

# Disaster Management Law: The Indian Experience

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**Abstract**—‘Mother Nature’ has bestowed kindness and affection on humans and other living creatures, at the same time seems to have cursed humanity in the form of killer earthquakes, deadly volcanoes, devastating floods, deracinating cyclones, crushing tsunamis, which ‘unkind acts’ and ‘natural disasters’, have impacted the earth and have made its dependents vulnerable to many life threatening risks. Human civilization, since times immemorial, has seen countless such natural disasters; the most worrying factor has been their disastrous impact on the underdeveloped and developing nations particularly on the nation’s economic, social and cultural life. India, is one of the nations that has been vulnerable to natural disasters because of its distinctive geo-climatic conditions; man-made disasters have further compounded the miseries, as those affected are mainly poor, labour class, rural masses, women and children and the loss of shelter, food, health, job et al results in large-scale violation of human rights and constitutional rights. To meet the exigencies of such disastrous situations, and to minimize and if possible, control their adverse effects, disaster management has become a basic necessity, with its success depending mainly on the laws that are framed to manage such disasters. This paper concentrates mainly on natural disasters; it asserts the need for elasticity in the disaster management law, as the law though it appears to be concrete, is very rigid and does not assure accountability and transparency of the administrators during the relief and recovery activities.

**Keywords**—disaster management, law, natural disaster, relief.

## I. INTRODUCTION

**D**ISASTERS have a colossal impact on humans, environment and economy throughout the globe. In the year 2011 alone, natural disasters have killed more than 31,331 people and have claimed more than 244.7 million victims worldwide and economic damages were estimated at around US\$ 366.1 billion.<sup>1</sup> The word ‘Disaster’ is derived from the Middle French ‘*désastrel*’ and from the Old Italian *disastro*, which in turn comes from the Greek pejorative prefix *δυσ-*, (*dus-*) “bad”+ *αστήρ* (*aster*), “star”.<sup>2</sup> The root of the word *disaster* (“bad star” in Greek and Latin) comes from an astrological theme in which the ancients used to refer to the destruction or deconstruction of a star as a disaster.<sup>3</sup> Disaster is an incident or series of incidents that give rise to casualties and damage or loss of human life and property, ecosystem, infrastructures, essential services or means of livelihood on a

scale, beyond the normal capacity of the affected community to cope with. Disaster may also be explained as a “catastrophic situation in which the normal pattern of life or eco-system has been disrupted and extra-ordinary emergency interventions are required to save and preserve lives and or the environment”.<sup>4</sup> The United Nations defines disaster as “*the occurrence of sudden or major misfortune which disrupts the basic fabric and normal functioning of the society or community*”.<sup>5</sup> The Indian Disaster Management Act, 2005 defines disaster as “*a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or manmade causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area*”.<sup>6</sup> The top five countries that have been most frequently hit by natural disasters over the last decade are China, the United States of America, the Philippines, India and Indonesia. The worrisome aspects of these facts are, except USA all other countries are classified as low-income economies according to a World Bank classification;<sup>7</sup> Asian and African continent, considered as being backward continents, have suffered most by these major natural disasters; in the year 2012, 65.5% of global disaster victims belonged to Asia and 30.4% belonged to Africa.<sup>8</sup> The nations, with limited resources and concentrations of people with ever increasing population and poverty levels have increased the risk of disasters and have multiplied their consequences when they occur.<sup>9</sup>

Many regions in India are highly vulnerable to natural and other disasters on account of geological conditions. About 60% of the landmass is susceptible to earthquakes (55 per cent of the total area is in Seismic Zones III - V, vulnerable to earthquakes of moderate to very high intensity; the Sub-Himalayan/Western Ghats are vulnerable to landslides and avalanches; over 40 million hectares (12 per cent of land) are prone to floods and river erosion; of the nearly 7500 kilometers long coastline, approximately 5700 kilometers is prone to cyclones (coastal states, particularly on the East Coast and Gujarat in the West, are vulnerable to cyclones) and 68% of

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net sown area is vulnerable to drought.<sup>10</sup> To meet the exigencies of disaster situations, Disaster Management (DM) has become an obligation of every state machinery; India enacted its DM Law in the year 2005.

