

## **Approach to Disaster Management:**

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A crisis in the context of a disaster is an event, which threatens the whole of society, and its management implies that a mechanism is in place, which will enable a **TOTAL & EFFECTIVE RESPONSE** to offset its harmful effects. This total & effective response mechanism must subsume the coordinated response of the entire governmental system and the whole of civil society. By its very definition, therefore, **DISASTER MANAGEMENT** in the context of a disaster cannot be a quick-fix mechanism. It implies meticulous planning and coordination between various role-players, to prevent disasters and to mitigate their impact whenever they occur. The response system must incorporate the traditional coping mechanisms, which have evolved over centuries of experience by trial and error. A human rights' perspective to disaster management is very important because it is the poorest and weakest sections of society which suffer most in terms of loss of life and property, whenever a disaster strikes. If such human rights' concerns can be taken care of effectively and at the earliest, then only can the impact of disasters be mitigated to the maximum. This paper on disaster management will discuss the planning process, which needs to be in place to cope with disasters and their fallouts in all their ramifications.

**2.** A holistic approach to disaster management is in line with the Yokohama Strategy evolved during the International Decade of Natural Disaster Reduction (IDNDR- 1990 to 2000), i.e., planning for prevention, reduction, mitigation, and preparedness and thereafter response planning, goes a long way to reduce the loss of life and property due to disasters. Effort has to be, not to develop a plan de novo, but to build on what obtains at different levels and streamline such bottlenecks as may exist. Considering the very large number of disasters that occur in India in different parts of the country, a generic categorization of disasters would help in preparing crisis management plans. This generic categorization of disasters is, in no way intended to disturb the handling of specific disasters by various departments and ministries at the center or state government levels according to existing rules of business of government. In fact, in our view, all conceivable disasters natural as well as others would fall in one or another of the following five categories. Accordingly, the 30 odd types of disasters, which have been experienced in the past in India have been categorized into five sub-groups:

**Sub-Group 1:** WATER AND CLIMATE RELATED HAZARDS (Floods and Drainage Management / Droughts / Cyclones / Tsunami / Tornadoes / Sea Erosion/ Hurricanes / Hailstorms / Cloudburst / Snow Avalanches / Heat & Cold Waves / Thunder and lightening)

**Sub-group 2:** GEOLOGICALLY RELATED HAZARDS (Earthquakes/Landslides/ Mudflows/ Sea Erosion/Dam Bursts & Dam Failures/ Mine Fires)

**Sub-Group 3: CHEMICAL, INDUSTRIAL & NUCLEAR RELATED DISASTERS**  
(Chemical & Industrial Disasters/Nuclear Disasters)

**Sub-Group 4: ACCIDENT RELATED DISASTERS**

(Road, Rail and other Transportation Accidents including waterways-Boat Capsizing/ Mine Flooding/Major Building Collapse/Serial Bomb Blasts/Festival related Disasters/ Electrical Disasters & Fires/Forest Fires/ Urban Fires/Mine Flooding/ Oil Spill/ Village Fires)

**Sub-Group 5: BIOLOGICALLY RELATED DISASTERS**

(Biological Disasters/ Epidemics/Cattle and Bird Epidemics/Pest Attacks/ Food Poisoning)

**3. Quick Response Mechanism-The Trigger Mechanism:**

In the matter of response, a need has arisen to provide for “QUICK RESPONSE” at the national, state and district levels to provide for quick rescue and immediate relief in disaster situations such as the Orissa super cyclone, the Bhuj earthquake, recent Tsunami & the latest J & K earthquake. This would imply that even neighboring districts and states may need to rush to the aid of the affected districts and states in situations when the state and district headquarters may themselves be immobilized due to the intensity of the disaster. At the national, state and district levels also a concept of a SPECIAL DISASTER RELIEF UNIT, or a well-trained civil force is being mooted to reduce response time to the minimum. A concept of “**Trigger Mechanism**”, which is another name for “Standard Operation Procedure (SOP)” current in the defence services needs to be standardized at the earliest. The proposed Trigger Mechanism (an elaboration of the concept is available at APPENDIX I) is a device to minimize response time when disasters strike and may comprise of the following:

- (i) Civil Defence warden system is a good response mechanism; can it be extended to the whole country? Panchayat members could be wardens in the rural areas.
- (ii) Communication links: VHF at each Tahsil/ Taluka; V-Sat at each district headquarters; HAM (Help All Mankind) radio promotion programme needs to be taken up.
- (iii) District Control Room/Shadow Control Room; State Control Room/Shadow Control Room/ Central Control Room, Control room in the convener/nodal department handling each category of sub-groups of disasters mentioned in the earlier para 2, and control room in each department which is assigned the specific disaster constituting the sub-groups would be necessary.
- (iv) L1, L2, L3 levels of each type of disaster have to be predetermined, to lay out procedures to trigger off the Basic Initial Response Management Steps (BIRMS) without formal orders from any where. Sub-groups of ministries and departments which have been assigned responsibility of different sub-groups of disasters and so constituted at the national and state levels, have to address

this exercise at the earliest. L1 denotes a disaster which can be handled effectively at the district level. Normally L2 level of disasters of the district will be the L1 level at the state hqs; and L3 level of the district will be the L2 level of the state hqs; L3 level of the state hqs would normally be the L1 level at the centre. L0 level is designated as the preparatory level prior to L1. In disasters such as the Bhuj or J & K earthquakes or the Orissa super cyclone or the recent Tsunami L1, L2, L3 would perhaps be triggered off simultaneously.

- (v) Police wireless network and Police Control Rooms need to be designated as alternate communication system.
- (vi) 'Dos' and 'donts' for each type of disaster for people and the relief volunteers and personnel, to facilitate relief and rescue activities when disasters strike need to be finalized at the earliest. These ought to be passed on to the State Resource Centres of the National Literacy Mission for communicating the same to the Zilla Saksharta Samitis (ZSSs) for further dissemination down to the community level.
- (vii) Humanitarian concerns from areas far removed from the site of disasters respond very quickly and the incoming relief in the shape of experts, volunteers, equipment and material at the site of the disasters needs to be sorted out and managed at short notice. The trigger mechanism should lay out a standard operation procedure to deal with this situation.
- (viii) Medical relief in the shape of doctors, paramedics and medicines not only have to attend to those surviving but have to contend with the trauma experienced by them. Taking care of this trauma is a long-term commitment for which the medical teams are not adequately prepared. These matters need advance planning.
- (ix) While a quick response mechanism in India needs to be set up and streamlined, what is equally important is that the administrative system is geared to anticipate the kinds of disasters which are fairly periodic such as drought & floods and many other types of disasters which are less frequent but which do give considerable advance warning.
- (x) Dealing with Nuclear, Biological and Chemical disasters in the context in which they are being mentioned of late would call for a quick response mechanism totally different from the conventional crisis management angle.
- (xi) Accident Related Disasters have been included in this paper on DISASTER MANAGEMENT because but for the railways there is no management mechanism in place for other forms of accidents. Road accidents alone claim well over a lakh of lives every year, not to mention many more maimed for life. Road accidents also tend to withhold traffic leading to traffic jams, which very often tend to become major law and order crisis, specially on the highways.

4. A special reference to the disaster of drought is necessary here. Rains in the Indian sub-continent fail once in a while. If there is an appropriate greening program in place, then in the years of normal rainfall, sufficient moisture gets conserved in the soil to take care of years when rains may fail. Needless to say, there has to be a comprehensive greening program at the district level to prevent drought and to cope with it whenever it occurs. The problem arises when and where there are no proper arrangements for conservation of rainwater, and drought begins to lurk. Disasters like drought take a long time to develop, and the very first signs of distress need to be attended to otherwise it is too late to prevent loss of human and cattle life. Can states adopt schemes like the Employment Guarantees Scheme (EGS) of Maharashtra, where on the first signal of distress the District Collector is able to intervene? This is not the same as GOI having schemes in the Ministry of Rural Development to provide for rural employment as an EGS. GOI funds reach the states only after they have utilized the previously released funds, and, in view of the resource crunch, District Collectors are unable to provide relief on the first signal of distress. A state level EGS could take care of such situations, well in time, otherwise once the first signals of distress go unheeded, the disaster of drought assumes proportions which become impossible to handle, giving rise to mass migration and unimaginable hardship to the poorest of our people. This could be easily avoided by timely action at the district and state levels. Similarly, floods can also be anticipated as they occur in the same parts of the country every now & then during nearly the same months of the year. A responsive administrative system can very well take preventive action well in time to minimize hardship to people.

