# DISASTER MANAGEMENT IN INDIA- PRAXIS OR MERELY A SPECULATION?

by

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# **INTRODUCTION**

"We cannot stop natural disasters but we can arm ourselves with knowledge: so many lives wouldn't have to be lost if there was enough disaster preparedness."

– Petra Nemcova

India is the home to a plethora of physical features like the beautiful Himalayas, the great Thar Desert, comforting northern plains and many more. Despite their aesthetic appeal to the eyes, they also add certain amount of vulnerability towards natural disasters.

Moreover, with the dawn of technology, humans have invested their brains in the formation of certain weapons which can aid in defense against uninvited attacks from foreign agencies. It is a hard pill to swallow that a minute negligence in handling these substances can lead to catastrophic events like the Chernobyl nuclear disaster of 1986.<sup>1</sup>

India is vulnerable, in varying degrees, to a large number of disasters. More than 58.6 per cent of the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12%) of its land is prone to floods and river erosion; close to 5,700 km, out of the 7,516 km long coastline is prone to cyclones and tsunamis; 68% of its cultivable area is vulnerable to droughts; and, its hilly areas are at risk from landslides and avalanches.<sup>2</sup> Moreover, India is also vulnerable to Chemical, Biological, Radiological and Nuclear (CBRN) emergencies and other man-made-disasters.

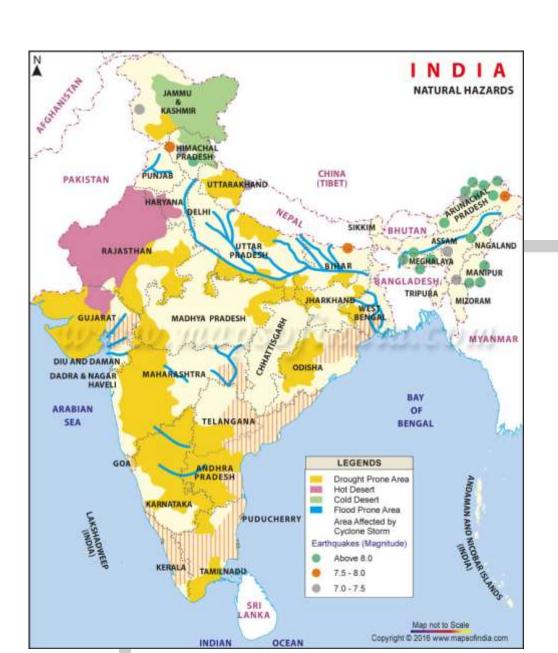
<sup>&</sup>lt;sup>1</sup> Chernobyl Accident 1986, available at: https://www.world-nuclear.org/information-library/safety-and-security/safety-of-plants/chernobyl-accident.aspx (last visited on January 28, 2020).

<sup>&</sup>lt;sup>2</sup> Vulnerability Profile of India, available at: https://ndma.gov.in/en/vulnerability-profile.html (last visited on January 28, 2020).

Disaster risks in India are further compounded by increasing vulnerabilities related to changing demographics and socio-economic conditions, unplanned urbanization, development within high-risk zones, environmental degradation, climate change, geological hazards, epidemics and pandemics. Clearly, all these contribute to a situation where disasters seriously threaten India's economy, its population and sustainable development.

Following is the map depicting the various natural hazard prone regions in India. The various hazards have been marked in different colors for clear indication of the regions and easy understanding of the map.





In order to combat these disastrous events, The Disaster Management Act was passed in the year 2005 in India.