## II. DISASTER MANAGEMENT A CONCEPTUAL ANALYSIS

The declaration of the International Decade (1990-2000) for Natural Disaster Reduction (IDNDR)<sup>11</sup> by the United Nations in 1989 was a major step towards global action on reduction of occurrences of such disasters and for minimisation of the adverse impacts of such hazards to the maximum level through concerted DM, the most striking focus being, the paradigm shift in the concept of DM from post-disaster rescue, relief and reconstruction, to adopting a pre-disaster pro-active approach. Adding to the IDNDR, the Earth Summit<sup>12</sup> in 1992 stressed the importance of scientific, technical planning to reduce the human, environmental and economic losses substantially. The World Health Organisation (WHO) report, 1992, also highlighted the key activities of coping with disasters as essentially 'national preparedness, preventive and mitigative measures'.<sup>13</sup> The Yokohama strategy and plan of action for a safer world,<sup>14</sup> which was attended by UN member states, non-governmental organizations, the scientific, business and industrial community, affirmed that, disasters have mostly affected the poor and the socially excluded people in the developing countries, due to their higher degree of vulnerability to such situations; prevention, mitigation and preparedness are better than disaster response which is often carried out at a very high cost and yields only temporary relief, and that prevention contributes to lasting improvements in safety and is essential to integrated DM.<sup>15</sup> In continuation of the Yokohama plan, the Hyogo conference<sup>16</sup> provided the most inclusive outline for reducing the risks of natural disasters around the world. All these efforts, at the international level, have strongly asserted that disasters can be handled through proper DM and can reduce the impact on man, property and environment.

The concept of management has become broad and dynamic with the changing times. The environmentalists, sociologists, economist, administrators, behavioural scientists, legal experts and scientists look at management from different view points.<sup>17</sup> With different view points it can be asserted that it as an activity concerned with the orchestration of people, work and systems in the pursuit of organisational goals.<sup>18</sup> DM is an applied and multidisciplinary area in which a wide range of issues from forecasting, warning, evacuation, search and rescue, relief, rehabilitation and resettlement are involved thus, needing men from administration, science and technology, legal

experts, NGO's and the communities and these roles and activities span the pre-disaster, disaster and post-DM.<sup>19</sup> Effective DM, therefore involves the implementation of the four crucial sequential series of action (a) *Pre-disaster planning*: this stage covers a wide range of preventive and mitigation activities such as knowing where and when disasters will strike, construction of defensive engineering works, land use planning through measures like coastal zone regulations, building hazard resistant buildings, formulating, dissemination and maintenance of evacuation plans and the like before the event; (b) *Preparedness*: 'Disaster preparedness is about managing the unknown, not a science but a social behavior that is responsive, predictive and imaginative'.<sup>20</sup> This stage is considered to be very crucial, as it reflects the degree of alertness immediately before the onset of the disaster. The most crucial aspect in this stage is the effectiveness with which the public officials mobilise evacuation plan, prepare shelter homes with all required essential supplies for the evacuees and the victims; (c) *Relief and assistance*: this is followed immediately after the disaster has hit; it includes emergency rescue and medical aid for the victims, supplying them with basic necessities like, food, clothing, medicine and shelter and (d) *Recovery and Reconstruction*: this period stretches over a longer duration as it rebuilds and rehabilitates the lives and property of victims and helps an area return to normalcy after severe devastation.<sup>21</sup> These four sequential series are not conclusive but are very decisive in successfully handling disasters; these series of actions are also complementary and supplementary to each other.

## III. DISASTER MANAGEMENT AND LAW IN INDIA

It is a known fact, that disasters combine two important elements- one, the hazards and the other, the vulnerable people; disaster agents (the hazards) affect vulnerable communities in such a manner that their lives are directly threatened or sufficient harm is caused to the community's economic and social structure to undermine their ability to survive.<sup>22</sup> In the early years, DM encompassed post-disaster activities comprising rescue and relief operations only; gradually, it has imbibed pre-disaster prevention and mitigation measures along with post-disaster long-term activities like rehabilitation and resettlement. The concept has evolved over a period of time along with various types of response measures adopted from time to time; in this regard, all analyses, related to disaster issues, have a striking chronological benchmark, viz., *Pre-Bhopal gas disaster* and *Post-Bhopal gas disaster*

