# DISASTER MANAGEMENT, MEASURES AND FACTS IN INDIA: NEEDS TO IMPROVE

Sharad N Reshmi
School of Engineering
Central University of Karnataka
Gulbarga-585 311, Karanataka
*sharad.reshmi90@gmail.com*

***'Disaster is a crisis situation that far exceeds the capabilities'.***

**Abstract -** 'Disaster' is defined as a crisis situation causing wide spread damage which far exceeds our ability to recover. Thus, by definition, there cannot be a perfect ideal system thatprevents damage, because then it would not be a disaster. It has to suffocate our ability to recover. Only then it can be called as 'disaster'.

Disasters are not totally discrete events. Their possibility of occurrence, time, place and severity of the strike can be reasonably and in some cases accurately predicted by technological and scientific advances. It has been established there is a definite pattern in their occurrences and hence we can to some extent reduce the impact of damage though we cannot reduce the extent of damage itself.

Floods, droughts, cyclones, earthquakes, and landslides have been recurrent phenomena. About 60% of the landmass is prone to earthquake of various intensities; over 50 million hectares is prone to floods; about 9 % of total area is prone to cyclones and 71% of the areas are susceptible to drought. In the decade 2000-2010, an average of about 54422 people lost their lives, and about 45 million people were affected by disaster every year.The 10th Five Year Plan documents have a detailed chapter on Disaster Management. The plan emphasizes the fact that development cannot be sustainable without mitigation being built into development process. Each State is supposed to prepare a plan scheme for disaster mitigation in accordance with the approach outlined in the plan. In brief, mitigation is being institutionalized into development planning.

The Government of India has issued guidelines that where there is a self of projects, projects addressing mitigation with be given priority. It has also been mandated that each projects in a hazard prone area will have disaster prevention/mitigation as a term of reference and the project documents has to reflect as to how project addresses that term of reference. In the sections are discussed the measures shortcoming, measures taken for the mitigation of the disaster.

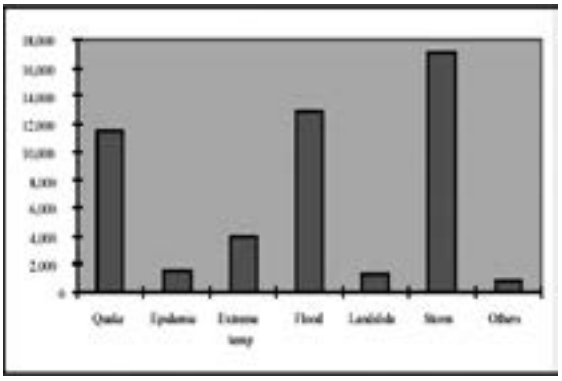
**Keyword-:** Disaster Management, Measures, Facts and Need to Improve.

## I. INTRODUCTION

The disaster management and risk reduction: strategy and coordination plan does not only provide the framework for the specific sector plans, therefore contributing to the three S2020 strategic aims, but also focuses on the delivery of initiatives of a global nature and scope. These initiatives intend to address identified gaps in the way we manage information and knowledge across sectors, as well as supporting funding for community resilience interventions and other interventions. With the establishment of decentralized functions at regional level (zone offices), it is essential to provide adequate technical support, information management and coordination capacity globally in support of regional and country level

staff as well as National Societies by using innovative methods and approaches that can respond to developing external trends and better enable the zones to respond to the needs of National Societies.

It is really an unfortunate and undesirable situation that in our country where more than 6 crore people are affected by disasters every year. Statistics is shown in figure,



We have no policy on systematic disaster Management. It is only after a disaster strikes that the wheels of the government, both at the centre and at the states, move and that too slowly. Despite the need to build up capabilities to meet the challenges of disasters, the thrust has unfortunately been on alleviation and relief. Even the relief has not been quick and adequate, as few disasters such as Orissa super cyclone of 1971 and 1999, Tsunami of 2004, Gujarat earthquake of 2001, Land Slide of Assam-1991,Nagaland-1993,Flood of North East India-1978,Assam-1994, even recently happened Earth quake of J&K, U P, Bihar and other disaster like Utterkhand flood etc. experiences has shown, India's response to and tackling of this five major disasters has thrown up the following weakness in our disaster management efforts.

