Disaster Management Policy in India:

Disaster management is a multi disciplinary activity involving a number of Departments/agencies spanning across all sectors of development. Where a number of Departments/agencies are involved, it is essential to have a policy in place, as it serves as a framework for action by all the relevant departments/agencies. A National Policy on Disaster Management has been drafted, and is in the process of being finalized. After inter ministerial consultations, it will be submitted to the Cabinet for approval. In the line with the changed focus, the policy proposes to integrate disaster mitigation into development planning. The policy shall inform all spheres of Central Government activity and shall enjoin upon all existing sectoral policies. The broad objectives of the policy are to minimize the loss of lives and social, private and community assets because of natural or man-made disasters and contribute to sustainable development and better standards of living for all, more specifically for the poor and vulnerable section by ensuring that the development gains are lost through natural calamities/disaster. The policy notes that State Governments are primarily responsible for disaster management including prevention and mitigation, which the Government of India provides assistance where necessary as per the norms laid down from time to time and proposes that this overall framework may continue. However, since response to a disaster requires coordination of resources available across all the Departments of the Government, the policy mandates that the Central Government will, in conjunction with the State Governments, seek to ensure that such coordination mechanism is laid down through an appropriate chain of command so that mobilization of resource is facilitated.

The broad features of the drafted National Policy on Disaster Management are enunciated below:-

i) Adoption of a holistic and pro – active approach towards prevention mitigation and preparedness.

ii) Incorporation of mitigation measures in the on – going schemes/programmes.

iii) Each Ministry/Department of the Central/State Government will set apart an appropriate quantum of funds under the Plan for specific schemes/projects addressing vulnerability reduction and preparedness.

iv) Where there is a shelf of projects, projects addressing mitigation will be given priority.

v) Each project in a hazard prone area to have mitigation as an essential term of reference and to include a statement indicating as to how the project addresses vulnerability reduction.

vi) Community involvement and awareness generation, particularly the of the vulnerable segments of population and women has been emphasizes as necessary for sustainable disaster risk reduction. This is a critical component of the policy since communities are the first responders to disasters and, therefore, unless they are empowered and made capable of managing disasters, any amount of external support cannot lead the optimal results.

vii) Interaction with the corporate sector, the non – governmental organization and the media in the national efforts for disaster prevention/vulnerability reduction.

viii) Building up institutional structures/appropriate chain of command and imparting appropriate training to disaster managers at various levels to ensure coordinated and quick response and development of inter – State arrangements for sharing of resources during emergencies.

ix) Inculcating a culture of planning and preparedness at all levels for capacity building measures.

x) Formulation of Standard Operating Procedures (SOPs) and disaster management plans at state and district levels as well as by relevant central government departments.

xi) Compliance with construction designs laid down in relevant India Standards.

xii) Evaluation and, where necessary, retrofitting of lifeline buildings in seismic zones III,IV & V – hospitals, railways stations, airports/airport control towers, fire station buildings, communication network, major administrative buildings.

xiii) Conversion of relief codes into disaster management codes for institutionalizing the planning process.

xiv) Promotion of internal cooperation in the area of disaster response preparedness and mitigation in tune with national strategic goals objectives.

The Disaster Management Act, 2005

The Disaster Management Act, 2005 is an exhaustive legislation containing eleven chapters and seventy six sections covering various aspects of disaster management and related issues. 23 Section 5(1) of the National Environment Appellate Authority Act, 1997 which reads, "A Person shall not be qualified for appointment as a chairperson unless he has been" (a) A Judge of the Supreme Court; or, (b) The Chief Justice of the High Court 24 Id, at Section 11 25 M.C.Mehta v. Union of India decided on 7.05.2004 by Y.k.Sabharwal and B.N.Aggarwal. The Disaster Management Act, 2005 seeking for an effective management authorities have been constituted at the National, State and at the District level. The National Disaster Management Authority (National Authority), which is to be chaired by the Prime Minister of India is entrusted with the responsibilities for laying down the policies on disaster management, and approve plans at the national level for disaster management. The National Authority is also entrusted with the duty to lay down guidelines to be followed by the State Authorities for preparing plans at the State Levels and co-ordinate the policies at different levels. The National Authority is also empowered to arrange and oversee the provision of funds for mitigation measures, preparedness and response and to provide support for other countries affected by disasters.

