster".

#### Literal interpretation

Literally, disaster refers to the mishap, calamity or the grave occurrence from either the natural or man-made reasons which can't be stopped or tackled immediately by the affected community.

India, being very much prone to disasters due to its geographical location, earthquakes, landslides, drought, cyclones, floods, forest fires, and fire accidents are some of the major calamities that keep occurring, inflicting colossal damage. Rapid growth in the population rate and urbanization has mostly triggered the level of the disasters.

#### Types of Disasters

The disasters can be broadly classified into two major categories:

- ◆ Natural disasters

- ◆ Man made / human instigated disasters

Natural disaster is a natural process that may cause loss of lives, injuries or other health impacts, property damages, loss of livelihoods and services, social and economic disruptions or major environmental damage. Various disasters like earthquakes, landslides, volcanic eruptions, hurricanes, floods, blizzards, tsunamis, and cyclones are covered under the scope of the term natural disaster. Human instigated disaster is also known as the complex emergency and its disaster caused due to major happenings such as fires, oil spill, breakdown of authority, looting, wars etc.

National level natural Disaster is an extreme disruption in functioning of habitat that widespread human material or environmental losses that exceed the affected population to cope with its resources. Landslides earthquakes, Tsunami, cyclones, drought, volcano example of disasters. It mis hap calamity all the great occurrence the natural or man made reasons which can't be stopped or tackled immediately by the affected community. It varies geographically based on climate and type of earth surfaces and degree of vulnerability. This influences the mental social economical political and cultural state of affected area.

1. It completely disrupts the normal day to day life.
2. Negative influence to emergency systems.
3. normal daily needs like food cloth shelter health and deteriorating depending on the industry and severity of the disasters

It can be called as a series of disruption of the functioning of society causing white spread human material or environmental losses which exceed the ability of the effected society to cope using its own resources.

Disaster may have the following main features

- ◆ Unpredictability
- ◆ Unfamiliarity
- ◆ Speed

- Urgency
- Uncertainty

Disasters in India over a decade-at a glance  
 India has faced some of the most destructive disasters in past decade which can be named as under:

Name of the event	Year	Area
Cyclone "vardah"	2016	Chennai
Floods	2014	J&K
Cyclone "hudhud"	2014	Andhra Pradesh
Odessa floods	2013	Odessa
Cyclone phailin	2013	Odessa & Andhra Pradesh
Floods & landslides	2013	Uttarakhand & HP
Cyclone mahasen	2013	Tamil Nadu
Cyclone nilam	2012	Tamil Nadu
Uttarakhand floods	2012	Uttarkashi, Uttarakhand & Bangeslwar
Assam floods	2012	Assam
Cyclone thane	2011	Tamil Nadu
Sikkim earthquake	2011	Sikkim, West Bengal & Bihar
Chandabur	2010	Leh & Ladakh
Leicht	2009	More than 10 states
Wasi floods	2008	North Bihar
Maharashtra floods	2005	Maharashtra
tsunami	2004	Tamil Nadu, Andhra Pradesh, Pondicherry, Andaman & Nicobar islands

### Effects of disasters in India

The impact of natural as well as human instigated disasters is massive death, destruction, injuries, huge loss of the lives of humans and livestock.

### The Impact of Human Activities on Natural Disasters

Since a long for now, it has been noticed that modernization is leading to grave ignorance towards the environment. Environmental bylaws are being neglected by industries. Due to over-exploitation of nature, we humans have created such a situation where events.

#### Disaster Management

Disaster management is the management of resources and responsibilities in order to lessen the impact of disasters. Disaster management is the management of resources and responsibilities in order to lessen the impact of disasters

Disaster management in India refers to conservation of lives and property during a natural or man-made disaster. Disaster management plans are multi-layered and are planned to address issues such as floods, hurricanes, fires, mass failure of utilities and the rapid spread of disease. India is especially vulnerable to natural disasters because of its unique geo-climatic conditions, having recurrent floods, droughts, cyclones,

The direct or indirect impact of the disasters has always been deadly, destructive and damaging. They cause loss of life to the humans as well as livestock.

Disaster management is the management of resources and responsibilities in order to lessen the impact of disasters.

In India, a lot of forums, funds and organizations are functioning to mitigate the effects of the disasters like national disaster management authority (NDMA), national remote sensing centre (NRSC), Indian council of medical research (ICMR), central water commission (CWC) etc. A separate fund called as "national disaster management fund" (NDMF) is also there for exclusive mitigation.