The Disaster Management Act, 2005 defines events that cause substantial loss of life, prosperity and environment. It reads, "Disaster means catastrophe, mishap, calamity or grave occurrence in any area, arising from nature or man-made causes, or by accident or negligence which result in substantial loss of life, of human suffering or damage to, and destruction of property, or damage

to, or degradation of environment, and is of such nature or magnitude as to be beyond the coping capacity of the community of the affected area."<sup>3</sup>

The act defines Disaster Management as, a continuous cycle and integrated process of planning, organizing, coordinating and implementing, coordinating and implementing measures which are necessary or expedient for-

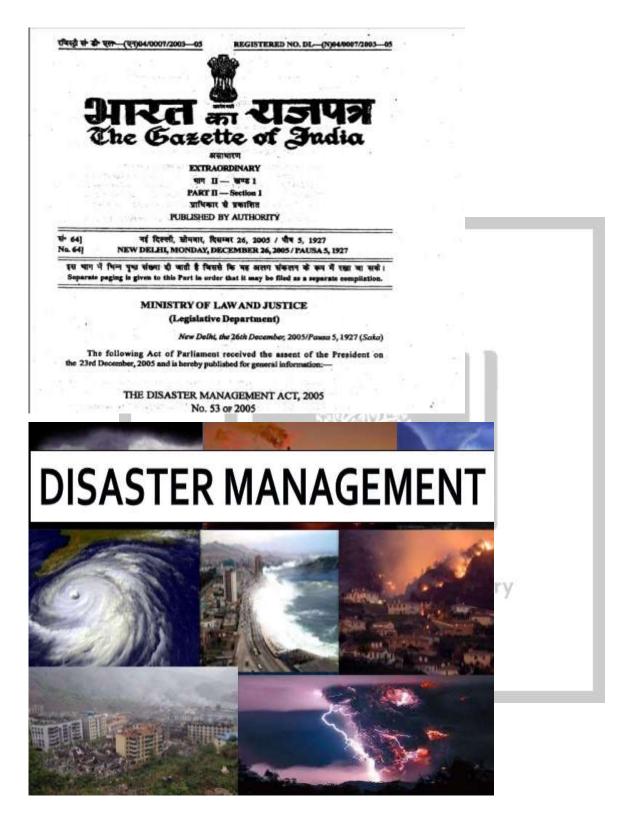
- (i) Prevention of danger or threat of any disaster;
- (ii) Mitigation or reduction of risk of any disaster or its severity or consequences;
- (iii) Capacity-building;
- (iv) Preparedness to deal with any disaster;
- (v) Prompt response to any threatening disaster situation or disaster;
- (vi) Assessing the severity or magnitude of effects of any disaster;
- (vii) Evacuation, rescue and relief;
- (viii) Rehabilitation and Reconstruction.<sup>4</sup>

The Act provides for three tier mechanism for Disaster Management that includes National Disaster Management Authority, State Disaster Management Authority and District Disaster Management Authority.

Basically, it provides for the effective management of disasters by Indian government bodies, and regulates the establishment, structure, organization, powers, functioning and responsibilities of national, state and district disaster management authorities. It is a unique approach to save the innocent lives and the environment from the fatal effects of disasters.

<sup>&</sup>lt;sup>3</sup> The Disaster Management Act, 2005, Section 2(d), available at: https://ndma.gov.in/images/ndma-pdf/DM\_act2005.pdf (last visited on January 28, 2020).

<sup>&</sup>lt;sup>4</sup> The Disaster Management Act, 2005, Section 2(e), available at: https://ndma.gov.in/images/ndma-pdf/DM\_act2005.pdf (last visited on January 28, 2020).



STATEMENT OF PROBLEM

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The Disaster Management Act, 2005, throws light on the responsibilities of the government before, during and after the disaster has hit the particular region. Chapter V of this Act specifically, deals with the measures to be taken by the government for disaster management. By means of this assignment, I shall emphasize on the governmental responsibilities and with the help of certain eminent instances of hazardous events, I shall try to analyze that whether the government is actually putting it into action or is it just a speculation. The same shall be supported by case laws.

# **OBJECTIVES OF THE STUDY**

- 1. To have a deep knowledge about The Disaster Management Act, 2005 as a means to fight the life threatening events.
- 2. To learn the various provisions of The Disaster Management Act, 2005 particularly the ones related to the governmental responsibilities.
- 3. To be able to understand the significant aspects of measures to be taken by the government by considering examples of certain disastrous events of the past and case laws, and accordingly, give the relevant suggestions.

