



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: B  
GEOGRAPHY, GEO-SCIENCES, ENVIRONMENTAL SCIENCE & DISASTER  
MANAGEMENT

Volume 16 Issue 6 Version 1.0 Year 2016

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals Inc. (USA)

Online ISSN: 2249-460X & Print ISSN: 0975-587X

## Linking Relief-Rehabilitation-Development Against Disaster

By Col Pk Chaturvedi

**Introduction-** A disaster means that appalling disturbance / change which brings with it great damage, misery and death when it occurs and leaves a legacy of destruction that has to be overcome. Although disasters have enormous damaging capacity, there exist considerable evidence of the efforts made by human beings to survive in extreme events such as earthquakes or hurricanes or fires and these evidences are observed throughout ancient to modern history of human civilization. In contemporary societies, warnings and repercussions of disasters has been superintended by various organizations in various forms. International aid-agencies such as the World Bank (WB), United Nations Development Programme (UNDP), Canadian International Development Agency (CIDA), and United States Agency for International Development (USAID) etc. emphasize through their Disaster Relief Program (DRM) on the involvement of community for development purposes and long term sustainability (UNDP-DRM, 2002-09).

However, disasters could be reduced if not prevented. With today's advancements in science and technology, including early warning and forecasting of natural phenomena together with innovative approaches and strategies for enhancing local capacities, the impact of natural hazards somehow be predicted and mitigated. Also, its detrimental effects on populations can also be reduced and the communities can be protected adequately.

*GJHSS-B Classification: FOR Code: 059999p*



LINKING RELIEF REHABILITATION DEVELOPMENT AGAINST DISASTER

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# Linking Relief-Rehabilitation-Development Against Disaster

Col Pk Chaturvedi

## I. INTRODUCTION

**A** disaster means that appalling disturbance / change which brings with it great damage, misery and death when it occurs and leaves a legacy of destruction that has to be overcome. Although disasters have enormous damaging capacity, there exist considerable evidence of the efforts made by human beings to survive in extreme events such as earthquakes or hurricanes or fires and these evidences are observed throughout ancient to modern history of human civilization. In contemporary societies, warnings and repercussions of disasters has been superintended by various organizations in various forms. International aid-agencies such as the World Bank (WB), *United Nations Development Programme* (UNDP), *Canadian International Development Agency* (CIDA), and *United States Agency for International Development* (USAID) etc. emphasize through their Disaster Relief Program (DRM) on the involvement of community for development purposes and long term sustainability (*UNDP-DRM, 2002-09*).

