

Legal framework for Disaster Governance at International and National Level

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Abstract

Disaster management means managing the necessary safety measures to prevent any disaster which can be man-made or natural. Disaster management is a process of reducing the damage caused by a disaster. Disaster cannot be completely avoided through disaster management, nor can its threat be eliminated, but in the event of a disaster, the damage caused by the disaster can be reduced to a great extent. Disaster management helps in reducing the risk of disaster. To deal with the disaster, arrangements have also been made by the government at the national and international level.

Keywords

Disaster Management, National , international level , (Disaster Management Act 2005) ,Law ,Institutions , Freedom from fear , Freedom from want , Rehabilitation , Risk reduction , Social contract.

Introduction

Space based inputs offer unique and crucial data during natural disasters viz. flood, cyclone, agricultural drought, landslides, earthquakes and forest fires in near real-time using space and aerial remote sensing based inputs. These services are available free for all users.

National Database for Emergency Management (NDEM) serves as a national repository of GIS based databases for the entire country coupled with a set of Decision Support System tools to assist the State / Central Disaster Management Authorities in decision making during emergency situations.

Current activities to support disaster management support are : Near Real Time Flood & Cyclone monitoring & mapping in the country, Flood Hazard/Risk Zonation for Flood prone states, Spatial Flood Early Warning, forest fire alerts, landslide zonation and inventory, agricultural drought studies and Capacity Building and institutionalization is being done to the stake holders.

DOS extends satellite data support under the following International Disaster programmes.

- International Charter Space and Major Disasters to international Disaster events.
- Sentinel Asia Framework
- United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)
- United Nations Economic and Social Survey of Asia and the Pacific 2013 (UNESCAP)

The services are available for countries including Cambodia, China, Indonesia, Iraq, Japan, Myanmar, Nepal, Oman, Philippines, Sri Lanka, Taiwan, Tajikistan, Thailand, Vietnam.

NDEM essentially serves as a national repository of GIS based data for entire country coupled with a set of Decision Support System tools to assist the disaster managers in decision making during emergency situations.

National Database for Emergency Management (NDEM) is a national repository of multi-scale geospatial databases coupled with decision support system tools. It is a unique and homogeneous database served for entire country with essential database elements for addressing emergency/disaster management in the country. NRSC/ISRO established a state-of-art facility with structured framework with multi-institutional participation to assist the disaster managers of all States/UTs for preparedness, hazard/risk zonation, damage assessment, and emergency response under the behest of Ministry of Home Affairs (MHA), Government of India. NDEM services have been operationalised since 2013 providing timely information along with disaster specific products for effective decision making.

Literature reviews

Many articles have been studied and suggestions have been received on how disaster management can reduce the damage caused by disasters. For this, the following research papers have been studied.

1.Disaster Governance and Legal Systems in India - Anil Kumar Gupta.

Anil Kumar Gupta in his study reviewed the laws directly and indirectly addressing disaster related hazards and vulnerability and capacity factors as well as the opportunities, resources and responsibilities of organizations/agencies. Apart from touring the disaster management governance in India, financial strategies, mechanisms of international cooperation and recent developments were discussed. A detailed description on the National Authority for Emergency

Response and Disaster Administration (NDMA), institutions (NIDM), sub-national and district structures is also given.

2. Legal Framework of Disaster Management in India - Rajendra Kumar Pandey.

Rajendra Kumar Pandey studied that disaster management is also an important function of the government. Therefore, the Central Government should also have the power to make rules related to disaster management.

3. Disaster Management Laws: International and Indian Perspectives - Tarun Arora and Nibedita Bhattacharjee.

This chapter describes the obligations of the State to carry out risk reduction, disaster management and rehabilitation. At the international level, the adoption of the Hyogo Declaration, 2005, the Sendai Framework, 2015 and the Sustainable Development Goals, 2015 reflect international solidarity to maintain the dignity of human life and strengthen resilience to reduce the severity of disasters.