# RESEARCH METHODOLOGY

The research methodology adopted in doing a research work plays a major role. The work becomes more accurate and reliable if the appropriate methodology is used.

Thus, for my research work, I chose the DOCTRINAL RESEARCH METHODOLOGY, which is about the legal propositions and doctrines. It involves exploring the topic and its legal concepts thoroughly.

#### THE DISASTER MANAGEMENT ACT, 2005.

The Disaster Management Act, 2005 has been enacted as the central Act to deal with the management of disasters on December 23, 2005. This act envisaged a three tier Disaster Management structure in India at National, States and District levels. Under the act, the NDMA, SDMA, NEC, NDRF, NIDM and disaster related funds were established.

## National Disaster Management Authority (NDMA):5

Its chairperson is the Prime Minister. Not more than nine other members can be there. Vice Chairperson is appointed from amongst members by the Chairperson. Executive Committee is chaired by the Secretary of the Ministry entrusted with the work of the Disaster Management.



# State Disaster Management Authority (SDMA):6

Its Chairperson is the Chief Minister of the concerned State. Other members not exceeding eight are there. And in addition, Chairperson of the State Executive Committee (who is Chief Secretary) is also included. Vice Chairperson is appointed by Chairpersons from amongst members.

<sup>&</sup>lt;sup>5</sup> National Disaster Management Authority, available at: https://ndma.gov.in/en/ (last visited on January 30, 2020).

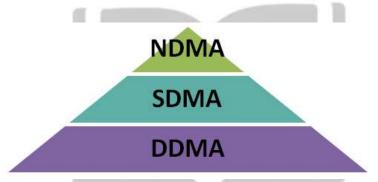
<sup>&</sup>lt;sup>6</sup> The Disaster Management Act, 2005, Chapter III, available at: https://ndma.gov.in/images/ndma-pdf/DM\_act2005.pdf (last visited on January 30, 2020).

Chairperson of the State Executive Committee is the Chief Executive Officer. State Executive Committee is chaired by the State Chief Secretary.

#### District Disaster Management Authority (DDMA):<sup>7</sup>

The act provides for the district Disaster Management Authority under a chairperson (cochairperson is elected member of local authority). Overall co-ordination between various departments at district level is achieved.

Under General Financial Rules/Revenue Codes, there are powers to draw money. If there are armed forces units available locally, their assistance can be requested. Coordination with civil society is achieved



# **National Executive Committee:8**

The Central Government shall constitute a National Executive Committee to assist the National Authority in the performance of its functions under this Act. It shall consist of:

- the Secretary to the Government of India in charge of the Ministry or Department of the Central Government having administrative control of the disaster management, who shall be Chairperson, ex officio;
- the Secretaries to the Government of India in the Ministries or Departments having administrative control of the agriculture, atomic energy, defence, drinking water supply, environment and forests, finance (expenditure), health, power, rural development, science and technology, space,

<sup>&</sup>lt;sup>7</sup> The Disaster Management Act, 2005, Chapter IV, available at: https://ndma.gov.in/images/ndma-pdf/DM\_act2005.pdf (last visited on January 30, 2020).

<sup>&</sup>lt;sup>8</sup> The Disaster Management Act, 2005, Section 8, available at: https://ndma.gov.in/images/ndma-pdf/DM\_act2005.pdf (last visited on January 30, 2020).

telecommunication, urban development, water resources and the Chief of the Integrated Defence Staff of the Chiefs of Staff Committee, ex officio.

- The Chairperson of the National Executive Committee may invite any other officer of the Central Government or a State Government for taking part in any meeting of the National Executive Committee and shall exercise such powers and perform such functions as may be prescribed by the Central Government in consultation with the National Authority.
- The procedure to be followed by the National Executive Committee in exercise of its powers and discharge of its functions shall be such as may be prescribed by the Central Government.

## National Disaster Response Force:<sup>9</sup>

There shall be constituted a National Disaster Response Force for the purpose of specialist response to a threatening disaster situation or disaster.

Subject to the provisions of this Act, the Force shall be constituted in such manner and, the conditions of service of the members of the Force, including disciplinary provisions therefore, be such as may be prescribed.