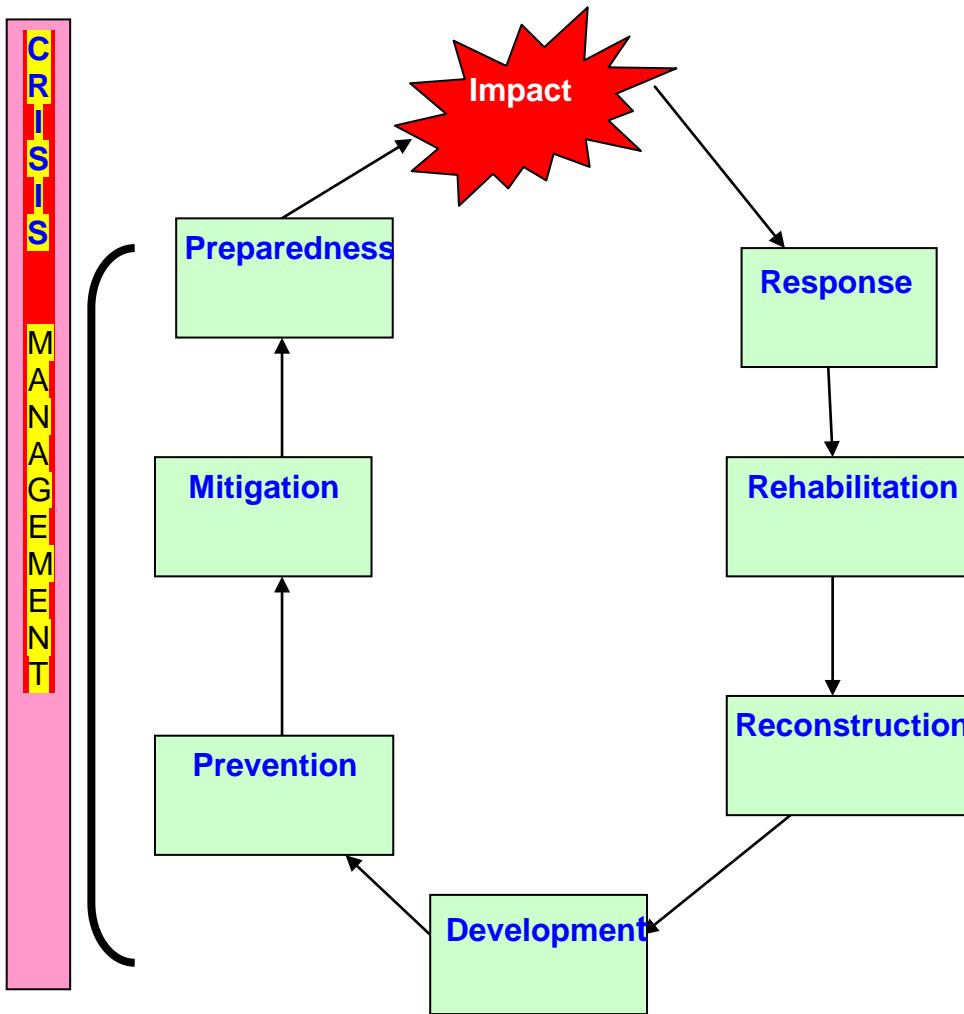
However, disasters could be reduced if not prevented. With today's advancements in science and technology, including early warning and forecasting of natural phenomena together with innovative approaches and strategies for enhancing local capacities, the impact of natural hazards somehow be predicted and mitigated. Also, its detrimental effects on populations can also be reduced and the communities can be protected adequately.

Disaster recovery and rehabilitation efforts require enormous funds that, amidst insufficient contingency funds, are taken out from other development programmes that are planned or are underway, thereby impeding development efforts (*Building Material and Technology Promotion Council, 1996*). Therefore, it is important that disaster mitigation programmes are made an integral part of developmental programmes. At the same time, efforts to enhance the capacities of communities and coping systems at various levels towards self-reliance and self-sufficiency must be sustained. The tools for assessing relief requirements and analyzing capacities and vulnerabilities have to be further developed, fine-tuned and promulgated among aid providers and disaster management practitioners (*Centre for Science and Environment (CSE)-Case Study, Nov 2013*).

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## II. IMPACT OF DISASTER

Disasters leave harm and damage to people, infrastructure, economies and the environment hence the goals of sustainable development get hindered. The disaster management framework has promoted a comprehensive approach that embraces disaster response and also prevention, preparedness and recovery activities. However, much of the focus has been concentrated upon disaster response planning relatively lesser activities have been undertaken on disaster prevention, including the examination of the underlying causes of disasters. As the potential of the occurrence of a disaster increases, the coping mechanisms of many societies tend to become less effective. Moreover, vulnerability to such risks tends to increase due to the mismatch between faster speeds of urbanization compared to that of building infrastructures to cope with the urbanization. It results from the coupling of independent risk sources, i.e. interaction of natural hazards with technological, lifestyle, and social risks and transition of people from rural to urban areas; increase of mobility and cultural de-rooting i.e. loss of traditional management capabilities; increase of social pressure and conflicts and insufficient management capacity for mitigation and contingency management (*UNDP-Project Management Board (PMB), 2002*..