#### **5. Updating the Plan and its Rehearsal:**

A plan is only as good as when it is updated and rehearsed. Plans made in the past have often been rendered obsolete and out of date, and the effort made to prepare them becomes infructuous. It is being suggested that every year "last week of April" be observed as "updating the plan" week and every year "first week of May" be observed as "rehearsing the plan" week throughout the country at district, state and national levels to ensure that the plans which are ready at different levels are implement-able. The quality of rehearsal would need to be assessed objectively, one mark for a prescribed act done, zero mark for a prescribed act not done. The voluntary agencies would have a special role in this exercise, in that this would give them an excellent opportunity to understand the plans that have been prepared. This, in turn, would enable them to streamline their own complimentary role in disaster management. This kind of a drill every year will augment the country's state of preparedness and will instill confidence in people to face any situation in future, as well as ensure protection of human rights of the poorest. This exercise has been designated as "**L0-L1 Exercise**" at the district and state levels for improving their preparedness to cope with disasters, and is annexed as **Appendix-II** to this note.

6. There is need to integrate the school, college and university systems with disaster preparedness and response mechanism as they are a major systemic casualty of a super

disaster, and have a major stake in preventing them, and also in mitigating their impact. Involvement of students and youth in disaster preparedness would also orient them for discharging their social responsibility towards the vulnerable sections of society in the long run. The voluntary agencies need to come forward in a big way to mobilize students to prepare people to cope with disasters, as well as for organizing rescue and relief in a crisis. In a disaster situation it is the poorest sections of society which suffer most, and it is these sections of our population which have little access to the fruits of development due to illiteracy. The Universities in India have a very important role to play on the various issues raised in this note and specially those (mentioned in later para 8) relating to the silent disaster arising out of the phenomenon of the ever swelling urban slums generated by the rural-urban migration of the rural poor. Similarly, the major cultural shift (mentioned in later paras 12, 13 and 14) arising out of the phenomenon of globalization, and the need for preparing people to cope with disasters through their V.C.Os, also would require the genius of the University system in India, in due course. Mobilizing the University system in India for such a nation-building exercise is a challenging task which would call for the very best from our youths and the elite sections of society.

7. Development plans at national, state and district levels need to apportion funds for prevention and mitigation of disasters, as cost-effectiveness of prevention and mitigation is estimated to reduce relief costs to up to one tenth. This will call for involving and motivating the peoples' representatives, community based organizations (CBO), NGOs, etc. for undertaking this exercise as part of the routine of development planning at all levels. The Planning Commission has also been requested to keep this in mind while formulating development plans at all levels. The Tenth Five Year Plan has a separate chapter on Disaster Management. Many development schemes, such as, road building, implemented indifferently are known to cause disasters. In the hills road construction carried out without imagination has triggered off many a landslides, while in the plains floods have been caused where they were unheard of prior to road construction. The attention of the Planning Commission has been invited to the need for ensuring implementation of development schemes at all levels in a manner so as not to cause disasters. In fact NGOs need to work with Panchayats to evolve model Panchayat-level sustainable-development and disaster management plans to become examples for other Panchayats. The basic premise that has emerged is that a sustainable development plan, prepared and implemented by the people with government co-operation is the best guarantee to prevent many natural disasters and to minimize the suffering of the poorest in disaster situations. The whole process of preparation of disaster management plans must lay special emphasis on taking timely preventive measures by incorporating them into the very development planning system. This, in a manner of speaking may generate a nation-building exercise which will involve the poorest of the poor in their own development. This will also need the willing co-operation of the elite of our society, working in close collaboration with peoples' organizations at all levels to plan for a safe and better future.