Sometimes, due to lack of co-ordination between the central and state government as well as the absence of correct resources; the concerned forums, organizations are unable to provide the apt rehabilitation. God has created everything including land, water, air etc. Nature has several manifestations - benign as well as hostile.

Sometimes, it is soothing, sometimes it is ferocious. Whenever it turns to be in its bad temper, it can bring about devastation which is known as disaster.

Natural disaster is a natural process that may cause loss of huge lives, injuries or other health impacts, property damages, loss of livelihoods and services, social and economic disruptions or massive environmental damage. Various disasters like earthquakes, landslides, volcanic eruptions, hurricanes, floods, blizzards, tsunamis, and cyclones are covered under the scope of the term natural disaster. Human instigated disaster is also known as the complex emergency and is the disaster caused due to major happenings such as fires, oil spill, breakdown of authority, looting, wars etc.

Disaster management in India refers to conservation of lives and property during a natural or man-made disaster. Disaster management plans are multi-layered and are planned to address issues such as floods, hurricanes, fires, mass failure of utilities and the rapid spread of disease. India is especially vulnerable to natural disasters because of its unique geo-climatic conditions, having recurrent floods, droughts, cyclones, earthquakes and landslides. Due to the vastness of the country different regions are vulnerable to different natural disasters. For example, during rainy season the peninsular regions of South India is mostly affected by cyclones and states of West India experience severe drought during summer. The new approach started from the conviction that development cannot be sustained unless mitigation is built into the development process. Another cornerstone of the approach is that mitigation must be multi-disciplinary, spanning across all sectors of development. The new policy also emanates from the belief that investments in mitigation are much more cost effective than expenditure on relief and rehabilitation. Disaster management occupies an important place in India's policy framework, as poor people are most affected by disaster and they are India's predominant population.

The steps being taken by the Government emanate from the approach, has been outlined above. The approach has been translated

into a National Disaster Framework (a roadmap) covering institutional mechanisms, disaster prevention strategy, early warning system, disaster mitigation, preparedness and response and human resource development. The expected inputs, areas of intervention and agencies to be involved at the National, State and district levels have been identified and listed in the roadmap. This roadmap has been shared with all the State Governments and Union Territory Administrations, Ministries and Departments of the Government of India and the State Governments/Union Territory Administrations have been advised to develop their respective roadmaps taking the national roadmap as a broad guideline. There is, therefore, now a common strategy underpinning the action being taken by all the participating organisational stakeholders.

#### **The Disaster Management Act, 2005**

The Disaster Management Act was passed by the Lok Sabha on 28 November 2005, and by the Rajya Sabha on 12 December 2005. It received the assent of the President of India on 9 January 2006. The Act calls for the establishment of a National Disaster Management Authority (NDMA), with the Prime Minister of India as chairperson. The NDMA has no more than nine members at a time including a Vice-Chairperson. The tenure of the members of the NDMA is 5 years. The NDMA which was initially established on 30 May 2005 by an executive order, was constituted under Section-3(1) of the Disaster Management Act, on 27 September 2005. The NDMA is responsible for "laying down the policies, plans and guidelines for disaster management" and to ensure very timely and effective response to disaster". Under section 6 of the Act it is responsible for laying "down guidelines to be followed by the State Authorities in drawing up the country Plans".

India has been traditionally vulnerable to natural disasters on account of its unique geo-climatic conditions. Floods, droughts, cyclones, earthquakes and landslides have been a recurrent phenomena. India has been traditionally vulnerable to natural disasters on

account of its unique geo-climatic conditions. Floods, droughts, cyclones, earthquakes and landslides have been a recurrent phenomena. About 60% of the landmass is prone to earthquakes of various intensities; over 40 million hectares is prone to floods; about 8% of the total area is prone to cyclones and 68% of the area is susceptible to drought. In the decade 1990-2000, an average of about 4344 people lost their lives and about 30 million people were affected by disasters every year. The loss in terms of private, community and public assets has been astronomical.

At the global level, there has been considerable concern over natural disasters. Even as substantial scientific and material progress is made, the loss of lives and property due to disasters has not decreased. In fact, the human toll and economic losses have mounted. It was in this background that the United Nations General Assembly, in 1989, declared the decade 1990-2000 as the International Decade for Natural Disaster Reduction with the objective to reduce loss of lives and property and restrict socio-economic damage through concerted international action, specially in developing countries.