*Fig.1:* Impact of disaster can be represented linking various stages as shown below:-  
Flow Diagram – Disaster Impact

### III. DISASTER MITIGATION IN INDIA

India faces disasters of different types and people have been struggling to overcome the disasters that strike with periodic regularity. During the years 1990-1999, there were 59,846 reported deaths, while 315,125,127 people were affected by various disasters in the country. During the years 2000- 2009, there were 64,478 people killed and 659,134,721 people were affected by various disasters in India, indicating an increase in both deaths and the impact of disasters (World Disaster Report 2010). The country is more vulnerable to disasters, such as droughts, earthquakes, floods, avalanches, cyclones, landslides, etc. Major natural disasters that India has experienced includes Uttar Kashi Earthquake (1991), Latur Earthquake (1993), Super cyclone in Orissa (1999), Bhuj Earthquake in Gujarat (2001), South Asia Tsunami (2004) (*Chandran 2004*), Kosi floods 2008 (*NDRF 2008*).

Disaster Management geared to make a paradigm change from response and calamity relief to disaster prevention, preparation and mitigation. Another significant change is to move from largely government instituted disaster management to public private partnership and community based disaster management. In this regard, significant changes have been made. India probably has the world's oldest disaster relief code which started in 1880. This relief code provides details of the relief to be given by the government to the affected people. India has been following five year national plans although they are not on a rolling basis. The Tenth Five-Year Plan 2002-2007 for the first time had a detailed chapter entitled Disaster Management-Development Perspective. The plan emphasized the fact that development cannot be sustainable without mitigation being built into the development process. Disaster mitigation and prevention were adopted as essential component of the

development strategy. The Eleventh Five Year Plan 2007-2012 (*Planning Commission, 2008*) states:-

*"The development process needs to be sensitive towards disaster prevention, preparedness and mitigation. Disaster management has therefore emerged as a high priority for the country. Going beyond the historical focus on relief and rehabilitation after the event, there is a need to look ahead and plan for disaster preparedness and mitigation in order to ensure that periodic shocks to our development efforts are minimized."*

The Eleventh Five Year Plan (op.cit) aims at consolidating the process by giving impetus to projects and programs that develop and nurture the culture of safety and it also concentrates upon the idea of integration of disaster prevention and mitigation into the development process. The guidance and direction to achieve this paradigm shift will need to flow from National Disaster Management Authority (NDMA), and in the true spirit of the Disaster Management Act, 2005 to all stakeholders including State Governments and Union Territories, right up to the Panchayati Raj (Local administration by five locally elected citizens) Institutions. Communities at large will need to be mobilized to achieve this common objective as they are the first responders. Even the best of isolated efforts will not bear fruit unless they are part of an overall, well-considered approach. Also responsibilities of all stakeholders need to be clearly spelt out and accountability and sustainability factored in.

While participating in these relief operations, it was strongly felt that the resources from external agencies arrive at least 06 to 12 hours later than the occurrence of disasters. Further, the priority is given by local commanders to those casualties that appear to have more chances of survival. While most of the casualties can be saved by local assistance during initial reaction time, lot of efforts are needed to look into the issue and administer local activities in initial stage of the disaster or even preparedness in disaster prone localities. There is a paradigm shift from reactive approach of mitigation and relief to proactive approach of planned rehabilitation and development.

#### IV. LINKING RELIEF, REHABILITATION AND DEVELOPMENT (LRRD)

Conceptual thinking about LRRD already started in the 1980s. The most broadly associated idea with LRRD is that both humanitarian relief and development assistance should be structured in a way that reduce the need for humanitarian aid and promote developmental objectives before, during and after emergencies. Relief and rehabilitation may be temporary measures necessary for returning to pre-existing levels of development cooperation. Once disaster hostilities

cease, moving into recovery and early development type assistance may be hampered by a lack or incapacity of local authorities and the prevailing need for socio-psychological coping with the past. How to apply relief, rehabilitation and development measures simultaneously over an extended period is analysed and placed in this thesis.