In carrying out its functions the National Authority is assisted by a National Executive Committee (NEC), which has been entrusted with the responsibility to implement the programs and policies of the National Authority and carry out the directions of the Central Government in this regard. The NEC has also has the duty to draw up a National Plan containing measures to be taken for prevention and mitigation of disasters, for integration of mitigation plans with the development plans, and for preparedness and capacity building to effectively respond to disasters.The National Authority has also the duty to lay down the guidelines to provide for the minimum standard of relief to the effected persons. The Act contains similar provisions for constituting State Disaster Management authority with similar 26 Bill No. LV of 2005 introduced in the Rajya Sabha 27 Clause 3 of the Act 28 Clause 6 of the Act. 29 Clause 8 of the Act. 214 powers and functions at the State level. A State level Executive Committee has been constituted under the Bill entrusted with the responsibility to carry out the policies at the State level and to draw up a State level Plan. The Bill also provides for District level Disaster management authorities to draw district level plans and implement them in co-ordination with National and State Plans. The Act also contains also provides for detailed responsibilities of various departments at the centre and the State Governments and the local authorities of a disaster management and their duty to formulate policies and implement them at their respective levels. It also provides for the setting up of National Institute on Disaster Management for planning and promoting training and research in the area of disaster management. The Act also provides for the constitution of a National Disaster Response Force for the, purpose of specialist response for a threatening disaster situation or disaster. The Act also contemplates creation of Disaster Response Funds and Disaster Mitigation Funds at the National, State and District Levels respectively. The Act lays down institutional, legal, financial and coordination mechanisms at the National, State, District and Local levels. These institutions are not parallel structures and will work in close harmony. The new institutional framework is expected to usher in a paradigm shift in DM from relief centric approach to a proactive regime that lays greater emphasis on preparedness, prevention and mitigation.

National Disaster Management Authority (NDMA)

The NDMA, as the apex body for disaster management, is headed by the Prime Minister and has the responsibility for laying down policies, plans and guidelines for DM and coordinating their enforcement and implementation for ensuring timely and effective response to disasters. The guidelines will assist the Central ministries, Departments and States to formulate their respective DM plans. It will approve the National Disaster Management Plans and DM plans of the Central Ministries/Departments. It will take such other measures, as it may consider necessary, for the prevention of disasters, or mitigation, or preparedness and capacity building for dealing with a threatening disaster situation or disaster. Central Ministries/Departments and State Governments will extend necessary cooperation and assistance to NDMA for carrying out its mandate. It will oversee the provision and application of funds for mitigation and preparedness measures. NDMA has the power to authorize the Departments or authorities concerned, to make emergency procurement of provisions or materials for rescue and relief in a threatening disaster situation or disaster. The general superintendence, direction and control of the National Disaster Response Force (NDRF) are vested in and will be exercised by the NDMA. The National Institute of Disaster Management (NIDM) works within the framework of broad policies and guidelines laid down by the NDMA. The NDMA is mandated to deal with all types of disasters; natural or man – made. Whereas, such other emergencies including those requiring close involvement of the security forces and/or intelligence agencies such as terrorism (counter – insurgency), law and order situations, serial bomb blasts, hijacking, air accidents, CBRN weapon systems, mine disasters, port and harbor emergencies, forest fires, oilfield fires and oil spills will continue to be handled by the extant mechanism i.e., National Crisis Management

Committee (NCMC). NDMA may, however, formulate guidelines and facilitate training and preparedness activities in respect of CBRN emergencies. Cross – cutting themes like medical preparedness, psycho – social care and trauma, community based disaster preparedness, information and communication technology, training, preparedness, awareness generation etc., for natural and man – made disaster will also engage the attention of NDMA in partnership will also engage the attention of NDMA in partnership with the stakeholders concerned.