4. Legal Framework & Issues of Disaster Management - prof. Masood Ahsan Siddiqui .

- Professor Masood Ahsan Siddiqui reviewed the study suggesting that disaster management could be included as an independent entry in the concurrent list of the Indian Constitution.
- Just as cases related to personal liberty are heard under Article 21 of the Indian Constitution. Similarly with the growing issues related to disaster risk reduction and environment, a new Article 21B can be added to the Constitution of India.
- In line with the SFDRR, the Disaster Management Act 2005 may be renamed as the National Disaster Risk Reduction Act.
- According to the provisions of Section 47 of the Disaster Management Act, it is necessary to create a mitigation fund.

What is a disaster?

Disaster is a man-made or natural calamity which causes loss of livelihood and property in a certain area, as a result of which humans and animals suffer. Disaster causes huge loss of life and property. Disaster disrupts the normal functioning of the society. A large number of people are

affected by it. Therefore, all those incidents which occur widely in nature and put not only humans but all living beings in danger are called disasters. For example, earthquake, flood, cyclone, drought, landslide, fire, terrorism, nuclear crisis, chemical crisis, environmental crisis etc. are disasters.

Definition Disaster management act sec 2(e)

"Disaster Management" means a continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary or expedient for-

- prevention of danger or threat of any disaster.
- Mitigation or reduction of risk of any disaster or its severity or consequences.
- Capacity-building.
- Preparedness to deal with any disaster.
- Prompt response to any threatening disaster situation or disaster.
- Assessing the severity or magnitude of effects of any disaster.
- Evacuation, rescue and relief.
- Rehabilitation and reconstruction.

What do you mean by Disaster Management?

Disaster management can be defined as the management and organization of responsibilities and available resources for coping up with various humanitarian aspects of emergencies. It focuses on the response, preparedness, and recovery so that the impact of the disaster is lessened as much as possible. Essentially, it is a series of strategic planning of the various procedures that need to be undertaken, administered, and employed to safeguard assets and lives from severe damages when natural or man-made calamities take place.

Objectives of study

The objective of study

- The objective of disaster management is to reduce the impact of disasters.
- Loss of life, property and infrastructure is to be minimised.
- It focuses on preparedness, response, recovery and mitigation to enhance the resilience of communities and ensure effective coordination among various stakeholders during emergencies.

Research Methodology

The study mainly focuses on secondary data collection from various sources such as magazines. The paper has been prepared by studying newspapers, research papers and books. In this paper, how we can reduce the damage caused by disaster through disaster management has been explained. Like improving tolerance, Preventing losses and hazards, providing relief to the affected people, preparing for action to be taken at the time of disaster, assessing the damage caused, arranging rescue for the affected, rehabilitation and reconstruction of the affected area.

Historical background of Natural Disaster

A Natural Disaster is a natural event that causes great damage to the property or loss of human life. Natural disasters have had their sad history in India as well as other places around the world. Now with the extended climate change and rising temperatures, the Earth is more prone to them occurring. As it is, we have seen many disasters in the previous year. In the article below, take a look at the top deadly natural disasters in the history of India.

Examples of Natural Disaster: Volcano, flood, Tsunami, and Earthquakes, or hurricane or cyclone etc.

The greatest natural disasters in history

1. Kashmir flood disaster, 2014

Year - 2014

Affected areas - Rajouri, Srinagar, Bandipur etc.

Number of deaths - 550+

Reason - Incessant rain and spate of Jhelum river

This flood caused huge damage to life in the Kashmir region in September 2014. The water level of Jhelum river has increased due to continuous torrential rainfall. That is why water entered into the residential areas of the Kashmir region. The Indian army helped a lot of the stranded residents of this region. Around 550 people lost their lives and damage of properties was estimated between Rs. 5000 cr and 6000 cr.

2. Uttarakhand Flash Floods, 2013

Year - 2013

Affected Areas - It affected 12 out of 13 districts of the state. Four districts were worst affected namely; Rudraprayag, Uttarkashi, Pithoragarh, and Chamoli.

Number of deaths - 5,700 plus

Cause: Heavy rainfall, massive Landslides

3. Gujarat Earthquake, 2001

Year: 2001

Affected Areas: Kutch, Ahmedabad, Bhuj, Gandhinagar, Surat, Surendranagar, Rajkot, Jamnagar etc.