A number of studies focus on developing risk reduction approaches (Paton, 2003 & Camilleri, 2003), vulnerability reduction (Hellstrom, 2005; McEntire, 2001), and developing more comprehensive disaster management approaches (McEntire, op.cit). However, very few studies reflect on developing effective monitoring tools in order to understand the vulnerable communities post-disaster, which could form the basis for sustainable reconstruction (Birkmann & Fernando, 2007). The urban or rural planners and disaster managers need coordination at the operational level and strategic coordination at the policy level (Bennett et al., 2006). Most of the development projects are completed in urgency within the stipulated time frame, without actually investigating the long term benefits of such projects or developing effective monitoring systems for the programs. Time and again it has been stressed that disasters stems from human and societal changes which translates into vulnerability (Blaikie, 1994; McEntire, op.cit; UN/ISDR, 2005 & Baumwoll, 2008). Therefore, disaster planning is linked to community development and planning.

The case studies by Mitin Bhat (Disaster Mitigation initiative), and of Ramesh Mohopatra (2009), on 'Tsunami affected fishing community in Tamil Nadu coast' have brought community related issues and advantages to involve community for rehabilitation and development.

DGEP, 2012 during European Parliament policy briefing on 'Linking relief, rehabilitation and development: Towards more effective aid' states that the basic idea of LRRD is to link short-term relief measures with longer term development programmes in order to create synergies and provide a more sustainable response to crisis situations. As stated in the Principles of Good Humanitarian Donor ship, humanitarian assistance should be provided in ways that are supportive of recovery and long-term development, striving to ensure support, where appropriate, to the maintenance and return of sustainable livelihoods and transitions from humanitarian relief to recovery and development'. In turn, well-designed development cooperation programmes should reduce the need for emergency relief, and LRRD development activities should include measures for conflict prevention, disaster risk reduction, disaster preparedness and the development of early warning systems.

VENRO, 2006 working paper on LRRD states that fluid transition from relief to rehabilitation and development co-operation justified to describe the respective phases, methodical approaches and terminologies involved. The immediate goal of relief is to secure survival and provide those affected with the most vital support as quickly as possible. Salvage and rescue, shelter, protection, food aid, water supply and emergency medical care are of top priority. This stage of relief may last for a couple of weeks up to several months, and even longer in the case of what are referred to as chronic crises. As a rule, this is to the detriment of project planning but must not be used as an excuse not to make a need assessment and do the corresponding project planning.

Voice-Concord position paper - LRRD (2012) is confirming that LRRD is an acceptable approach for Slum disaster management. A larger investment in Disaster Risk Reduction (DRR) in development programmes is an essential component in LRRD, and more importantly in reducing the need for emergency responses. At the same time, DRR mainstreaming and activities which lay the ground for DRR in development should continue to be supported under the Humanitarian Aid instrument. This paper strongly supports the work of this research.

In India, funds for emergent requirement are taken out from other development programme are highlighted by *Building Material and Technology Promotion Council, 1996*. Based on land zoning, Report of the expert Group on Natural Disaster Prevention, Preparedness and Mitigation having bearing on Housing and Related Infrastructure aspects of fire hazards, has helped in bringing important lessons in this research.

Investment in Disaster Risk Reduction (DRR) in development programme is an essential component in rehabilitation and development, and more importantly in reducing the need for emergency responses. At the same time, activities which lay the ground for DRR in development should continue to be supported under the Humanitarian Aid instrument. NGOs have separate humanitarian and development departments. Funding constraints reinforce the gap, as donors may choose to only fund (a part of) one 'phase'. This can lead to projects which are suddenly discontinued because an 'emergency phase' is ending in the donor's view, or to long term programme which no longer make sense because a disaster has completely changed the local situation in the 'development phase'. Such trends need to be checked in time (VOICE, op.cit).