<sup>&</sup>lt;sup>9</sup> National Disaster Response Force, available at: http://www.ndrf.gov.in/ (last visited on January 31, 2020).

## National Institute of Disaster Management: 10

The National Institute of Disaster Management (NIDM) was constituted with a vision to play the role of a premier institute for capacity development in India and the region. Under the Disaster Management Act 2005, NIDM has been assigned nodal responsibilities for human resource development, capacity building, training, research, documentation and policy advocacy in the field of disaster management.

NIDM provides Capacity Building support to various National and State level agencies in the field of Disaster Management & Disaster Risk Reduction. The Institute's vision is to create a Disaster Resilient India by building the capacity at all levels for disaster prevention and preparedness.



# Central Government and State Government to take respective measures: 11

The Central and the State Government are required to take the relevant measures in order to deal efficiently with disasters. For instance:

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- Coordination of actions of various ministries, departments and authorities
- Ensure the integration of measures of these ministries and departments
- Allocation of funds to these ministries, departments and authorities for prevention of disaster,
   mitigation, capacity building and preparedness

<sup>&</sup>lt;sup>10</sup> National Institute of Disaster Management, available at: https://nidm.gov.in/ (last visited on January 31, 2020).

<sup>&</sup>lt;sup>11</sup> The Disaster Management Act, 2005, Chapter 5, available at: https://ndma.gov.in/images/ndma-pdf/DM\_act2005.pdf (last visited on January 31, 2020).

- Deployment of naval, military and air forces, other armed forces as me be required for the purposes of this act
- Establish institutions for research, training and developmental programmes in the field of disaster management
- Coordination with the United Nations agencies, international organizations and governments of foreign countries for the purpose of this act
- Such other matters as it deems necessary or expedient for the purpose of securing effective implementation of the provisions of this act.

Similarly, there are certain responsibilities of various ministries and departments under the Central and State Government to take the right step towards disaster management. There is also a provision for National Policy and State Policy maintained by the respective governments.

## The National Policy on Disaster Management, 2009:12

It was approved by the Government in November 2009. This comprehensive policy document lays down policies on every aspect of holistic management of disasters in the country.

# Salient Features of India's National Policy on Disaster Management:

• India's National Policy on Disaster Management was approved by the Union Cabinet of India on 22nd October, 2009 with the aim to minimize the losses to lives, livelihoods and property, caused by natural or manmade disasters with a vision to build a safe & Disaster resilient India by developing a holistic, proactive, integrated, Multi-disaster oriented and technology driven strategy.

With this national Policy in place in India, a holistic and integrated approach will be evolved towards disaster management with emphasis on building strategic partnerships at various levels.

The themes underpinning the policy include Community based Disaster Management, Capacity development in all spheres, Consolidation of past initiatives and best practices and Cooperation with agencies at National and International levels with multi-sectoral synergy.

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<sup>&</sup>lt;sup>12</sup> National Policy on Disaster Management, available at: https://pib.gov.in/newsite/mbErel.aspx?relid=133377 (last visited on January 31, 2020).

The Policy is also intended to promote a culture of prevention, preparedness and resilience at all
levels through knowledge, innovation and education. It encourages mitigation measures based on
environmental sustainability.

It seeks to mainstream disaster management into the developmental planning process and provides for Institutional and Financial arrangements at national, State, and District-levels for Disaster Prevention, Mitigation, Preparedness and Response as it ensures adequate budgeting for disaster mitigation activities in all Ministries and Departments.

- State Policies on Disaster Management % The States of Madhya Pradesh, Gujarat, Kerala have formulated State Disaster Management Policies. Tamil Nadu, Chattisgarh, Uttranchal, Meghalaya, Bihar, Rajasthan, Delhi, Orissa and West Bengal have prepared draft policies.
- State Relief Codes/ DM Codes: Many States have manuals and codes for management of drought, floods etc. Now many states are in the process of changing their State Relief codes into Disaster Management Manuals.

Now, let us study the major disasters which occurred in the past and the way government took the relevant steps to fight them.