Resources available with the disaster management authorities at all levels, which are capable of discharging emergency support functions, will be made available to the nodal Ministries/Agencies dealing with the emergencies at times of impending disaster(s). National Executive Committee (NEC)¬ The NEC comprises the Union Home Secretary as Chairperson, and the Secretaries to the Government of India, in the Ministries/Departments of Agriculture, Atomic Energy, defense, Drinking Water Supply, Environment and Forests, Finance (Expenditure), Health, Power, Rural Development, Science & Technology, Space, Telecommunication, Urban Development, Water Resources and the Chief of the Integrated Defence Staff of the Chiefs of Staff Committee members. Secretaries in the Ministry of External Affairs, Earth Sciences, Human Resource Development, Mines, Shipping, Road Transport & Highways, and the Secretary, NDMA will be special invitees to the meetings of the NEC. The NEC is the executive committee of the NDMA, and is mandated to assist the NDMA in the discharge of its functions and also ensure compliance of the directions issued by the Central Governmental. The NEC is to coordinate the response in the event of any threatening disaster situation or disaster. The NEC will prepare the National Plan for Disaster Management based on the National Plan for Disaster Management based on the National Policy on Disaster Management. The NEC will monitor the implementation of guidelines issued by NDMA. It will also perform such other functions as may be prescribed by the Central Government in consultation with the NDMA.

State Disaster Management Authority (SDMA)¬
At the State level, the SDMA, headed by the Chief Minister, will lay down policies and plans for DM in the State. It will, inter alia approve the State Plan in accordance with the guidelines laid down by the NDMA, coordinate the implementation of the State Plan, recommended provision of funds for mitigation and preparedness measures and review the developmental plans of the different Departments of the State to ensure the integration of prevention, preparedness and mitigation measures. The State Government shall constitute a State Executive Committee (SEC) to assist the SDMA in the performance of its functions. The SEC will be headed by the Chief Secretary to the State Government and coordinate and monitor the implementation of the National Policy, the National Plan and the State Plan. The SEC will also provide information to the NDMA relating to different aspects of DM.

District Disaster Management Authority (DDMA)¬
The DDMA will be headed by the District Collector, Deputy Commissioner or District Magistrate as the case may be, with the elected representative of the local authority as the Co-Chairperson. The DDMA will act as the planning, coordinating and implementing body for DM at the District level and take all necessary measures for the purposes of DM in accordance 218 with the guidelines laid down by the NDMA and SDMA. It will, inter alia prepare the District DM plan for the District and monitor the implementation of the National Policy, the State Policy, the National Plan, the State Plan and the District Plan. The DDMA will also ensure that the guidelines for prevention, mitigation, preparedness and response measures laid down by all the Departments of the State Government at the District level and the local authorities in the District.

Local Authorities¬ For the purpose of this Policy, local authorities would include Panchayat Raj Institutions (PRI), Municipalities, District and Cantonment Boards, and Town Planning Authorities which control and manage civic services. These bodies will ensure capacity building of their officer and employees for managing disasters, carry out relief, rehabilitation and reconstruction activities in the affected areas and will prepare DM Plans in consonance with the guidelines of the NDMA, SDMA and DDMAs. Specific institutional framework for dealing with disaster management issues in mega cities will be put in place.

National Institute of Disaster Management (NIDM)¬
The NIDM, in partnership with other research institutions has capacity development as one of its major responsibilities, along with training, research, documentation and development of a National Level information base. It will network with other knowledge-based institutions and function within the broad policies and guidelines laid down by the NDMA. It will organize training to 219 trainers, DM officials and other stakeholders. The NIDM will strive to emerge as a „Centre of Excellence" in the field of Disaster Management.

National Disaster Response Force (NDRF)¬
For the purpose of specialized response to a threatening disaster situation or disasters/emergencies both natural and man-made such as those of CBRN origin, the Act has mandated the constitutional of a national

Disaster Response force (NRDF). The general superintendence, direction and control of this force shall be vested in and exercised by the NDMA and the command and supervision of the Force shall vest in an officer to be appointed by the Central Government as the Director General of Civic Defence and National Disaster Response Force. Presently, the NDRF comprises eight battalions and further expansion may be required. NDRF units will maintain close liaison with the designated State Governments and will be available to them in the event of any serious threatening disaster situation. While the handling of nature disasters rests with all the NDRF battalions, four battalions will also be equipped and trained to respond to situations arising out of CBRN emergencies. Training centers will be set up by respective paramilitary forces to train personnel from NDRF battalions of respective Forces and will also meet the training requirements of State/UT Disaster Response Forces. The NDRF units will also impart basic training to all the stakeholders identified by the State Government in their respective locations. Further, a National Academy will be set up to provide training for trainers in disaster management and to meet related National and International commitments.