(A) *Pre-Bhopal gas disaster*: the outcome of the great famine<sup>23</sup> of 1876-1878 was that the British India government brought in the *Famine Relief Code* in 1880

which is considered as the world's oldest disaster relief code, which provided details of the relief to be given by the government to the affected people.<sup>24</sup> Even though there was a relief code, its actual implementation took place only after 1900. Relief departments were set up for emergencies during disasters. Such an activity-based setup with a reactive approach was functional only in the post disaster scenario. The policy was relief-oriented and activities included, designing relief activities and initializing food for work programmes; guiding principles of relief were communicated to the provisional governments which clearly indicated sources of finance and laid down detailed instructions. The series of famines in 1896-97,<sup>25</sup> 1900,<sup>26</sup> 1905,<sup>27</sup> and the great Bengal famine<sup>28</sup> in 1943 however showed the utter inadequacy of the disaster relief mechanism. In the Post Independent years, it appears that the union of India<sup>29</sup> rigidly centralized the relief policy and assisted the state governments through various situation based relief schemes.<sup>30</sup> The union ministry of Agriculture and Animal Husbandry was made responsible for relief works during disasters and its basic criterion was to intervene and assess the losses and damages accrued on cultivable land, but the task of managing disasters continued with the Relief Commissioners of each state under the supervision of a Central Relief Commissioner to handle relief material and finance in the affected areas.

(B) *Post-Bhopal gas disaster*: the Bhopal gas disaster<sup>31</sup> is considered to be one of the worst industrial (man-made) disasters in human history; it affected more than half a million people, killed over 3,000 and rendered more than 10,000 permanently disabled;<sup>32</sup> in addition, thousands of cattle were affected, nearly poisonous water, pollution of surrounding air for miles led to choking and breathlessness and this, coupled with other long lasting disastrous effects. The disaster brought in sharp focus the shortcomings of the DM system and policies, but the actions were 'passive'; the only positive outcome was the enactment of Environment Protection Act 1986 which provided a strong environment legislation that aimed at mitigating environment pollution, protection and improvement of human environment and the prevention of hazards to human beings, other living creatures, plants and property.<sup>33</sup> The major 'pathbreaking' events during the 1980-90's were the proactive and landmark judgements of the Supreme Court of India, matters concerning environment protection and conservation and the right to a pollution-free environment.<sup>34</sup> All these judgments had a

restricted view, as they were concerned mainly with matters connected with man made disasters; never-the-less they had a positive impact on realising the need for pollution control and sustainable development. The IDNDR efforts and some of the major disasters, like the Orissa super cyclone<sup>35</sup> in 1999, Gujarat earthquake<sup>36</sup> in 2001, the Indian Ocean tsunami<sup>37</sup> in 2004, forced the central government to bring a comprehensive centralised disaster management legislation that paved the way for the Disaster Management Act (DMA) 2005; the act has put in place the necessary institutional mechanism for drawing up and supervising the implementation of DM plans, ensuring adequate action by various government machinery for preventing and mitigating the adverse effects of disasters and the task of coordination and prompt response to any disaster situation. The DMA provides for the establishment of a National Disaster Management Authority (NDMA)<sup>38</sup> headed by the Hon'ble Prime Minister and assisted by a National Executive Committee (NEC);<sup>39</sup> the primary function of the NDMA is to lay down policies and plans and issue guidelines on disaster management; State Disaster Management Authorities (SDMAs)<sup>40</sup> are headed by Chief Ministers, and District Disaster Management Authorities (DDMAs)<sup>41</sup> are headed by district collectors/ magistrates/ commissioners; there is also provision of specific roles to local bodies<sup>42</sup> in DM. Under its aegis, the National Institute of Disaster Management (NIDM),<sup>43</sup> has been formed for training, research and comprehensive human resource development plan covering all aspects of DM; the National Disaster Response Force (NDRF)<sup>44</sup> has been set up as a 'specialist response' to any threatening disaster situation or disaster. The Act further contains provisions for financial mechanisms such as creation of funds for response, National Disaster Mitigation Fund (NDMF) and similar funds at the state and district levels for the purpose of disaster management.<sup>45</sup>