Conceptual thinking about LRRD started in the 1980s, having idea that both humanitarian relief and development assistance should be structured in ways that reduce the need for humanitarian aid and promote developmental objectives before, during and after emergencies. The implementation of LRRD led to the

emergence of two approaches, i.e. continuum and contiguum. In the continuum approach, the succession of relief, rehabilitation, and development, based on the assumption of a linear sequence before-during-after the disaster. In contiguum approach, simultaneous occurrence of humanitarian aid, rehabilitation and development, is carried out in order to respond effectively to all aspects and areas of the disaster. LRRD under the contiguum approach requires both NGOs and the Govt to expand their activities facilitating co-operation, in order to prevent crises, and to contribute to the long term stability and well-being of society (Karlos PA, 2002). LRRD interventions, regardless of the size or character of a disaster (sudden, recurrent or ongoing natural hazards or conflict), is need of time. Effective LRRD can address the poverty that disasters and conflicts generate (or intensify) by laying the groundwork for sustainable development during humanitarian interventions.

Long term programmes may be in the best position to respond to forecasts of a crisis, as development NGOs are on the ground, have established links with communities and government bodies and have staff and partner organisations in place. If a crisis is up coming, they can act upon early warning signals and adapt their programme where necessary. Once a crisis reaches a certain threshold, a more substantial humanitarian intervention may become necessary. Moreover, development funding needs to be dispersed quicker in situations where LRRD is needed as the current practice is far too slow for this purpose. Disaster preparedness will save money: "It is much more cost effective to prevent and prepare for a crisis than to wait for it to happen (VOICE, op.cit).

Aid agencies and government authorities on the ground have to take context-specific actions in relation to key needs of affected populations. The coordination among all actors: local authorities, donors, Govt agencies, local civil society and NGOs are very difficult. This involves field-level coordination between all actors but also, internal coordination between different departments of aid agencies, governmental authorities and donors.

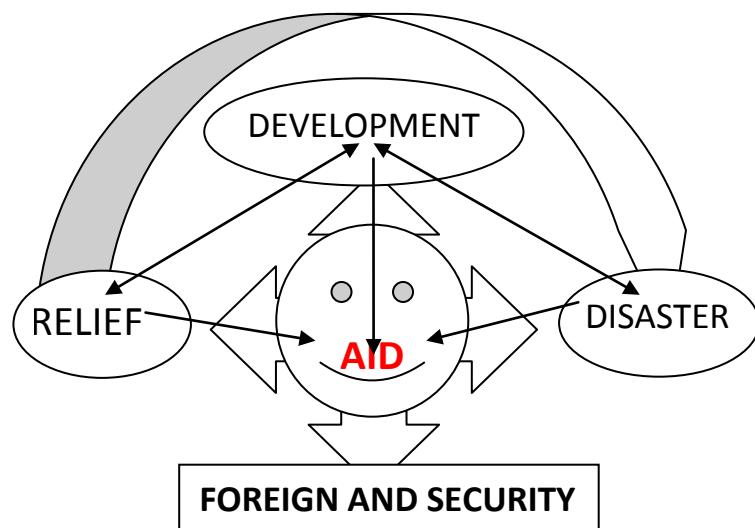
## V. INTERRELATIONSHIP BETWEEN DRR AND RRD APPROACHES

At all level, disasters are now viewed as opportunities for sustainable development. However, recently, post-disaster reconstruction efforts and community based development initiatives were lacking resources. Simultaneous projects are launched by numerous local state and central government organizations for housing and infrastructure construction, repairs, for livelihoods creation and for a range of other social programs. However, affected

communities are totally unaware of the long term benefits of such initiatives.