Role of State, District and Local authorities

Section 23 of the DM Act 2005 provides that there shall be a DM plan for every State. It outlines the broad coverage of the plan as well as the requirements of consultation in the preparation of the State plans. It also provides for annual review and updating of the State plan, and to enjoin upon the State governments to make provisions for financing the activities to be carried out under the State plans. It provides for the departments of the State governments to draw up their own plans in accordance with the State plan. The state plans shall be prepared by the SEC in conformity with the guidelines to be issued on related matters by the SDMA having regard to the guidelines laid down in this regard by the NDMA, and after such consultation with local and district authorities and the people‟s representatives as the SEC may deem fit. The State plan prepared be SEC shall be approved by the SDMA. It is the primary responsibility f the State governments/SDMAs to monitor and assess any developing situation and keeps the NDMA and NEC apprised of the same. They will also be responsible to constantly evaluate their own capabilities to handle evaluate their own capabilities to handle that situation and project the anticipated requirements for the central resources well in time. Inter – State assistance and cooperation will be encouraged.

The States/UTs will also be responsible to develop their own response potential progressively and complete the process at the earliest. This will comprise training and equipping of State response forces, community preparedness, training and creation of response caches at the District level. District level preparations will provide the cutting edge to all response activities. Local authorities, PRIs and ULBs will play a significant role in the entire process, particularly in response and rescue operations, relief and rehabilitation, awareness generation and disaster preparedness, restoration of livelihood options and coordination with NGOs and civil society. All central ministries, State governments, district authorities and other stakeholders will prepare SOPs in consonance with the National and State Plans. SOPs will be prescribed for activities like search and rescue, medical assistance and casualty management, evacuation, restoration of essential services and communication at disaster sites, etc. The other important activities are provision of food, drinking water, sanitation, clothing and management of relief camps. Detailed SOPs will also be devised by all concerned for dispatch, receipt and deployment of central resources.

Role of NGO

NGOs are organizations registered under various Indian laws such as the Societies Registration Act, 1860, Section 25(1) of Companies Act, 1956 meant for non- 248 profit companies, or State-specific Public Charitable Trust Acts. NGOs work on a variety of areas like humanitarian assistance, sectorial development interventions and sustainable development. NGOs play important roles in different stages of the Disaster Management Cycle. Volunteerism and social service has deep roots in India, since time immemorial, even though it received special significance during the freedom struggle through the Gandhian concept of Shramdaan, implying the offering of free labour for some noble cause like rural development, construction of social assets and public infrastructure and amenities, etc. In post-Independent India, the Non-Governmental Organisations (NGOs) have been providing support in critical sectors like health, education, water supply and sanitation, shelter and infrastructure, restoration of livelihoods, food security and nutrition, environment, etc. Given India‟s multihazard risk and vulnerability to natural and man-made disasters, NGOs have been playing a significant role in providing humanitarian assistance to disaster-affected people in most of the severe disasters like the Latur earthquake in 1993, Orissa super cyclone in 1999, Bhuj earthquake in 2001, Indian Ocean tsunami in 2004, Kashmir earthquake in 2005, Barmer floods in 2006, Kosi floods in 2008,cyclones Aila and Laila and the more recent cloud burst in Leh in August 2010, apart from participating in providing relief to disaster affected communities in various other localised disasters.