The super cyclone in Orissain October, 1999 and the Bhuj earthquake in Gujarat in January, 2001 underscored the need to adopt a multi dimensional endeavour involving diverse scientific, engineering, financial and social processes; the need to adopt multidisciplinary and multi sectoral approach and incorporation of risk reduction in the developmental plans and strategies.

Over the past couple of years, the Government of India have brought about a paradigm shift in the approach to disaster management. The new approach proceeds from the conviction that development cannot be sustainable unless disaster mitigation is built into the development process. Another corner stone of the approach is that mitigation has to be multi-disciplinary spanning across all sectors of development. The new policy also emanates from the belief that investments in mitigation are much more cost effective than expenditure on relief and rehabilitation.

Disaster management occupies an important place in this country's policy framework as it is the poor and the under-privileged who are worst affected on account of calamities/disasters. Disasters retard socio-economic development, further impoverish the impoverished and lead to diversion of scarce resources from development to rehabilitation and reconstruction.

The steps being taken by the Government emanate from the approach outlined above. The approach has been translated into a National Disaster Framework [a roadmap] covering institutional mechanisms, disaster prevention strategy, early warning system, disaster mitigation, preparedness and response and human resource development. The expected inputs, areas of intervention and agencies to be involved at the National, State and district levels have been identified and listed in the roadmap. This roadmap has been shared with all the State Governments and Union Territory Administrations. Ministries and Departments of Government of India, and the State Governments/UT Administrations have been advised to develop their respective roadmaps taking the national roadmap as a broad guideline. There is, therefore, now a common strategy underpinning the action being taken by all the participating organizations/stakeholders. c) Legal and techno-legal framework

- (d) Mainstreaming Mitigation into Development process.
  - (e) Funding mechanism.
  - (f) Specific schemes addressing mitigation.
  - (g) Preparedness measures.
  - (h) Capacity building.
  - (i) Human Resource Development
- and, above all, community participation. These are detailed in the following chapters.
- Document Type**
- ◆ Case study
  - ◆ Report

### Regions and Countries

- ◆ India - Donor country

### Topics

- ◆ Crisis response
- (a) Institutional changes

### Disaster Management Plan

On 1 June 2016, Narendra Modi, the Prime Minister of India, launched the Disaster Management Plan of India, which seeks to provide a frame work and direction to government agencies for prevention, mitigation and management of disasters. This is the first plan nationally since the enactment of the Disaster Management Act of 2005. [1]

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**Disaster may have the following main features**

- ◆ Unpredictability

- ◆ Unfamiliarity
- ◆ Speed
- ◆ Urgency
- ◆ Uncertainty
- ◆ Threat

It is a sudden calamity event bring great damage, destruction and devastation to life and property that makes disaster is invisible government as well as non government play a role in preparing the society Home guard civil defence volunteer national service scheme Nehru Yuva Kendra sangathan to play a role at time of disaster disasters can be manage through coordination with various Government and non government how disasters are to be manage and different levels are at par

### Managing Disasters

Disasters can be managed effectively through clothes work with various Government and non government agency. The flowchart will be showing about the management of disasters at levels in our country

**National level:-** The response from the central government based keeping in view the following factors:

1. The gravity of the disaster.
2. The scale of the relief operations.
3. The requirements of the central assistance for augmenting financial resources and logistics support at of state government.

The ministry of home affairs is the nodal ministry at the coordinating disaster management activities for all nation accept draught which is taken care by ministry of agriculture department of agriculture and corporation. Other ministries the responsibility of providing emergency support in cases that fall within their preview.

**State:-**the responsibility to cope up with natural disasters essentially that of the state comment government the role of the central government into support and terms of physical and financial resources the chief minister of secretary of the state red estate devil the meeting which is in overall charge of the relief operation at the state and the relief permission always in charge of the really bad rehabilitation measures in the week of natural disasters in any of the state secretary department of revenue is also in charge of pradeep operations Riley contingency plano cortez state police code and state contingency plan which guides them to manage disaster churni o scenarios.

### Conclusion

Disaster management has assumed great importance in recent times. To handle any unforeseen situation efficiently, we need to be well-equipped with latest technologies. It cannot avert the outbreak of disaster, but can mitigate its impact to a large extent.

To handle the situation efficiently, we need to be well-equipped with latest technologies. Disaster management cannot avert the situation, but can mitigate its impact to lessen sufferings of humans, plants and animals

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