Thus, there is possibly a need for a common platform for post-disaster development. Numerous communities were unable to adapt to the new environment after the relocation. They returned to their original homes within the few months of after the relocation that lead them to further vulnerability. This shows a failure of the system that targets capacity building and sustainable development for communities. Development initiatives undertaken by either the local government or the aid agencies lack cultural sensitivity. It is also identified that there is a need for coordination at the operational level (who does, what and where) and

strategic coordination at the policy level. The indigenous knowledge should be considered in the process of disaster reduction, by educating, preparing and consulting communities before a disaster occurs. A larger investment in Disaster Risk Reduction (DRR) in development programmes is an essential component in LRRD, and more importantly in reducing the need for emergency responses. At the same time, DRR mainstreaming and activities which lay the ground for DRR in development should continue to be supported under the Humanitarian Aid instrument (Voice-Concord, op.cit).LRRD can have six key relationships between aid and disaster (Lindahl, (1996):-



Source: Chaturvedi

Fig. 2: Illustration: Inter-relationship

A more recent addition to this list of key relationships is between relief and peace-building activities (Mancino et al, 2001). The 'second generation' of the debate identified by Macrae and Harmer (2004) raises the issue of relationships to a higher and more political level, to do with the links between aid, foreign

and security policy. But as far as slum fire is concerned, it does not need such international level aid or security. Slum fire impact is heavily dependent on how slum society is structured and development programme or humanitarian assistance aid funding is made available.

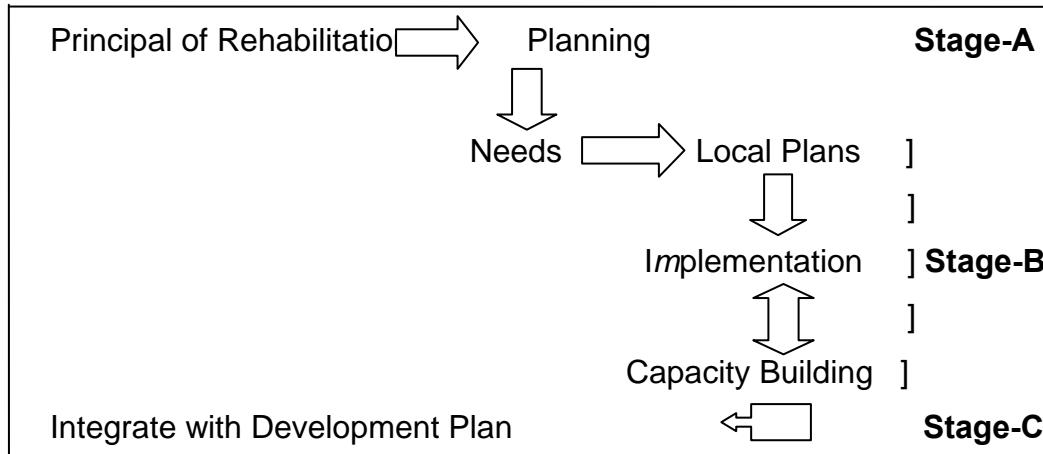


Source: <http://4.bp.blogspot.com/FFGUnHgvrHQ/U9tp7KXGbtI>

Fig. 3: From Shock to Development

By developing integrated strategies having mixed dget for relief projects and development projects, promoting capacity building of local populations by providing substantial resources in order to achieve it, RRD may be more effective. Governments have to dedicate substantial resources to crisis/disaster warning systems, or to tackle problems before they get out of

hand. The activities for Development can be segregated in three stages as depicted below.



Source: Compiled by Chaturvedi

Fig. 4: Illustration: Flow Chart-Stages to Development to Ensure Sustainability

According to VOICE (op.cit), the disaster prevention/ risk reduction; rehabilitation measures focuses on restoring the status quo ante and promoting the existing potentials as well as aims to achieve qualitative and sustainable improvements in the living conditions of those affected. Running project phases is not divided. If it is not possible for a single organisation to implement the different phases of a project, co-ordination with other organisations working on a complementary basis is sought to integrate capabilities aimed at comprehensive improvements in living conditions.

*Missing coordination between stake holders-* With the immensity and complexity of the disaster problem, no stakeholder could effectively address the problem alone. Cooperation in disaster reduction activities among governments at national and local levels, non-governmental organizations and various sectors of the communities is essential. The broadened participation of relevant sectors, such as environment, finance, industry, transport, construction, agriculture, education, health, and media among others, in disaster reduction activities, allows for greater understanding of local vulnerabilities and risk to disasters and integration of actions of stakeholders.