In the recent past, the role of NGOs in disaster management (DM) has started changing from providing post-disaster relief to strengthening pre-disaster preparedness and mitigation through capacity building, public awareness campaigns, mock exercises, workshops and conferences, etc. NGOs have also started to collaborate with corporate entities in Public-Private Partnership (PPP) projects and Corporate Social Responsibility (CSR) initiatives in the field of DM at 249 State, District and Sub-district levels. Till recently, the work of NGOs in the field of DM has been mostly sporadic, reactive, responsive and driven by local level compulsions in the geographic areas where they are implementing development projects and very often they faced enormous challenges in coordinating with the government machinery and even among NGOs themselves. In line with its mandate as envisaged in the Disaster Management Act 2005 (DM Act 2005), the National Disaster Management Authority (NDMA) has circulated National Disaster Management Guidelines on Role of NGOs in Disaster Management defining the role of NGOs in disaster management. NGOs are organizations that are non – profit making, voluntary and independent of government, engaged in activities concerning various societal and developmental issues. The NGO sector has always been very vibrant in India, and is based on the concept of volunteerism and care for the fellow citizens. Many organizations also undertake DM activities, as a core area of ongoing work in the case of some agencies while some others participate only in post – disaster response when the communities they work with face sudden emergencies.

A very large number of NGOs, both international and national, have significantly large field presence that often extend across a number of States. They are well organized in terms of operations, administration and finances. Their work is complemented by local and community based organizations, which are most spontaneous and informal in nature, and work at the grassroots levels often from within communities. Several NGOs have access to significant resources in the form of money, material, equipment, human resources, knowledge and skills to deal with disaster related situations through various communities – centric processes and approaches. Many have very systematic and time – tested arrangements for accessing 250 international humanitarian resource. Many of these humanitarian players have significant sect oral competencies with proven track records and demonstrated results by virtue of their work in various parts of India and also in other countries. NGOs work in the sectors of women and child care, health, education, livelihood promotion, water and sanitation, shelter and habitat promotion, advocacy and various other aspects of disaster preparedness, mitigation and response. NGOs play a significant role in slow onset disasters such as droughts, through work that is developmental and at the same time reduces risk as well as responding to the relief needs.

The strong field presence of many NGOs at the national, state, district and sub – district levels, even extending to remote settlements in far flung areas indicate the high credibility and acceptability that they enjoy with local communities. The strong contact with local community groups like Self Help Groups (SHGs), farmers groups, youth groups, women‟s groups, village health committees, watershed committees, etc. and their participation in the local level implementation of government‟s flagship programmes and their innovative approaches in employment generation, income generation, poverty alleviation and natural resource regeneration and climate change adaptation/mitigation projects make them ideal partners in mainstreaming disaster risk reduction (DRR) in development plans at various levels. NGOs not only work on their own but also work in partnership with other national and international organizations, UN agencies, community based organizations, local governments, and self help groups and government bodies. Over the years NGOs have also come together through networks, coalitions and alliances so as to offer value added humanitarian services, notable examples being Voluntary Health Association of India (VHAI), Voluntary Action Network India 251 (VANI), Sphere India, Alliance for Adaptation and Disaster Risk Reduction (AADRR), and Confederation of Voluntary Associations (COVA).

There is also need to strengthen public awareness, capacity building and knowledge management. Institutional mechanisms for the advocacy and engagement of NGOs with government agencies on DM concerns requires to be strengthened. Replication and scaling up of community level good practices has to be promoted. Humanitarian advocacy needs to be carried out for public policy/system reform, awareness on entitlement and grievance redressal. There is need to promote quality, accountability and do no harm principles and standards. Promotion of the principle of collaborative, consultative and unified action to complement and supplement government action in DM is of critical importance. The sector also needs to work concertedly for promoting community participation, good governance, accountability and transparency.

Role of Police

Man-made disasters such as bomb explosions and arson cause a sense of vulnerability. Natural disasters such as hurricanes, floods, tornadoes and fires all cause specific damage and chaos. A strong police

presence in both situations may help ease fears and help prevent others from taking advantage of the situation.

1. **Crowd Control**

Disaster situations draw crowds. There are people hoping for a glimpse of the unfolding drama. Family members and friends of the victims show up, hoping to glean information about their loved ones. The people involved in the situation also mill around, sometimes while injured or in shock. The police cordon off areas and work to keep crowds under control.