### *A. Lack of Preparation in Early Warning System:*

Though, the forecasting, monitoring and warning mechanisms are beautifully articulated on paper in practice, the warnings are not early enough and they do not reach all those likely to be affected. In case of Tsunami, 2004; Bhuj, J & K earthquake, and recent flood of Utter Khand etc for example, communication facilities whichcould have resulted in better co-ordination of warning and reduction of damage to life and property were inadequate.

### *B. Lack of Pre-disaster Preparedness:*

With disasters striking India with increased regularity,there should be a plan in place to tackle the disaster andreduce its impact. On the contrary, people are caughtunaware time and again. There is not planned informationsystem as to what needs to be done when faced with acalamity. For example, during Tsunami, 2004, dead bodylaid floating in the water for many days due to theunavailability or lack of required equipment to meet the need of the time/ emergency, and in Kedarnath flood so many bodies were not recovered.

### *C. Inadequate and Slow Relief:*

Relief is an important aspect of the disaster management to provide help to the affected people. The relief operations are temporarily handled and haphazard manner. How efficiently to provide food, medicine, to reduce the suffering of the affected people etc are addressed and met improperly. Even days after the Bhuj earthquake, and Tsunami, 2004, many people could not be provided with safe drinking water, temporary shelter, and medicines. Such a scenario gives rise to law and order problem- looting of the relief materials and outbreak of the epidemic due to rotting dead bodies on the other hand, in the name of relief fund some of them looted on the highways also.

### *D. Lack of Co-ordination:*

Disaster management requires concerted efforts from Central Government, State Government, NGOs, International agencies and private sectors etc. Because of the lack of the co-ordination, relief material is not property distributed among the people. Even worst happens when they are mis-utilized and are not distributed uniformly.

### *E. Slow Rehabilitation and Reconstruction:*

While immediately after a disaster strikes, there is hectic relief and rescue mission, mainly aimed at feeding the people and stalling the outbreak of an epidemic, relief and rescue cannot go on endlessly and rehabilitation and reconstruction should be given proper attention. However, this is an area which is often ignored and progressed is slow once the initial attention fades away. Restoration of infrastructure, hospitals, schools, houses, and sources of living of the people needs to be given proper attention.

### *F. Proper Administration*

A quick assessment of the extent of the damage is necessary so that relief and rehabilitation work can be properly planned. However, it was seen that even many months after the Bhuj earthquake, Tsunami of 2004, and Utter khand flood, the government was yet to finish the preliminary survey of assessing the total impact of the damage. Apart from this, poor administration frustrated the best intentions and efforts of private initiatives. After the quake, Gujarat government was too slow and indecisive on some of the best rehabilitation plans proposed by the NGOs and Corporate.

### *G. Poor Management of Finances for Post-disaster Relief:*

Mostly relief and rehabilitation work suffers from thelack of co-ordination, proper management, and supervisionat all levels and indicated the absence of adequate planningand preparedness to meet any emergency. Consequently, the funds are mis-utilized and relief measures were tardy and inadequate, providing scope for pilferage of relief and rehabilitation remained unutilized and there is huge shortfall in distribution of emergency relief, shelter material cloths, house building assistance etc. There have also been reports of relief and rehabilitation funds being utilized for paying salary arrears of the state government employees.

Thoughts and Decisions, taken by the Government of India to improve Disaster Management:

**At Central Level:**

At the central or national level, Ministry of Home affairs is entrusted with the nodal responsibility of managing disaster. At the apex level, there are two cabinet committees' viz. cabinet committee on national calamity and cabinet committee on security. All the major issues concerning natural disasters are placed before cabinet committee on natural calamity whereas calamities which can affect internal security or which may be caused due to use of nuclear, biological or chemical weapons etch are placed before cabinet committee on security.

The NCMC (National Crisis Management Committee) is the next important functionary. The cabinet secretary heads it. It includes secretaries of concerned department/ministers. Its main function is to give direction to Crisis Management Group (CMG) and any minister/department for specific action needed for meeting the crisis situation. CMG lies below the NCMC. The Central Relief Commissioner is its chairman. His primary function is to coordinate all the relief operations for natural disaster. Apart from coordinating the relief operations, it reviews the contingency plans formulated by Central Ministers/Department and measures required for dealing with natural review the relief operation and explore all possibilities to render all possible help to the affected region.

**At State Level:**

At the state level, there are state relief commissioners who are in charge of the relief measures in wake of natural disaster in the perspective states. The chief secretary is the overall in charge of the relief operations in the state. The relief commissioner and additional relief commissioner work under his direction and control. In addition, there are number of secretaries, head of various departments who also work under the overall direction of chief secretary. At the district level, districts are headed by District Collector or district magistrate who is responsible for the overall supervision and monitoring of relief measures and preparation of disaster management plans. At this level DSO/SDM take care of the disaster management.