**8.** A silent crisis afflicting our country is the phenomenon of the ever swelling urban slums generated by a massive rural-urban migration of the rural poor, who have been driven away from the rural countryside due to their alienation from the village community lands. The lure and glitter of the far-away metropolis, and the fairy tales spun by commercial cinema painting an image of modern life with piped water supply, electricity, telephone and television were too alluring and hard to resist, and thus the flight from the villages. At first sight this may not appear to call for crisis management but neglecting this state of affairs can lead to disasters of unprecedented magnitude such as the recent inundation experienced by Mumbai for over a week in neck-deep waters and inundation in waist-deep waters by Chennai, due to a sudden downpour. This process of rural-urban migration has been accelerated after the advent of television and its extension to nearly all parts of the country. Thus, television, a unique media of mass education, instead of disseminating life-generating concerns of sustainable development, has today become a mere tool of mass commercial advertisements sponsored by multi-national companies and our own corporate sector, dishing out spurious values which seem to threaten the very moral fibre of our upcoming generations, giving rise to fears of a “moral disaster”. This “moral disaster” may not appear to merit attention in the manner of crisis management, but can the country keep ignoring what has been building up due to neglect of vital development issues over the past fifty years? It must have been the precipitous decline in the level of social values in public life that has, for the first time prompted inclusion of ethical issues in the terms of reference (T.O.R.) of the second Administrative Report Commission (ARC), recently setup by the Govt. of India.

**9.** The corporate sector of India which has the wherewithal that can enable it to rise the occasion, therefore, has a special role to play now-

- (i)** to create markets for the produce of our cottage and village industries to generate gainful rural employment, by extending this facility through their own marketing networks, which will minimize the perils of the rural-urban migration, and may even hopefully trigger a reverse migration from the urban slums back to the villages, provided adequate promotional efforts are made by the State.
- (ii)** to apply a self-denying ordinance on the quality and themes of the commercial advertisements that are being dished out through the television. The themes could easily cover family level cleanliness and sanitation; social level sanitation to facilitate recycling of waste and converting bio-degradable garbage into manure; city level sanitation to improve the quality of urban life; communal and social harmony so essential for our progress; family level harmony by projecting proper mother-in-law, daughter-in-law, sister-in-law relations; pollution control on vehicular and industrial emissions & effluents; keeping the rivers clean by proper disposal of municipal wastes in order to facilitate supply of clean drinking water;

laying stress on supply of chemical-free-food grains by emphasizing biological control of pests and organic farming in agriculture, etc. The corporate sector in India is capable of playing this role provided it realizes the dire consequences of ignoring this matter affecting the basic human rights of the poorest, and

- (iii) The state of rivers, water streams and water bodies in India is indeed, already catastrophic with sewers and industrial effluents flowing into them unabated for the last two decades. Drinking water supply to nearly all municipalities in the country is made from the highly polluted rivers, water streams and water bodies. The issue of supply of clean drinking water in our towns & cities is closely connected with the sewerage disposal system now prevalent in the country. In days gone by the simple soakage pit in the compound of every house was quite suitable. Twenty feet away from this soakage pit in every direction was free of microbes and the water used to flush the toilets did not lower the ground-water level. The current prevalent centralized sewerage disposal system is not only capital intensive, it is a heavy drain on our scarce water supply because every time the flush system is operated 10 litres of water are lost to flush one litre of urine or any other heavier stuff, and this excessive demand for water to flush the toilets also contributes to lowering of the ground-water level. This centralized sewerage is supposed to be treated by the sewerage treatment plants (STPs) which are mostly out of order or non functional due to power scarcity. This untreated sewerage as well as effluents from chemical and other industries flows into our rivers, water streams & water bodies, which are supplying drinking water to our towns & cities. Thus, there is an inbuilt and planned mechanism to infect our water supply system causing wide spread infection to our children & the whole population. Ninety percent of the disease burden in India especially amongst children is due to stomach ailments caused due to infected drinking water supply. Disasters like the Surat Plague which occurred a decade ago and the recent outbreak of Japanese Encephalitis in U.P. are lurking around, specially in view of W.H.O. warning regarding Bird Flu. There is a strong case for reverting back to the old low cost decentralized soakage pit methodology or other such modern system to conserve water, as well as to minimize water pollution. The whole issues of urban planning has to address this state of affairs rather urgently, lest a crisis of unmanageable magnitude engulfs the sub-continent.

#### **10. Networking of Knowledge and the Learning Exercise:**

Every disaster is a unique event and every kind of data emerging out of it needs to be meticulously recorded for posterity. The scientific community, the technologists, the social scientists and other branches of knowledge need to be mobilized at short notice to record data and carry out necessary studies whenever a disaster strikes. This gives rise to need for laying out a structure for initiating the learning exercise, at short notice, which can be used to collect data whenever a disaster strikes, in order to generate knowledge which may prevent future disasters as well as prepare people to face them in a better manner whenever they may recur. This learning process has to be traced

backwards to know about the causes of various kinds of disasters, which is only possible through a process of networking of such knowledge as is available throughout the world today. Broadly knowledge can be networked in three groups:

- (i) Knowledge relating to natural disasters,
- (ii) Knowledge relating to non-natural disasters such as nuclear, industrial and chemical and
- (iii) Knowledge relating to biological disasters.