# **BHUJ EARTHQUAKE, 2001**

A powerful earthquake rocked the western state of Gujarat in India at 08:46 hours (Indian Standard Time) on the 26th January 2001. The earthquake was estimated by USGS<sup>13</sup> to have a Moment Magnitude of 7.9. The epicentre was reported to be near a major town called Bhuj in the Kachchh region of Gujarat.

<sup>13</sup> U.S. Geological Survey, available at: https://www.usgs.gov/ (last visited on February 1, 2020).



Initial reports in the media indicated extensive damage to the civil engineering structures followed by reports on loss of life on a massive scale. The extent of earthquake damage was immense.

The large magnitude of the earthquake combined with the poor construction quality contributed to large scale damage to the building stock and a high number of casualties.

- Ahmedabad, Rajkot, Jamnagar, Surendaranagar and Patan were heavily damaged.
- Nearly 19,000 people died. Kutchh alone reported more than 17,000 deaths.

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- 1.66 lakhs people were injured. Most were handicapped for the rest of their lives.
- The dead included 7,065 children (0-14 years) and 9,110 women.

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• There were 348 orphans and 826 widows.

#### **Assistance provided:**

- Immediate relief of Rs 500 crores from the NCCF<sup>14</sup>.
- NCCF augmented by imposing a 2% surcharge on personal and corporate income tax in Union Budget (2001-02) for assisting Gujarat.
- Rs 110 crores provided from PM's Relief Fund.
- Assistance was provided under various centrally sponsored schemes for reconstruction of social and physical infrastructure.
- Arrangements were tied up with ADB and World Bank for credit worth US \$800 million.

<sup>&</sup>lt;sup>14</sup> National Calamity Contingency Fund, available at: https://doe.gov.in/national-calamity-contigency-fund-nccf (last visited on February 1, 2020).

- NHB and HUDCO set apart adequate funds for housing reconstruction.
- RBI instructed banks to freeze recoveries and extend liberal loans.
- Gujarat government was enabled to float tax-free earthquake bonds.

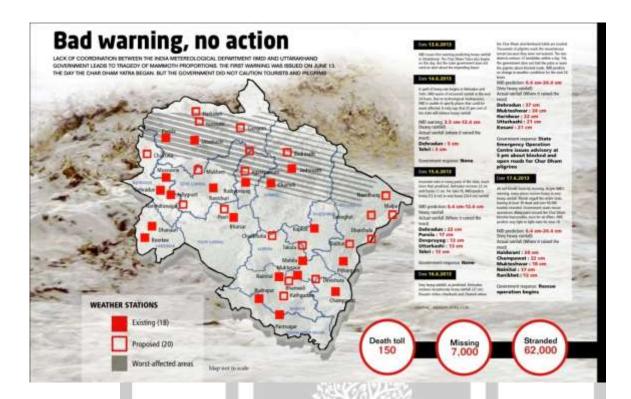
#### **NOTE:**

This disaster was a major setup for India in terms of human life, economy, social aspects, infrastructure, etc. It made the central and the state government to question their power to deal with future disastrous events. Though the government and the various national as well as international organizations had given their support but it was crystal clear that a better system of disaster management had to be constructed in order to fight any future hazards. Thus, it was after the Bhuj earthquake of 2001 that the government started working towards framing of a more efficient system under the banner of The Disaster Management Act, 2005.



North India Floods, 2013

At the peak of the monsoon season the northern state of Uttarakhand was face to face with floods caused due to the cloud burst that hit three of the four famous Char Dham pilgrim sites, "2013 North India floods" leaving tens and thousands of inhabitants as well as pilgrims stranded or swept away due to the floods, and not to mention the damage cause to life, property and business.