The number of deaths: Around 20,000, injured 167,000 and nearly 400,000 became homeless.

Cause: Earthquake

This was the day of India's 51st Republic Day celebration on January 26, 2001. Suddenly, Bhachau Taluka of Kutch (Gujarat) experienced an earthquake of 7.6 to 7.9 on the Richter Scale and lasted for 120 seconds. This disaster killed around 20,000, injured 167,000 and nearly 400,000 people became homeless.

4. 2017 Hurricane Maria

On Sept. 20, 2017, Puerto Rico was hit by the deadliest U.S.-based natural disaster in the last 100 years, according to NBC News. Hurricane Maria had the highest average rainfall of all 129 storms that have hit Puerto Rico in the past 60 years, according to the American Geophysical Union.

The hurricane dropped around 41 inches (104 centimeters) of rain onto the island, which caused devastating floods. Research published in the New England Journal of Medicine estimated that the total death toll caused by Hurricane Maria was more than 4,600. Hurricane Maria was also the third most costly tropical cyclone in the U.S., causing around \$98 billion worth of damage, according to the National Oceanic and Atmospheric Administration (NOAA).

5. 2019 and 2020 Australia wildfire

Between 2019 and 2020, Australia experienced some of the deadliest wildfires in recent history. The official death toll for the wildfires was 33, according to the Parliament of Australia. A further 445 people died from conditions related to smoke inhalation from the wildfires, and 4,000 people were admitted to hospital, according to the BBC.

Between September 2019 and March 2020, 46 million acres (19 million hectares) of forests in southeast Australia were burnt, according to the Center of Disaster Philanthropy. Generally, the

majority of wildfires are believed to have been ignited by lightning, according to the Parliament of Australia; however, according to research conducted by the University of Oxford, the risk of intense fire weather during the bushfire season in southeastern Australia has increased by 30% since 1900 as a result of climate change.

6.Galveston Hurricane ,1900

The Great Galveston Storm occurred on September 8, 1900, when a hurricane with an estimated strength of Category 4 hit Galveston, Texas. This hurricane remains the deadliest natural disaster in U.S. history, as well as the worst hurricane in U.S. history. More than 8,000 people were killed, and 10,000 were left homeless. The hurricane decimated Galveston, which at the time was one of the most advanced cities in Texas. The hurricane had an estimated tidal surge of 15 feet (4.5 meters), while the barrier island of Galveston was only 5 feet (1.5 meters) above sea level. It struck without much warning, as storm forecasting at the time lacked the advanced technology necessary to accurately predict the enormous physical and human toll the hurricane would take.

7.Yangtze River Flood (1931)

Major flood events along the Yangtze River (Chang Jiang) in central and eastern China have occurred from ancient times to the present, causing considerable destruction of property and many casualties, but the major flood of 1931 stands out. It covered tens of thousands of square miles, flooding rice fields and various cities, including Nanjing and Wuhan. The flood affected more than 50 million people. Government organizations, including the National Oceanic and Atmospheric Administration, estimated the death toll to have been about 3.7 million people.

Types of disasters

Disasters are classified into two types, namely:

1.Natural disasters

2.Man-made disasters

1.Natural Disasters

Natural disasters are physical peculiarities caused either by quick or slow beginning occasions that promptly affect human wellbeing and auxiliary effects bringing on additional demise and languishing. Natural disasters are further classified into 5 types.

- **Geophysical natural disasters-** Naturally occurring disasters like a volcanic eruption, tsunamis, earthquakes, and landslides are some of the major forms of geophysical natural disasters.
- **Hydrological natural disasters** - Naturally occurring disasters like avalanches and floods are the major forms of hydrological natural disasters.
- **Climatological natural disasters** - Naturally occurring disasters like extreme temperatures, forest fires, and global warming are some of the major forms of climatological disasters.
- **Meteorological natural disasters** - Naturally occurring disasters like cyclones and storms are the major forms of meteorological disasters.
- **Biological natural disasters** - Naturally occurring disasters like disease epidemics and plagues are the major forms of biological disasters.