This would also involve identifying centers of excellence in different fields of knowledge and technology, which would need to collaborate to develop the required networks of knowledge. This would help the country to prevent & reduce the occurrence of disasters and mitigate their impact whenever they strike. This exercise of harnessing science and technology in aid of disaster management promises to be an exciting venture, which would hopefully usher in a comparatively safer world in the near future.

**11.** There is need today to save the concept of “Protection of Human Rights” from becoming a mere slogan by taking in hand concrete and practical welfare programs to be implemented by the very people whose human rights are threatened. This would require marshalling the services of honest and dedicated volunteers who are prepared to spare their time and energy for such programs without seeking any personal benefits. Such volunteers would have to have the patience to function as facilitators willing to encourage the poorest of the poor to stand on their own feet, instead of converting the poorest of the poor into beggars of relief. There are many organizations today which are distributing relief as charity in the name of “Protection of Human Rights” who seem to be indifferent to the need for encouraging the poorest of the poor to stand on their own feet. In fact, it appears that these organizations prefer that the poorest remain poor so that they may continue to give charity. There is a further need to motivate such charitable organizations to join hands so that the poorest of the poor are enabled to stand on their own feet. Then only are we truly helping the poor and conferring on them a freedom of choice so essential to generate self-esteem in them.

**12.** In this era of globalization the corporate sector has a special role to play in the context of protection of human rights of the poorest in a disaster situation. The concept of “World-a Market” has today overtaken the ancient Indian concept of “World-a Family”, and the only way we can promote the latter concept is by protecting the human rights of the poorest in all situations, in disaster as well as in normal times. The burden of converting “World-a Market” to “World-a Family”, it seems may well fall on India, and then alone would the human rights of the poorest and the lowliest be safeguarded automatically. This is going to be a major cultural shift in which the best minds in India would need to collaborate at all levels in society as well as in the governmental system



at the center, the states and the districts. Sage Bharatrihari, one of the Rishis of India, had observed.

अयम् निजः परोवेत्ति गणना लघुचेतसाम ।

उदार चरितानाम् तु वसुधैव कुटुम्बकम् ॥

This is mine, that is yours, is the calculation of small minds; for the broadminded, the whole world is a family.

### **13. The role of the Armed Forces:**

The role of the Armed Forces and Para-military Forces in disaster situations has always been exemplary and so far, fortunately, above partisan politics. The defence forces in India have very high traditions of service and sacrifice and are held in high esteem by all sections of society. Excessive dependence on them for such civil functions as disaster management takes away a great deal of their time and energy from their main task of defending the country. The approach to future planning should be to reduce society's dependence on the Armed Forces and Para-military Forces in disaster situations, by preparing people, through their voluntary community organizations (VCOs) and Panchayati Raj Institutions to cope with disasters, by taking appropriate preventive measures well in time.

**14.** Inculcating a culture of safety in various walks of life as well as in the basic social infrastructure is the need of the hour. This would call for a radical change in our thinking at all levels. The schools to begin with and later the colleges and Universities as well as the professional colleges and institutions have to build this concept in their curricular and extra-curricular activities. Social organizations and the governmental administrative system at all levels have to incorporate these safety concerns in their work-ethics, work-manuals and procedures. A responsive administrative system geared to anticipate problems only would be in a far better position to manage disasters effectively and deliver good governance than one which is laid back. Acute Crisis Management implies a superior quality of management which can be delivered only by a governmental system geared to give good governance. It needs to be understood that routine governance, if it is efficient, would be called to face a crisis once in a while. But if routine governance is unresponsive and indifferent, it would be bogged down in managing routine matters as issues of crisis management, as in-fact, appears to be the state of affairs in quite a few states in North India. It further needs to be appreciated that a strategy of development, which promotes sustainability along with progress alone is some sort of a guarantee to prevent disasters, but this also calls for good and responsive governance as a primary condition. Otherwise funds allocated for development are bound to get diverted to finance the baser elements in our society. This is what is amply apparent today in our social set up.

