

Re knitting the Local Cash Flow System – Strategic Approach to Community Based and Sustainable Disaster Management

Toms K Thomas

Mutual Assistance Resource Group

Thrissur, Kerala

toms_thomas@yahoo.com

Abstract

Disaster in any form either man made or nature made often significantly affect primarily the local economic structures through breaking the cash flow systems with in the economy specially the financial systems with in the informal sector. Informal sector workers are the one that become economically most vulnerable at times of disasters. It is also important to mention that the effect of different kinds of disasters on the local economy is not always the same and so there are diverse coping up mechanisms required to reset the economic structures. One among the very critical is the resetting up of the local economic structures along with strengthening of the local livelihood mechanisms. Often in disaster affected localities alternative livelihood and cash flow establishing are explored which may not be the right approach to recharge the local economy and setting up of he cash flow mechanisms.

In every economy especially in the traditional local economies there are diverse patterns of financial arrangements and systems both constructed as well as tradition knit that support the various livelihoods activities and support the economic structures. Disasters often primarily struck the constructed economic systems since it is developed based on some principles though the traditional economic systems are not much affected. This significantly affects the cash flow mechanisms which in a way affect the lives of the people especially the very marginalized. However in some cases the traditional knit structures also get badly affected and reengineering of it becomes a Herculean task.

This paper therefore will review the ways and means for re knitting the local economy through various post disaster activities. It should suggest the importance of a linking of the relief with rehabilitation and planning out the various activities in various phases in way mutually compliment and finally impact on the local economy. Relief should be planned in a way that should address these issuers associated with economic re engineering from the very first day of the disaster management efforts. The paper suggest that there is a need to direct the relief initiatives in way that it could re knit the local economy and reinstate the cash flow with in the locality. There is therefore a need to think away from the conventional relief initiatives of the aid agencies and planning for innovation in relief provision to make it more viable and cost effective and fast responding to the local needs.

Community based Disaster Risk Reduction in Myanmar – A Fellowship Approach

Colin Fernandes

ActionAid Myanmar

Dagon Township, Yangon , Myanmar

colin.fernandes@actionaid.org, colin.angelo@gmail.com

Abstract

The paper reviews the experience of ActionAid Myanmar's Disaster Risk Reduction work with communities affected by cyclone Nargis in May 2008. It demonstrates effective implementation of the community based disaster preparedness intervention through its Fellowship programme. The paper will conclude with a model that can be replicated.

The Fellows are young women and men who have demonstrated leadership potential, and who are prepared to commit to living and working in poor villages for 12 months are provided with intensive training on various development approaches. Their continuous presence with the community enables the development of strong relationships which form a strong foundation of the community based Disaster Risk Reduction Programme. Their engagement with the community, government and local leaders has helped in the systematic understanding and subsequently high levels of participation by community members.

Myanmar is one of the poorer countries in the world ranked 132 out of 177 countries¹. The country's disaster management system is inadequate to respond to large scale disasters, hence when communities are affected by disasters, the first respondents are more often the community themselves. It is critical to build up the capacities of these communities with a comprehensive understanding of risk reduction, which acts as a pre-requisite for effective disaster management. Capacitated with this knowledge, communities can identify and access the various resources and institutions, both government and non-government, that can help in reducing their risk to disasters through a range of preparedness and mitigation measures.

Through this approach, the fellows have been able to catalyze analysis and action planning by communities, which has led to volunteerism from communities. In Myanmar, this is crucial in maintaining and promoting communities' existing spirit of dignity, independence and self-reliance. The approach takes seriously people's agency and actively avoids interventions which can create passivity and dependency. Communities have been able to use this process to seek support for community driven development initiatives in their villages from various institutions. The above approach has been able to demonstrate that an intensive engagement with communities and at a suitable pace results in sustainability of the programme.

Disaster Management: New Role for Civil Society Organizations in Changing Macro-Reality

Subodh M. Wagle

Indian Institute of Technology, Mumbai
Trustee, PRAYAS, Pune

and

Sachin Warghade

Resources and Livelihoods Group, PRAYAS, Pune
reli@prayaspune.org

Abstract

The disaster management sector is undergoing major changes in the legal, institutional, and policy spheres. Macro-level changes prompted by wider liberalization, globalization, and privatization policies will also affect the disaster management (DM) sector. The challenge before the civil society organizations (CSOs) is to cope with these changes and ensure adherence to the progressive principles in DM. These challenges can be met only by taking up new roles by CSOs. This would require preparation in terms of critical analysis of the conventional intervention strategies and of analyzing the probable impacts of also the macro-level changes. The conventional role of providing direct benefits to disaster affected people, in any case is highly important.