2.Manmade Disasters

Manmade Disasters are the events that are brought about by human beings which happen in or near human settlements frequently caused as a consequence of Environmental or Technological Emergencies. Manmade disasters are further classified into three types.

- **Gas leakages** - Gas spills are quite possibly the riskiest man-made disaster on the planet. They can straightforwardly carry unfortunate results to human well-being and the climate. Gas breaks can likewise spread rapidly without notice. It might cause a huge blast and claim human lives.
- **Oil spillages** - Oil spills adversely affect marine creatures. Since the majority of the oil floats in water, the daylight engrossing limit of the water diminishes. Oil spills are serious natural contamination. A ton of poisons are flushed into the air and soil.

- **Nuclear explosions** - Nuclear explosions cause serious damage to the atmosphere and soil and also have a long-lasting impact on the health of the inhabitants.

Concepts of Disaster Management:

Now that we are familiar with the type of disasters at hand, we can now take a look at the concepts related to disaster management. They are as follows:

1.Prevention

2.Preparedness

3.Response/Relief

4.Recovery

1. Prevention - UNISDR views Disaster Prevention as the concept of engaging in activities which intend to prevent or avoid potential adverse impacts through action taken in advance, activities designed to provide protection from the occurrence of disasters.

2. Preparedness - According to ICRC, Disaster Preparedness refers to measures taken to prepare for and reduce the effects of disasters, be they natural or man-made. This is achieved through research and planning in order to try to predict areas or regions that may be at risk of disaster and where possible prevent these from occurring and/or reduce the impact of those disasters on the vulnerable populations that may be affected so they can effectively cope.

Disaster preparedness activities embedded with risk reduction measures can prevent disaster situations and also result in saving maximum lives and livelihoods during any disaster situation, enabling the affected population to get back to normalcy within a short time period.

3. Response/ Relief - Focused predominantly on immediate and short-term needs, the division between this response/relief stage and the subsequent recovery stage is not clear-cut. Some response actions, such as the supply of temporary housing and water supplies, may extend well into the recovery stage. Rescue from immediate danger and stabilization of the physical and emotional condition of survivors is the primary aim of disaster response/relief.

Activities of Response/ Relief include:

- Rescue
- Relocation
- Provision Food and Water
- Provision Emergency Health Care
- Prevention of Disease and Disability
- Repairing Vital Services e.g. Telecommunications, Transport
- Provision Temporary Shelter

4. Recovery - Vulnerability of communities often continues for long after the initial crisis is over. It include the following activities:

- Rebuilding Infrastructure e.g. Homes, Schools, Hospitals, Roads.
- Health Care and Rehabilitation.
- Development Activities e.g. building human resources for health.
- Development Policies and Practices to avoid or mitigate similar situations in future.

Important sections of Disaster Management Act 2005

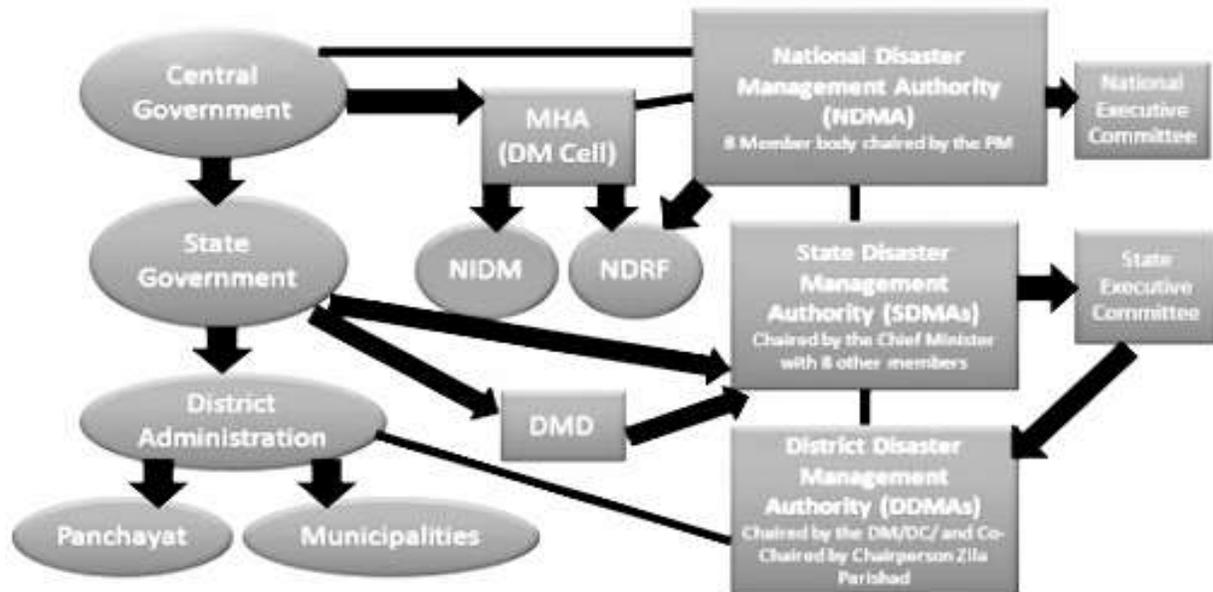
The important sections of the Disaster Management Act 2005 are as follows:

Section 6 – Section 6 empowers the NDMA to formulate a national plan for disaster management. It also ensures that the strategy is followed by state disaster management agencies.

Section 10 – It gives the National Executive Committee (NEC) the power to direct governments on the course of action.

Section 33- It states that the district authority may direct any district level officer, department or local authority to take such action as may be necessary to prevent or mitigate the effects of a disaster. The concerned department or officer is required to comply with the direction.

Legal - Institutional Framework



Disaster constitution provision

The Constitution of India has two entries in the State List that are remotely related to the subject of disaster management are entry 14, which deals with agriculture, including protection against pests and plant diseases, and entry 17 which deals with water, including water supply, drainage and embankments. The High Power Committee appointed by the Government of India, strongly felt that this is grossly inadequate, and that Disaster Management needs to be included in the 7th schedule of the Constitution under which ever list is felt most appropriate. However, the legislation on disaster management has been related to entry 23 (social security and social insurance) in the Concurrent list of the Constitution and the States would also be able to make their own legislation on the subject.

A number of constitutional provisions provide for the State's obligation to provide relief and rehabilitation. Article 21 of the Indian Constitution guarantees every person the right to life and personal liberty. It casts a positive obligation on the State to take all possible steps for prevention, preparedness and mitigation of disasters. Article 21 has been liberally interpreted by the Supreme Court to expand the scope of 'life' and can be said to be the repository of all important human rights. Besides, this Article 38 directs State to promote the welfare of the

people. Article 51 directs State to honor the international treaty obligations. India is a party to a number of international treaties on environment which contain specific provision on disaster management (Ref: Constitution of India)

Under Article 51 India is under an obligation to honor its international commitments. India is a party to a number of international Conventions which highlight its obligation to protect its people from disasters. The United Nations General Assembly designated the 1990s as the International Decade for Natural Disaster Reduction (IDNDR). A significant step in this regard was the 1st World Conference in May 1994 wherein the Yokohama Strategy and Plan of Action were given effect. The 2002 World Summit on Sustainable Development reinforced awareness of the need for risk and vulnerability reduction in order to secure sustainable development. Hyogo Framework for Action came into existence in 2005 and continued till 2014. For next 15 years, 2015-2030, India along with 186 other Countries ratified Sendai Framework for Disaster Risk Reduction (SFDRR) with 7 Global Targets to be accomplished under 4 priorities.

At the State and Central level, different legislations have been enacted, to deal with different types of disasters. Of these there are certain Acts whose operation spread across different types of disasters and deal with disasters in general. Also there are disaster specific statutes prescribing norms for tackling a particular type of disaster. Acts which are applicable to disasters in general, not exhaustive, are Indian Penal Code (1860), the procedural aspect Code of Criminal Procedure (1973), Indian Evidence Act (1872), Wildlife Protection Act (1972), Environmental Protection Act (1986), National Green Tribunal Act 2010 etc.