Despite there being a general tardiness about the manner in which we respond to disasters, there has been significance progress in this area and there have been many experiments and success stories worth emulating,

(1) Learning from the Latur-1993, earthquake calamity, Govt. of Maharashtra has launched India's first disaster management information-network. Soon after this quake, state government launched the Maharashtra Emergency Earthquake Rehabilitation Programme (MEERP). The programme aimed at achieving preparedness through an info-network so that unpredictable and uncontrolled disaster impacts could be offset with planned and manageable disaster mitigation efforts.

The state has been mapped for potential disasters. Statistics for potential natural calamity zones are now being complied. Record for the tide movements, potential typhoons and earthquake prone zones are being linked up with geographical information system to mitigate the disaster. The Multi-hazards Disaster Mitigation Plan will create disaster management information at emergency operation centre at state government headquarters. Apart

from forewarning of calamities like flood, earthquake, etc; post disaster relief and rehabilitation is another area of use of this network. It will help in co-coordinating among hospitals, voluntary organizations, ambulances, fire brigades and government relief measures.

(2) Some State Government has got their acts together, learning from past experiences. In 1991, A.P. Government was able to implement previously planned programme to evacuate 6 lakh people from the path of an approaching cyclone with 52 hours. Fatalities numbered less than on tenth of what could have otherwise been. This was achieved through a planned approach combing both traditional and advanced channels.

(3) The Indian Meteorological Department (IMD) has set up a National Seismic Telemetry Network to anticipate threats from seismic disturbances. After the Gujarat quake, 10 new seismological observation equipped with latest facilities were set up and 14 of the 45 existing observatories were upgraded with state of the art digital seismograph for better monitoring of effects of earthquake in the seismic zones.

(4) The Indian Meteorological Department (IMD) has set up cyclone warning centers along many coastlines. Information on cyclone warning is furnished to the central control room in the Ministry of Agriculture. Besides, high powered cyclone detection radars are installed at various places on the coastal belt, that can track disturbances within a range of 400 KM. Satellite imagery is another tool used when cyclone are beyond the range of the coastal radars. The ISRO has placed 250 storm warning receivers all along the Indian coast. In a time of crisis, these receivers are switched on via satellite and broadcast siren and local language warnings.

(5) Measures for flood mitigation were taken from 1950 onwards, as against the total of 40 million hectares prone to floods, area of about 15 million hectares have been protected by construction of embankment. The State Government has been assisted to take up mitigation programmed like construction of raised platforms etc. Flood continues to be a menace however mainly because of the huge quantum of silt being carried by the rivers emanating from the Himalayas. This silt has raised the bed level in many rives to above the level of countryside. Embankment has also given rise to problem of drainage with heavy rainfall leading to water logging in area outside the embankment. To evolve both short-term and long term strategies for flood management / erosion control, Government of India have recently constituted Central Task Force under the chairmanship of Central Water Commission. The task for will examine causes of the problem of recurring floods and erosion in States and region prone to the flood and erosion; and suggest short term and long term measures.

(6) Due to erratic behavior of monsoons, both low and medium rainfall regions are vulnerable to periodical drought. Experience has been that almost every third year is a drought. However, in some of the States, there may be successive drought years enhancing the vulnerability of population in these areas. Local communities have devised indigenous safety mechanism and drought oriented farming methods in many parts of the country. From the experience of managing the past droughts particularly severe drought of 1987, a number of programme have been launched by the Government to mitigate the impact of drought in the long run. This programme includes Drought Prone Area Programme (DPAP), Desert Development Programme (DDP), and Integrated Water Development Projects (IWDP) etc.

(7) In order to respond effectively to floods, Ministry of Home Affairs has initiated National Disaster Risk Management Programme in all the flood prone States. Assistance is being provided to the States to draw up disaster management plans at the State, District, Block, Taluka and village levels. Awareness generation campaigns to sensitize all the stakeholders on the need for flood preparedness and mitigation measures. Elected representative and officials are being trained in flood disaster management under the programme. Bihar, Orissa, West Bengal, Assam, and Uttar Pradesh are among the 17 multi hazard prone States where this programme is being implemented with United Nations Development Programme (UNDP), U.S. Agency for International Development (USAID) and European Commission.