(C) *Post Disaster Management Act*: in 2009 the central government approved the National Policy on Disaster Management (NPDM) which lays down a comprehensive document on every aspect of holistic management of disasters in the country. The themes, underpinning the policy, include community based DM, consolidation of past initiatives and best practices and cooperation with agencies at the National and International levels with multi-sectoral synergy; it also intends to promote a culture of prevention, preparedness and resilience through knowledge, innovation and education. It encourages environmental sustainability

and seeks streamlining of DM into the developmental planning process at all levels for disaster prevention, mitigation, preparedness and response as it ensures sufficient budgeting for disaster mitigation activities in all ministries and departments.<sup>46</sup> The figure below, summarizes the DM in terms of its response mechanism; the NCRM is the apex decision making body in the aftermath of a disaster, while the Crisis Management Group (CMG)/Ministry of Home Affairs (MHA) and the NDMA are responsible for the deployment of the NDRF, they also coordinate with the state governments and deploy the CAPF. The nodal agency in the state government provides support to the district administration which is responsible for the on-site management of the disaster.<sup>47</sup>

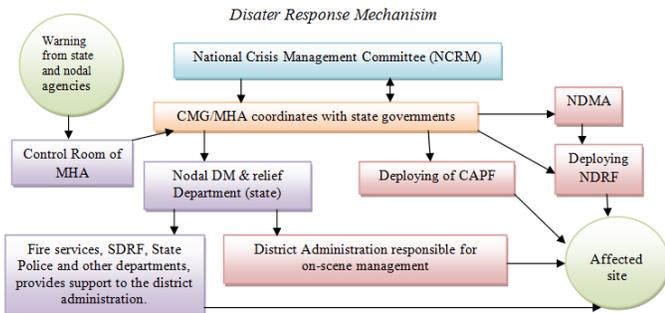


Figure 1. Disaster Resonse Meachism.

Source: the report of Comptroller Auditor General of India on Performance Audit of Disaster Preparedness in India Report No.5, 2013, p.18; Note: Central Armed Police Force, National Disaster Response Force.

The policy is crystal clear on DM, but it appears that its clarity and relief actions have remained on paper as the implementation mechanism has failed quite miserably; this was evident during the Uttarkhand disaster.<sup>48</sup> The incidence shook the nation's consciousness as to the preparedness of the government machinery in handling disaster situations and how they failed in protecting the basic rights of the victims. The Uttarkhand incidence brought into sharp focus, the DM and NPDM failures. The Comptroller and Auditor General of India (CAG), in his report,<sup>49</sup> has clearly identified the shortcomings in DM and has given vital suggestions to prepare a comprehensive national plan for DM;<sup>50</sup> fixing roles and responsibilities of MHA, NEC and NDMA; early completion of projects under taken by the NDMA; equipping the Meteorological department, space department with updated scientific tools and technology and to ensure the national database for emergency management to be operationalised at the earliest.

#### IV. THE WAY FORWARD

Combating disasters within a policy framework is still in its early stages in India. The DMA is a paradigm shift from reaction to mitigation and preparedness to disaster situations;

the assertions made in the NDPM needs to be carried out with much better coordination, planning, forecast and political commitment, which can definitely fix accountability and bring in transparency among all those involved in DM; this would positively ensure the desired results, which would ultimately provide relief to the victims of disaster and protect their rights as enshrined in Indian Constitution, as desired by Supreme Court and according to the expectations of International instruments. The country needs a proactive DM, for which the following suggestions are made; this may perhaps, to a certain extent, serve the purpose of making DM a realistic and inclusive tool to mitigate disasters and their ill effects.

- (a) The DMA should mandate the need for the role of experts- technical, environmental and societal, in the disaster action plans and bodies; as of now it is mainly 'bureaucratic' with general administrators lacking expertise on disaster related issues.
- (b) In all developmental plans, mainly through (the Five Year Plans) DM should be a priority area, as it gives a well planned preparedness for any eventual disaster situation; this can go a long way in minimizing the number of affected victims and reduce the overall costs of relief assistance.
- (c) As many of the disasters recur, the DMA should initiate separate disaster recurring funds unconnected with the National Disaster Response Fund and State Disaster Response Fund.
- (d) Even though there are provisions of penalties for offences in DMA they appear to be a farce. These need to be amended by fixing appropriate responsibilities with mandatory penalties to concerned authorities, both political and bureaucratic; this will lead to transparency and accountability in their actions and reactions.
- (e) Community-inclusive disaster sensitization, preparedness, should be given top priority in order to counter disasters; this can be achieved primarily by inculcating DM education in schools, appropriate higher educational institutions and NGOs; these will become harbingers of important messages to homes and communities and will go a long way in making the present and future generations a knowledgeable community helping prevent hazards from becoming disasters.

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