The famous Char Dham pilgrimage is now discontinued for three years for repair and restoration. The National Institute of Disaster Management (NIDM), in one of its first reports on the Uttarakhand floods, has blamed "climatic conditions combined with haphazard human intervention" in the hills for the disaster.<sup>15</sup>

Besides the natural disaster various other factors have contributed to the downfall of this famous religious/ tourist site. Uttarakhand's huge potential in tourism lead to the state in tapping its potential towards becoming a major tourist and pilgrim destination, also has a hand in this disaster. The uncontrolled rise of tourism inflow into the sate of Uttarakhand, took a toll on the ecology of the state. With Uttarakhand's proximity to the national capital, the weekend revelers soon found Uttarakhand to be the destination to beat the heat. Plus, the religious tourists found it much easier to travel to-not-so accessible Badrinath, Kedarnath, Gangotri and other shrines, all this lead to an unsustainable rise in the number of people traveling to Uttarakhand.

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<sup>&</sup>lt;sup>15</sup> Uttarakhand Disaster, 2013, available at: https://nidm.gov.in/PDF/pubs/ukd-p1.pdf (last visited on February 1, 2020).



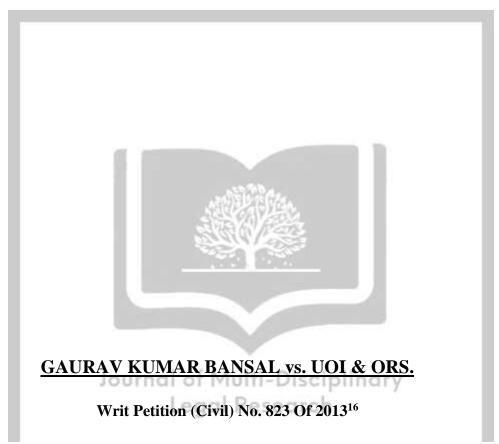
#### **Assistance Provided:**

- In view of the devastating impact of the heavy rain fall in the state of Uttarakhand, Secretary General, Indian Red Cross Society (IRCS) held a meeting on 18th June 2013 in his office with the senior officials from IRCS NHQ, IFRC and ICRC.
- The Indian Red Cross Society (National Head quarters) mounted an immediate response to the
  disaster by deploying relief and assessment teams to Dehradun, Uttarkashi, Rishikesh, Pithoragarh
  and Rudraprayag. Shri Gulam Nabi Azad, Hon'ble Chairman, IRCS (The Minister of Health and
  Family Welfare) flagged off the trucks carrying relief materials for the flood affected victims
  on 21st of June 2013.
- Relief materials in the form of Non food items were despatched to the Uttarakhand state branch
  by road for further distribution to the affected areas. Till date more than INR 2.2 crores worth of
  relief items was sent.
- The central and the state governments performed their duties with utmost sincerity to save thousands of lives. Relevant policies were undertaken and immediate steps were taken.
- The armed forces remained vigilant and highly active during the rescue operations.



#### **NOTE:**

All in all, the steps were taken as pet the act of 2005 and it was observed that the government and the agencies were more efficient this time as compared to the past events.



These two writ petitions were filed under Article 32<sup>17</sup> of the Constitution consequent upon the unprecedented flood and landslide disaster that occurred in Uttarakhand in 2013. Undoubtedly the disaster led to widespread damage to life, limb and property and according to the petitioners, the adverse impact of the disaster could have been mitigated had there been

<sup>&</sup>lt;sup>16</sup> Gaurav Kumar Bansal vs. UOI, available at: https://indiankanoon.org/doc/77839557/ (last visited on February 2, 2020).

<sup>&</sup>lt;sup>17</sup> Article 32, available at: https://indiankanoon.org/doc/981147/ (last visited on February 2, 2020).

effective implementation of the Disaster Management Act, 2005<sup>18</sup> and adequate preparedness by the State Government of Uttarakhand.

It was alleged in the writ petitions that many of the other States were also not fully prepared to deal with a disaster and therefore necessary directions ought to be given by this Court for proper implementation of the Act.

The apex court criticized the lax approach of authorities in taking adequate steps for preparing to disasters. Also, NDMA was asked by the Supreme Court to be extra vigilant and ready to deal with disasters.