(8) A comprehensive programme has been taken up for earthquake risk mitigation. Although, the Bureau of Indian Standards (BIS) has laid down the standard for construction in the seismic zones, these are not being followed. The building construction in urban and suburban areas is regulated by the Town and Country Planning Act and Building Regulations. In many cases, Building regulations do not incorporate the BIS codes. Even where they do, the lack of knowledge regarding seismically safe construction among the architects and engineers as well as lack of awareness regarding their vulnerability among the population led to most of the

## II. STATEMENT OF PROBLEM

Research indicates that non-native speakers of English face more difficulties in academic writing than native speakers do (Al Fadda, 2012; Pecorari, 2006; Rababah, 2003). The majority of the non - native speakers of English have been exposed to General English for a long period and when they start using academic writing, most of them fail in mastering it. Studies which have been conducted to find out difficulties/issues in the academic writing competencies of ESL students have found out the major problems are in the areas of cohesion, coherence, synthesizing information, reviewing, critiquing, grammar, syntax and vocabulary. Further, limited knowledge in that specific area of study, anxiety in writing, L1 interference, structural errors and difficulties in lack of practice and experience in academic writing skills are also hindered the writing skills of ESL learners (Al Badi, 2015; Ashraf & Bilal, 2016; Cai, 2013; Chou, 2011; Evans & Greens, 2007; Fareed, Giridharan & Robson, 2011; Lee & Tagino, 2008; Ntereke & Ramoroka, 2015).

As many researchers conclude, it is the responsibility of ESL practitioners to introduce better teaching materials and strategies to motivate learners to ensure positive learning outcomes by finding effective solutions for the existing problems in language learning and teaching in academic writing (Embogama 2010; Felea & Stanca 2014; Javid, 2015).

Since the growing presence of computer mediated instruction is being highly demanded by the learners, the experience in working in CALL can make a significant impact in language learning (Grgurovic, 2010). According to Embogama (2016) "in order to facilitate this process, we, as educators, need to change existing conventions and take our students beyond the boundaries of the classroom space and guide them to the world of education through technology" (p.77). Since the use of computers and internet can render more time and opportunities for off campus activities, it can be a better solution for the issue of inadequacy of time to focus equally on academic writing lessons/activities during the time period which has been allocated per week for language teaching and learning. Further in a language learning classroom there are students in different levels, thus focus on each individual within a limited time period is also a very difficult task. In addition, academic reading and writing require more time and ESL students need to spend an additional period of time specially on academic writing because editing, proof reading, referring other sources take more time than simply answering question/s.

Following above mentioned recommendations and proposals for future research, the current study sought to find out the effectiveness of CALL for improving ESL learners' academic writing skills.

## III. LITERATURE REVIEW

Pecorari (2006) in his study points out that most of the academic writing skills are unaddressed and students are graduated without having learnt the skills of academic writing. So he suggests that it is necessary "to address the full range of students learning, and not merely the visible tip of the iceberg" (p.27).

In the study of "ESL Learners' Writing Skills: Problems, Factors and Suggestions", Fareed, Ashraf and Bilal (2016) discuss the problems the ESL undergraduates face in writing skills in Pakistan. According to the findings the major problems in writing are in the areas of grammar, syntax and vocabulary. Further anxiety in writing, L1 interference and structural errors also hinder the writing skills of the ESL undergraduates. Inexperienced teachers, unsatisfactory teaching strategies, lack of practice in writing and poor motivation are some of the causes which influence on poor writing performance of ESL undergraduates. The findings highlight that the need for experienced teachers, learner motivation, improve vocabulary teaching and writing skills for ESL learners in improving academic writing skills.

Ntereke and Ramoroka's (2015) study focused on the effectiveness of writing activities and instructions in an academic writing course where English is taught as a L2 at the University of Botswana. Participants were challenged more in academic writing when they were synthesizing information. In addition the use of proper academic writing style and expressing ideas more clearly were also some other challenges that they faced in writing. Al Badi's (2015) study on "Academic writing difficulties of ESL Learners" also focused on the difficulties faced by the ESL learners in academic writing. The subjects were twenty ESL postgraduates from Korea, China, Taiwan and Oman who were studying Masters in TESOL at an Australian University. The results indicate that the ESL learners have more issues in coherence and cohesion in writing. In conclusion it was stated that the major reason for these difficulties is lack of practice and experience in academic writing skills.