1. This is another name for Standard Operation Procedure (SOP) which is current in the military, and is primarily meant to reduce response time to a minimum. The Civil Defence Organization is the closest example in Civil administration where, on hearing the air-raid siren the Chief Civil Defence Warden and his fellow wardens activate the entire civil defence system. It is for this reason that a suggestion has been made to introduce the civil defence warden system in areas vulnerable to disasters of different kinds.
2. In order to lay down SOPs for differing intensity of disasters the concept of L0, L1, L2, and L3 has been mooted.
  - i. L0 or ordinary level is to denote the normal times when the disaster management system should be maintaining a close watch over the state of preparedness for each type of disaster. Even for this, some drill may be necessary. A drill has been suggested that every year, all disaster management plans that are ready at different levels, should be updated in the last week of April and rehearsed in the first week of May. This rehearsal should be evaluated at every level. This would be an example of L0 and the activities/drills associated with it. With the exception of disasters like earthquake and cyclones, as well as major accidents, in which most of the damage usually takes place at one go, a disaster may start at a low key (L1) and may develop overtime to a more serious level (L2), and later become a major disaster (L3).
  - ii. L1-Level One- This is the starting point of a disaster situation, which, when reported from any quarter (may be a Civil Defence Warden), would set into motion, without formal orders from anywhere, some basic initial management response steps alerting all concerned according to a predetermined procedure/drill for each type of disaster. Basic action to mitigate the impact of the disaster would also be taken simultaneously, along with rescue and relief measures.
  - iii. L2- Level Two- An L1 level disaster may develop into a L2 level, overtime necessitating total attention of the district administration. This would entail triggering off some basic initial management response steps, predetermined for each type of disaster, which would be set into motion without formal orders from any quarters. The mitigation, relief and rescue activities would swing into action simultaneously.
  - iv. L3- Level Three- An L2 category of disaster could develop overtime into a L3 category. When this perception takes place, some basic initial management response steps, predetermined for each type of disaster, would be set into motion

without formal orders from anywhere. The corresponding mitigation, relief and rescue activities would swing into action simultaneously.

3. L0, L1, L2, L3 would need to be determined for each type of disaster by the corresponding managers at the district, state and the central level.
4. L1, L2, L3 would be different for the same type of disaster in different districts and different states, according to their capacity to cope with them. The determination of L1, L2, L3 would, therefore, have to be done by the District Relief Managers, the State Relief Commissioners and the Central Relief Commissioner for each type of disaster for their respective levels.
5. Normally, L2 of the district would be L1 of the state, L3 of the district would be L2 of the state and L3 of the state would be L1 for the center. For disasters where the total damage takes place at one go, like earthquakes, cyclones and major accidents, may be, L1, L2 & L3 would be triggering into action simultaneously at district, state & central level enabling the promptest appropriate response form each level to take place at the earliest.
6. The entire exercise of putting in place a trigger mechanism, therefore, essentially comprises of determining L0, L1, L2, L3 for each type of disaster at the district, the state, and the center. Along with this, the actions that need to follow as well as, the various authorities that need to be alerted and activated would also need to be predetermined.

**L0 Exercise (Last Week of “April - updating the plan week”)**

- 1) Update the existing district Disaster Management Plan (referred herein after as the district plan)
  - a) Telephone Numbers
  - b) Personnel
  - c) Vulnerability to fresh disasters
  - d) Critical data relating to a few previous disasters to be taken note of, for planning rescue & relief.
  