National Institute of Disaster Management

The National Institute of Disaster Management established under the Disaster Management Act 2005 is entrusted with the nodal national responsibility for human resource development, capacity building, training, research, documentation and policy advocacy in the field of disaster management. The National Institute of Disaster Management, upgraded from the National Center for Disaster Management of the Indian Institute of Public Administration on October 16, 2003, is on pace to fulfill its mission of building a disaster resilient India by developing and promoting a culture of prevention and preparedness at all levels. Is proceeding from.

Management structure

The Union Home Minister is the Chairman of the Institute which is a common body of 42 members including eminent scholars, scientists and practitioners, Secretaries of various nodal Ministries and Departments of the Government of India and State Governments and heads of national level scientific research and technical organizations. Are involved. This institute has a 26-member governing body headed by the Vice Chairman of the National Disaster Management Authority. The Executive Director runs the day-to-day administration of this institute.

Vision

To be a premier institute of excellence for training and research on disaster risk reduction and management in India and recognized as one of the internationally leading institutions in this field. To continuously strive towards building a disaster free India by developing and promoting a culture of prevention and preparedness at all levels.

Mission

- To serve as a think tank for the Government by providing policy formulation and support and thereby facilitate in reducing the impact of disasters.
- To plan and promote training and capacity building services including strategic learning.
- Research, documentation and development of national level knowledge.
- To promote system development and expertise for effective disaster preparedness and mitigation.
- To promote and raise awareness of knowledge and skills of all stakeholders.
- To strengthen the institutional mechanism for training and capacity building at all levels of all stakeholders.
- To facilitate networking and exchange of information, experience and expertise.

Work

Under the Disaster Management Act 2005, the Institute is entrusted with, inter alia, the following functions.

- Development of training modules, research and documentation work and organization of training programs in disaster management.
- To prepare and implement a comprehensive human resource development plan covering all aspects of disaster management.
- To provide assistance in policy making at the national level.
- To provide necessary assistance to training and research institutions for development of training and research programs for various stakeholders.
- To provide assistance to State Governments and State Training Institutes in the form of formulation of State level strategies, strategies, disaster management frameworks and any other assistance required for capacity building.
- To develop educational material for disaster management including academic and professional courses.
- To promote awareness among stakeholders including college/school teachers and students, technical personnel and others associated with multi-hazard mitigation preparedness and response measures.
- Undertaking, organizing and facilitating the conduct of study courses, conferences, lectures, seminars for promoting disaster management within and outside the country.
- Undertaking the publication of magazines, research papers and books and providing support for them and establishing and maintaining libraries etc.

National Disaster Management Authority (NDMA)

The Disaster Management (DM) Act, inter alia, provides for the establishment of a National Disaster Management Authority (NDMA) under the Chairmanship of the Prime Minister and a National Executive Committee (NEC) of Secretaries to assist the National Authority in its functions. Does.

Functions

The functions and responsibilities assigned to the NDMA are briefly listed below :-

- Lay down policies on disaster management.

- To approve the National Plan and approve plans prepared by Ministries/Departments of the Government of India in accordance with the National Plan.
- Lay down guidelines to be followed by State authorities in the preparation of State Plans;
- Lay down guidelines to be followed by various Ministries/Departments of the Government of India in their development plans and projects for the purpose of integrating measures for prevention of disasters or mitigation of their effects,
- Coordinate the promulgation and implementation of policy and plan for disaster management;
- Recommend provision of funds for the purpose of mitigation,
- Provide assistance for major disasters to other affected countries as may be determined by the Central Government;
- Take such other measures as may be considered necessary for prevention, mitigation, prevention of disaster or preparedness and capacity building to deal with the threat of disaster;
- Lay down broad policies and guidelines for the functioning of the National Disaster Management Institute;
- Empower the concerned Department to make emergency purchases of rescue and relief materials or provisions for the threat of disaster or disaster;
- Exercise general superintendence, direction and control of the National Disaster Response Force (NDRF) constituted under the Act to deal with the threat of disaster or disaster in a specialist capacity;
- Recommend guidelines for minimum standards of relief to be provided to persons affected by disasters;
- Recommend relief in repayment of loans or grant of fresh loans on concessional terms to persons severely affected by the disaster.