2. **Public Safety**

Officers might go from house to house searching for the injured or those who need help. They can offer transportation, emergency medical care and be a bridge between citizens and rescue personnel. They can check credentials and identification to see if someone really needs to be in the area. They may warn people when electric wires are on the ground, when dangerous pests are lurking or when unstable people are nearby.

3. **Directing Traffic**

Many disasters wipe out infrastructures such as electricity, making an unsafe situation for traffic and pedestrians. The police can close unsafe roads where downed wires, trees or flood situations might make travel unsafe. They direct citizens through nonworking traffic lights. They reroute random traffic to safer roads and try to keep out all unnecessary traffic. They can put roadblocks in the areas where the crisis is underway.

4. **Organizing Search Teams**

Disaster situations often lead to family members being separated. Elderly and single people are at risk if they have no one to check on them. If these citizens wander around, problems may result. The police can set up search teams and put together systems where loved ones can check on one another. They can set up command centers where the victims and family may be reunited. They work with emergency personnel to list the various medical facilities used for treating sick or injured people.

5. **Looters**

There are those who take advantage of a chaotic situation. When people are evacuated from homes or neighborhoods, houses are unsupervised and opportunities to commit crime may be rampant. Police presence may help to deter looting. If looting does occur, the police are ready to apprehend suspects.

Role of Education Institutes

To integrate disaster risk reduction into sustainable development policies and planning, to develop and strengthen institutions, mechanisms and capacities, to build resilience to hazards and to systematically incorporate risk reduction approaches into the implementation of emergency preparedness, response and recovery programmes, it is imperative to strengthen disaster preparedness and mitigation strategies at all levels. Disaster preparedness can play in saving lives and livelihoods particularly when integrated into an overall disaster risk reduction approach. The goal of developing 'disaster-resilient communities' rests heavily upon the success of disaster risk reduction education. In India, we have the Tata Institute of Social Sciences, University of Delhi, University of Pune, University of South Gujarat and other educational institutions which have taken up the task of strengthening government's efforts in conducting research on impacted communities, designing rehabilitation initiatives, disaster preparedness and mitigation strategies. Although knowledge does not guarantee power over natural catastrophe, it is a prime requisite of disaster preparedness and prevention. The integration of disaster risk education both formal and informal educational means at schools and universities is the one way to ensure that these messages reach into every home and community and that learning is sustained into future generations.

To highlight this aspect there is plethora of research material available at the global level as well as national level. Major studies in this area have been carried out by ISDR (2007, 2008), UNDP (2004, 2005, 2006) and World Bank. It is because of the efforts of the activists connected with nongovernmental organizations, scientific, academic and research institutions disaster risk education has been prioritised

both at the grassroots and 42National Institute on Disaster Management. (n.d.). Vision. For instance the 2006-07 UNISDR campaign "Disaster risk reduction begins at school" aimed to promote the integration of disaster risk reduction into government plans for school curricula and to ensure that school buildings are safe from the impacts of natural hazards is an outcome of UNISDR 2006 study. Similarly based on the global research studies on climate change awareness and environmental education, Ministries of Education in developing economies like India, China, Bangladesh and others are taking on the challenge of disseminating disaster risk reduction education. The current International Decade of Education for Sustainable Development led by UNESCO, provides a long-term focus for taking this agenda forward. Early efforts in disaster education focused exclusively on hazards. More recent efforts have begun to engage children and youth in discovering and recognizing the myriad local hazards that they face, and introduce primary disaster risk mitigation: physical protection of people and property, environmental stewardship, and recognizing underlying vulnerability connected with tenuous livelihoods (Petal 2007, 2008).

Developing a Culture of Preparedness Academic institutions have a key role to play in developing new disaster management curricula for the next generation, as well as providing short courses for policy makers and a wide range of other professionals whose daily decisions influence the level of disaster risk we all live with. Disaster risk reduction and sustainable development cross all disciplines, from Engineering, where work is being done on clean and renewable energy systems, to Architecture, which houses a 'Design Centre for Sustainability' by using holistic and synergistic approaches to sustainability, to Chemistry, where students are working on green materials. In these and other disciplines, we see a much greater emphasis on new concepts of intervention involving community consultation and partnership, a recognition that the kinds of problems we now face must be approached collectively and collaboratively, through partnerships that engage diverse range of stakeholders in creating a culture of disaster preparedness and mitigation. Artificial barriers between scientific disciplines and other faculties need to be bridged and disaster management should be imparted in a more holistic fashion. This will not only progressively enhance acceptability of DRR as an academic and professional domain but also boost knowledge management in India.