The effectiveness of disaster risk management interventions could be ensured when the community and people at risk are directly involved in the disaster risk management process. It is also critical that any disaster risk management plan is dynamic and remains relevant to the community and the roles and contributions of the members are defined. Through the participative approach, the determination of risks and the intervention measures are not imposed on the community, but rather accomplished by the very people concerned. Moreover, greater emphasis is placed on local knowledge and the indigenous ways of knowing,

rather than on expert knowledge and technologies. Also, community based-activities tend to be multi sectoral, thereby reinforcing local organizations, and enhancing consciousness, awareness and critical appraisal of disaster risks and their inter-dependence. Altogether, they increase the community's capacity and people's potential for reducing their vulnerability to disasters. Following measures are missing-

- i. Empowerment to the poor and women, to overcome established boundaries and limitations
- ii. Funds/subsidies of state-led programs are not seen.
- iii. New relationship between grassroots groups, social organisations, and the private and public sectors is not seen.
- iv. Institutionalization of innovations, implying the breaking of and making of new sets of social and political norms and rules.
- v. A community led reconstruction to development strategy is based on the premise that communities can be mobilized around rebuilding efforts. Collective action around rebuilding – whether it is houses, schools or community centers, involves people in sharing of skills, resources, materials, benefits and ideas, and therefore is a shift from disaster to sustainable development.
- vi. By building confidence in people's decision-making capacities, firstly people receive on time information on their entitlements, understand safety features and develop firsthand knowledge about local and new materials. Develop capacities to access cash and materials resources, and are part of community self monitoring mechanisms if and when they are established.
- vii. To strengthening community institutions, there is a need to ensure that village committees are formed after disaster to play an intermediary role between

govt, and communities. The key role in ensuring information and assistance reaches at every stage - finalizing list of beneficiaries, compensation, damage assessment, housing assistance, etc.

viii. Empowering women's self help groups to play a key role in mobilizing communities, addressing women's issues, enhancing participation of women in rehabilitation. Specific to the reconstruction program, women's can play a key role in reaching out information, Promoting safe construction practice, monitoring relief and reconstruction, ensuring earthquake resistant standards and providing feedback to administration.

## VI. RECOMMENDATIONS

The RRD approach confirms that development can only sustain if disaster mitigation is built into the development process. Further mitigation has to be across all sectors of development. It advocates that investments in mitigation are much more cost effective than expenditure on relief and rehabilitation.

*Funding Mechanism with development linked mitigation*  
- India's 10<sup>th</sup> Five Year Plan noted that the urban slum population is growing despite sharp reductions in poverty and rising incomes. The central and several state governments recognized the need for intervention by initiating, or enlarging existing urban housing and other slum subsidy programs. With this in mind, the Government of India (GOI) has requested a loan from the World Bank to implement a more effective strategy and delivery mechanism for the financing of urban slum improvement and sanitation provision in underserved areas.

In order to support the GOI to achieve the goals delineated in 10th Five-year Development Plan concerning slum improvement and poverty alleviation in urban areas, the Bank has agreed to consider a program that will focus on

- i. Refining the national policy framework for the upgrading of urban slums and sanitation in underserved areas in India;
- ii. Working with the states and various beneficiaries to establish a methodology which measures program performance of both the GOI and the states, and identifies concrete monitorable steps that can be taken to improve this performance;
- iii. Developing appropriate monitoring mechanisms to enable the evaluation and modification or redesign of the programs which would improve the transparency, efficiency, administrative simplicity, and targeting of the assistance;
- iv. Developing funding schemes for slum improvement and sanitation that could provide incentives so that resources are used more effectively and the program reach expanded. In doing so, the program will:

- a) Contribute to poverty alleviation in the poorest urban areas in India;
- b) Strengthen human capital in poor neighborhoods by increasing community participation in planning, delivery and maintenance of public works and services;
- c) Improve the efficacy of the use of more than \$400 million of annual government expenditures on these programs

## REFERENCES AND BIBLIOGRAPHY

1. Bennett, J., Bertrand, W., Harkin, C., Samarasinghe, S., & Wickramatillake, H. (2006). Coordination of international humanitarian assistance in tsunami affected areas.
2. Birkmann, J. (ed.) (2006) Measuring Vulnerability to Hazards of Natural Origin – Towards Disaster-Resilient Societies. UNU Press, Tokyo and New York.
3. Blaikie, P., Cannon, T., Davis, I. & Wisner, B. (1994). At Risk: Natural Hazards, People's Vulnerability and Disasters. London, Routledge. 219.
4. BM&TPC 1996.- Report of the expert Group on Natural Disaster Prevention, Preparedness & Mitigation having bearing on Housing and Related Infrastructure- Part-I, Techno legal aspects of flood and fire hazards and land Zoning.
5. Camilleri, H. Denis. (2003). Malta's risk minimization to earthquake, volcanic and tsunami damage, Disaster prevention and management, 12 (1): 37-47.
6. Chaturvedi PK (2011)Community Based Sustainable Responses to emergent Relief at District Level- Col PK Chaturvedi, Chief Engineer - Featured post of BVP/EEE/ facebook.
7. CSE Draft Discussion; Health and Environment Industrial Disasters- A Delhi Case Study, Nov 2013.
8. DFID- Disaster risk reduction: a development concern- A scoping study on links between disaster risk reduction, poverty and development Department for International Development, DFID, United Kingdom.
9. DGEP, 2012- DG FOR EXTERNAL POLICIES European Union POLICY DEPARTMENT - July 2012 PE 491.435 EN POLICY BRIEFING Linking relief, rehabilitation and development: Towards more effective aid.
10. GOI PC- Eleventh Five Year Plan 2007-2012 (Planning Commission 2008) Published by Oxford University Press YMCA Library Building, Jai Singh Road, On behalf of Planning Commission, Government of India, Yojna Bhawan, Sansad Marg, New Delhi 110 001,
11. GoI-UNDP Disaster Risk Management Programme 3rd Meeting of the Project Management Board (PMB) GoI-UNDP Disaster Risk Management Programme [2002-2007].



12. GOI-UNDP- UNITED Nations Development Programme India, (2002-2009), "Good Practices in Community Based Disaster Risk Management", Disaster Risk Management Programme.
13. Hellstrom, T. (2005). A decision model for involvement in vulnerability reduction, *Disaster Prevention and Management*, 14 (2):196-205.
14. Karlos PA, 2002- Linking Relief, Rehabilitation, and Development in the Framework of 'New Humanitarianism' -A Summary of Clara Beetz Slattery on behalf of VOICE asbl (Voluntary Organisations In Cooperation in Emergencies) BRUSSELS.
15. Mc Entire David A (2001) "Triggering agents, vulnerabilities and disaster reduction: towards a holistic paradigm", *Disaster Prevention and Management: An International Journal*, Vol. 10 Iss: 3, pp.189 - 196 .
16. Mohapatra R, Community Based Planning in post disaster reconstruction; A case study of Tsunami affected fishing community in Tamil Nadu coast of india -Waterloo, ontario, Canada 2009.
17. Paton, D. (2003). Stress in disaster response: a risk management approach, *Disaster prevention and Management*, 12(3): 203-209.
18. VOICE & CISP (2001) 'Linking Relief to Rehabilitation and Development' (booklet),Voice-concord, 2012; *Linking Relief Rehabilitation and Development (LRRD): Towards a more joined up approach enhancing resilience and impact*,July 2012.
19. World Disaster Report 2010). International Federation of Red Cross and Red Crescent Societies P.O. Box 303 CH-1211 Geneva 19 Switzerland.