Model Act for the Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance

In 2011, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), the IFRC, and the Inter-Parliamentary Union launched the pilot version of their “Model Act for the Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance”, with the intention of launching a finalized version by the end of 2012. The Model Act is an example of what a national law relating to disaster recovery should look like, utilizing the standards set forth in the IDRL Guidelines. It is intended as a tool for states who wish to implement the IDRL guidelines and unsure of language to use in any new legislation to be passed.

The “Model Act for the Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance” is intended as a reference tool for voluntary use, in whole or in part, by states that wish to prepare for the possibility that they may one day require international assistance to respond to a disaster on their territory. If such an event occurs, global experience shows that an affected state will benefit from a clear legal framework for the entry and coordination of international humanitarian assistance, which balances safeguards for public security and safety against the urgent needs of those affected by the disaster. This Model Act, like the IDRL Guidelines, is intended to help states address some of the legal and regulatory issues that commonly arise concerning international assistance during disasters. These issues relate to the entry and operation of assisting international actors, and also to the coordination of their assistance, especially in the relief and initial recovery period.

Suggestions for Disaster Management

- **Risk Assessment and Planning** - Conduct thorough risk assessments to identify potential hazards and vulnerabilities in the area. Develop comprehensive disaster management plans that outline roles, responsibilities, and actions to be taken in the event of a disaster.
- **Early Warning Systems** - Implement robust early warning systems to alert communities about impending disasters such as floods, hurricanes, tsunamis, or wildfires. This allows people to evacuate to safer areas in a timely manner.

- **Community Engagement** - Involve local communities in disaster preparedness and response efforts. Conduct awareness campaigns, drills, and training sessions to educate people about what to do before, during, and after a disaster.
- **Infrastructure Resilience** - Build and maintain resilient infrastructure that can withstand natural disasters. This includes constructing buildings to withstand earthquakes, reinforcing levees and dams, and implementing flood control measures.
- **Resource Stockpiling** - Stockpile essential supplies such as food, water, medical supplies, and emergency equipment to ensure a timely response to disasters. Pre-positioning resources in strategic locations can expedite relief efforts.
- **Coordination and Collaboration** - Foster collaboration among government agencies, non-governmental organizations, community groups, and other stakeholders involved in disaster management. Establish clear communication channels and coordination mechanisms to ensure a cohesive response.

Conclusion

Most often calamities wipe out a massive population from the earth. Though technology has increasingly developed it is an aphorism that still man is not capable enough to withstand the powers of nature. The failures to manage the disasters properly enhance the casualties. Failure of communication and early warning systems, immediate and speedy rescue operations and opening of rehabilitation centers, lack of proper medical treatment etc further add to the gravity of the disaster. In ecologically sensitive regions, disaster management should be a priority. The Uthrakhand experience exposed that India has failed to take adequate precautionary measures in case a disaster occurred.

We are always very late in exact prediction and finding out the actual cause of the disaster. Even if we trace out the actual cause, we are mute in taking further steps. India, from south to north and east to west experience different climate, geography and topography. Different regions are

vulnerable to different types of calamities. Every year thousands will die and even more will suffer the aftermaths of calamities.

It is the failure of disaster management that enhances the mortality rate. Both union and state governments are all the time irresponsible in their duties in proper handling of the disaster affected different regions. States like Odisha and coastal regions of Andhra Pradesh and Tamil Nadu are worst affected by cyclones, Gujarat and some other states are earthquake prone areas, monsoon always brings floods affecting the normal life of the people. All these factors are crystal clear.

NDMA as well as SDMA are not ready to learn lessons from their previous experience with disaster management. They wake up only when disaster occurs and are not ready to take precautionary measures, which will, to a great extent, save the lives of many. The government should take measures to ensure that fragility is not disturbed. Effective disaster management should rely on a thorough integration of emergency plans at all levels of government and nongovernment involvement. Activities at each level (individual, group, community) affect the other levels.

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