Government of India, Ministry of Human Resource Development in its Tenth Five Year Plan emphasized the need for integrating disaster management in the existing education system in India. One of the important initiatives taken by GOI includes recommending various Boards to incorporate disaster management in the curriculum of school and professional education and design disaster management plans for their institutions. In addition to this GOI has specially created around 15 institutes that offer courses on Disaster Management across India. Notable amongst them being the National Center for Disaster Management (NCDM) set up by the Indian Institute of Public Administration, the Centre for Disaster Management set up by Y S Chavan Academy of Development Administration, and Disaster Management Institute, Bhopal. NCDM is also the nodal agency for coordinating relief and rehabilitation work during natural calamities. GOI, Ministry of Human Resource Development has recommended the different school boards to incorporate Disaster Management in the school curriculum.

In case of integration of disaster management in the higher education, only two hours training programme is conducted every year for students of NSS. United National Center for Regional Development. (2008). As per the data available with the UGC 402 academic institutions all over the country imparting post graduate studies have incorporated courses on 'Emergency Management/ Disaster Management/ Crisis Management in their post graduate programmes. There are around 419 public and private universities44 (Avoid general referencing and refer to authentic source of information such as government, UN agencies, prominent institutions etc.) and 6014 colleges45 providing higher education in India, this clearly indicates huge gap in the educational sector to integrate emergency management as part of formal educational system.

Role of Private Organizations

Where does the role of the private sector lie in disaster management? In is obvious that this is a multi-faceted and multi-disciplinary one, including those listed below and more:

- o In defining, assigning and implementing clear and coherent institutional roles? In training, equipping and achieving proficiency for effective response capacity for high risk communities
- o In assessing institutional needs, developing and implementing programmes to assist key organizations with sustainability issues and measures
- o In improving disaster consciousness of the general population

- In improving access to accurate information and basic communication, energy and water systems for high-risk communities by facilitating appropriate technology alternatives on credit to qualifying communities.

At the same time, local authorities need to provide a more effective framework for unleashing the full potential of private sector contribution. This framework can include policies that contribute directly to safer industrial operation, and incentives for business to become more involved in disaster management programmes. Mechanisms whereby businesses and the authorities meet to discuss their respective roles and contributions to national disaster security need to be set up and operationalized on a regular basis.

In a session organized as a part of the World Conference on Disaster Reduction (WCDR, January 2005, Kobe, Japan), a number of interesting viewpoints were put forth:

1. It apparent that the private sector plays both vital and varied roles in emergency management. In fact, it is not an exaggeration to state that the contributions of businesses in mitigation, preparedness, response, and recovery activities have been woefully underestimated.
2. The private sector interacts frequently with the public sector to fulfill necessary community disaster functions. Therefore, the lines between the public and private sectors appear to be disappearing, blurring, or even artificial.
3. The public sector relies heavily upon the goods and services provided by the private sector. Many functions, such as public information, debris removal, and emergency medical care, could not be adequately performed without the assistance of the private sector.
4. Numerous factors facilitate coordination among the private and public sectors. Planning meetings, communications capability, and cooperation were mentioned as variables that promoted close collaboration.
5. Much more needs to be known about the roles of businesses in disasters. For example, are there functions performed by the private sector beyond those mentioned here.
6. Additional research on coordination will be required, focussing on the interaction of the public and private sectors in emergency management.
7. Methods of educating and involving businesses in emergency management must be promoted. Public officials and agencies should include, where possible, the private sector in all types of disaster prevention and planning activities.
8. Practitioners must continue to emphasize networking and partnering. The performance of emergency management is increasingly a result of successful collaboration among government agencies and the private sector.
9. The factors that hinder and help coordination must be explored by academia. Practitioners should familiarize themselves with the lessons provided by scholars in order to augment future emergency management capabilities.