- 2) Role of N.G.Os. in Pre-disaster period :-
  - a- Identifying the poorest & providing for them, and to scotch rumours likely to impede relief and rescue activities.
  - b- Identifying the storage points for:
    - (i) Medicines (ii) Food grains (iii) Clothes
  - c- Identifying safe place for shelter-temporary (tents) or permanent (buildings), for humans as well as for cattle.
  - d- Planning langars (supplying cooked meals)- who will do it and where ?
  - e- Training in relief distribution – Who, where and what ?
  - f- Organizing village/ward defence societies against criminal elements.
  - g-
    - (i) Identifying N.S.S. volunteers, Scouts & Guides for relief and rescue-detailing volunteers at specific places, and for specific times.
    - (ii) First aid posts, hospital (govt. and private), Red-Cross society facilities, doctors, para-medics, etc. Should be identified and alerted.
    - (iii) Providing critical data relating to previous disasters in order to improve relief and rescue activities.
  - h- If inter-district movement of relief materials is planned – then adequate advance preparation, under the auspices of district magistrates of the concerned districts would be necessary to ensure prompt and safe delivery of the relief materials.
  - i- The district level federation of N.G.Os. may identify an industrial house at the district headquarters, with a large number of telephones to function as a temporary control room to facilitate the functioning of their volunteers to assist the district administration in relief and rescue activities.
  - j- Preparing people to evacuate from disaster prone areas and helping them to move to safer places is most important, and N.G.Os. may address this activity.
  - k- Disasters cause tremendous emotional and psychological stress on the vulnerable population, and rehabilitating people emotionally is of great

urgency; this needs to be addressed by the voluntary community organizations (VCOs) evolved by the N.G.Os. of the nationwide network.

- 1- Preparatory action relating to each be taken up and supervisors be nominated for the L1 Exercise.
- 3) Padyatras be planned from block headquarters and in each municipal ward to vulnerable areas through mixed teams comprising of NGO volunteers & Govt. Officials, and such teams be formed.
- 4) All industrial establishments and major institutions and schools, colleges, professional bodies to be alerted and briefed about the exercise.
- 5) Attend to any other fresh aspect of disasters management not addressed so far in the district plan.

### **L1 Exercise (First Week of “May – rehearsing the plan week”)**

1. Since this exercise is planned over a week, different days could be fixed for different constituents of the district management system to test their response time and readiness.
2. Separate meetings could be arranged, of different set of functionaries relating to rescue and relief, to inform in “debriefing sessions” of what was lacking in their response as noted by the respective supervisors.
3.
  - a. Each functionary responsible for a specific role should be assessed.
  - b. Each department responsible for a specific task should also be assessed.
  - c. These assessments need not be made public, but should be conveyed to the concerned persons and departments for further improvements.
4. Planned padyatras be organized from block headquarters and in each municipal ward to vulnerable areas, and actions relating to item No.2 of L0 exercise be given final shape.
5. Report of L0 exercise held at district level be sent to the state government by 1<sup>st</sup> of May; and the report of L1 exercise held at the district level be sent to the state government by 10<sup>th</sup> May.

## **L0-L1 Exercise at State Level**

### **L0 Exercise (Last Week of “April - updating the plan week”)**

1. Quick review of disaster prevention measures as well as support systems to the districts, should be carried out by each department and ministry concerned.
  - a. Inventory of rescue & relief equipments district- wise and at state headquarters be prepared.
  - b. Equipments not available in the state but crucial for rescue and relief be identified and formal request to Govt. of India, in the concerned ministries and departments be made, to locate the same, and to issue instructions that the same may be made available when requested by the state.
  - c. Communication systems, downwards and upwards be reviewed.
  - d. Trained manpower needs for rescue and relief be assessed & communicated to the Relief Commissioner for placing an indent with the State Police and Home Guards, that such personnel be identified and kept in readiness to move at short notice.
2. Inter-district movement of foodgrains and fodder be planned in consultation with DMs concerned.
3. Storage points of medicines and hospital equipment be identified and 24-hours-chemists be listed for each district.
4. Review of implementation of building codes be carried out, after ascertaining that the building codes provide for preventive measures for different types of disasters.
5. Organizing Retro-Fitting clinics to make buildings safe in vulnerable areas be planned.
6. Fire prevention measures in high-rise buildings in the state be reviewed.
7. Any other set of important activities, which the state deems urgent in relation to disaster prevention, relief, rescue & rehabilitation, may be planned.

### **L1 Exercise (First Week of “May - rehearsing the plan week”)**

1. The state communication networks be actually tested, and protocols for different scenarios be hammered out, keeping in view past experience.
2. Ministry and department-wise review of actions and measures planned in the L0-exercise be carried out and appropriate modifications be made.
3. District-wise review of actions and measures planned in the L0-exercise at the district level, be carried out and appropriate standing instructions for all concerned be drafted.
4. Report of L0-L1 exercise in the state and its districts be compiled, or the process may be initiated, for submission to the Central Relief Commissioner by 15<sup>th</sup> May.