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# **CONCLUSION**

Disaster, as defined by the United Nations, is a serious disruption of the functioning of a community or society, which involves widespread human, material, economic or environmental impacts that exceed the ability of the affected community or society to cope using its own resources. Disaster management is how we deal with the human, material, economic or environmental impacts of said disaster, it is the process of how we "prepare for, respond to and learn from the effects of major failures.

<sup>&</sup>lt;sup>18</sup> The Disaster Management Act, 2005, available at: https://ndma.gov.in/images/ndma-pdf/DM\_act2005.pdf (last visited on February 2, 2020).

The Disaster Management Act, 2005 permits the states to have their own legislation on disaster management. The authorities mentioned under this act have been trying to perform their best in order to prepare before the disaster, to face the disaster and to recover after the disaster.

However, it can be observed from the above examples that despite so many efforts by the authorities there have been certain issues regarding proper implementation of the act.

The act has been criticized for marginalizing Non-governmental organizations (NGOs), elected local representatives, local communities and civic group; and for fostering a hierarchical, bureaucratic, command and control, 'top down', approach that gives the central, state, and district authorities sweeping powers. It is also alleged that the "Act became a law almost at the will of the bureaucrats who framed it."



In order to deal with the above mentioned issues, certain suggestions can be laid down.

#### **Policy Formation at State level**

This should take into account:

- > Greater policy, leadership and budget commitment
- ➤ Government Accountability and Political Commitment
- > Disaster reduction as a criteria for sustainable development

- Laying down model frameworks to fortify disaster management systems
- Provoking public awareness to disaster reduction
- ➤ Realizing criticality of disaster issues.

#### **Strategy for Future**

Future strategy for disaster interventions demands a vision, where Government requires putting appropriate emphasis on Structural and Non-structural measures. This requires optimizing between these measures to make them effective in all the aspects. Nonstructural measures will undoubtedly be less cost intensive as well as enduring also. Before going for structural measures a complete cost-Benefit analysis of the same requires to be carried out and the measures should be implemented only when they can prove to be fruitful.

#### **Regional Approach**

Disasters don't follow district boundaries. If we look at Gujarat, it comprises of different regions with their distinguished agro-climatic conditions, ecology and demography. The effect of any natural calamity also varies with this region. All the regions have their inherent characteristics and problems. Therefore, while going for any disaster risk reduction measures should be designed with regional approach as its foundation. The regions can further be divided into sub regions with its peculiarities, similarities in vulnerability, demography and other local characteristics. This process can also ensure balance between top down and bottom up approach since the vision is for the whole state but actions are aiming the local needs.

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# Revising and Strengthening the Legal Framework

It will be essential for the effective operation of the plans that sufficient legal powers for their execution. The conferment of responsibility without powers is, in terms of disaster preparedness and relief, worse than its opposite. The existing disaster related legislation are insufficient, moreover they tend not to place enough emphasis on mitigation. In establishing or reviewing such legislation, therefore, it may be advantageous to ensure that mitigation requirements are adequately covered.

#### **Administrative Reforms**

Disaster management is a matter of good governance. The administrative response to disasters has largely been dissatisfactory over last decades. This is mainly due to: lack of a well-structured nodal agency having sufficient power to be rendered in disaster situation and down the line administrative set up.

Further considering importance of disaster preparedness, we have to make it inevitable, integral practice and approach to our development planning. Disaster preparedness should become a culture and conscious practice. The response to a disaster should start from where it strikes so as to reduce the time gap between natural disaster and response. Development plans and policies that fail to understand this and fail to integrate disaster risk reduction are bound to suffer in the long run. Disaster preparedness should become an issue of governance and common interest.



- 1. https://ndma.gov.in/images/ndma-pdf/DM\_act2005.pdf
- 2. https://indiankanoon.org/doc/77839557/
- 3. https://nidm.gov.in/PDF/pubs/ukd-p1.pdf
- 4. https://www.usgs.gov/
- **5.** https://www.world-nuclear.org/information-library/safety-and-security/safety-of-plants/chernobyl-accident.aspx
- **6.** https://pib.gov.in/newsite/mbErel.aspx?relid=133377
- 7. http://www.ndrf.gov.in/