However, the paper emphasizes on the need for CSOs to go beyond this conventional role by undertaking direct interventions in the key governance functions of disaster management. To support this argument, the paper engages in detailed analysis of the challenges, problems, and opportunities presented by changing macro-reality that is affecting the DM sector. While elaborating on the new roles for CSOs, the paper presents some key strategies underlying these new roles and also suggests some practical actions in this regard.

Community based Communication Systems for disaster mitigation

Bhanu Pradeep Gautam

Poorvanchal Gramin Vikas Sansthan

UP and Bihar

pgvs_123@yahoo.com

Abstract

We know that knowledge management and packaging of information is critical for creating desired impact on the individual and community behavior on disaster information shared. Disaster communication and its impact in extracting response from communities during early warning, mitigation and adaptation process is essential. We should identify institutional roles, technological options (for infrastructure and delivery) and communication products for enabling community based disaster preparedness to effectively manage eventualities, build resilience and evolve community based coping mechanisms. In this respect role of social network in enabling communication channels for disaster information is of great significance.

The sufferings of the community during Kosi flood 2008 was just due to communication gap and community based initiatives. We need to strengthen/ establish community based organizations for disaster risk reduction.

This paper is based on the practical experiences of institution in community based relief and early recovery stage of the DRR in Supaul and Madhepura distt of Bihar.

Andhra Pradesh Relief To Development Program Initiative of Community Preparedness for Emergencies Response

K.Arup Kumar Patro

FOCUS HUMANITARIAN ASSISTANCE INDIA, An Affiliate of the Aga Khan Development Network (AKDN), MUMBAI-400 020, INDIA
arup.patro@focushumanitarian.org

Abstract

History confirms that the entire East Coast is the one of the most vulnerable areas of the country frequently battered by cyclones and flood. In addition, during each and every season, a substantial stretch of land is submerged by flash flood waters. This significantly multiplies the vulnerability on the population. Until recently, its costal rural communities were not prepared for emergency situations, resulting in the loss of livelihood assets such as lives, homes, property , livestock and crops during disasters. Such losses aggravated poverty and, in some cases, triggered migration. The poorest people were most affected.

In response to the 2005 Tsunami emergency, Aga Khan Development Network (AKDN), through its affiliates Focus Humanitarian Assistance Canada (FOCUS Canada) and Aga Khan Foundation Canada (AKFC), implemented the *Andhra Pradesh: Post Tsunami Relief to Development Program (APR2D)*. At 15 most vulnerable village of Nagayalanka Mandal of Krishna District of Andhra Pradesh . Nagayalanka Mandal is the southern most mandal situated along the coast located at the tail end of the Krishna River and therefore Nagayalanka Mandal is most vulnerable by geographically. AKDN's 3 year initiative to program of community emergency preparedness with a risk management approach targets to specific vulnerable groups of Tsunami affected area. Fifteen habitations comprising of 4,091 households are being covered. A total of 14,784 persons are being addressed in this program to enhance the state of disaster resilience and preparedness among coastal communities affected by the Tsunami.

The program has four primary objectives: (i) strengthened capacities of communities, local self governments and districts to prepare, mitigate, prevent and respond to natural and man-made ; (ii) reduced vulnerability from health and hygiene risks; (iii) established linkages with key stakeholders and the dissemination of knowledge, learning and best practices; and (iv) enhanced gender equality in the program area.

Role & Responsibilities of Indian Medical Association

Chetan Patel

Indian Medical Association

drcnpatel@gmail.com

Abstract

Indian Medical Association is one of the largest NGO working in India. It has a membership strength of about 1,80,000 spread all over India. It is three tier structure. It has a head quarter at New Delhi. It has 29 State branches & Union Territories and about 1700 branches covering all most all the district & Talukas. Only after few disasters in last 10 years, few steps have been taken but in a vast country like India, it is not practicable for the Govt. alone, to undertake Disaster Reduction Programme without involvement of NGOs. Indian Medical Association is one of the NGO which has taken up Disaster Management Programme for its member & society.

Preventing the disaster should be our goal but this can not be achieved every time and disasters are likely to occur. The best remedy is to remain prepared for that. This preparedness is required by all the concerned agencies like local administration, relief agencies, law & order including health care workers. But I am sorry to say that the organization with largest number of qualified professional is not contacted, whereas the fact is that the treatment & psycho care is being given by doctors. I requested the authorities of National Disaster Management authority to include Indian Medical Association in the National NGO Task Force.

Indian Medical Association has formed a Disaster Management Cell with specific aims and objectives. The members are from different specialities and different parts of India. The members have been allocated different responsibilities in relation to the Disaster Management. The members meet regularly thrice in a year and plan for the future actions.

A manual on Disaster Management has been published for the members. The manual contains lots of information. Uptil now two National Workshop has been organized for the members which has created awareness among members & more than 600 IMA members have been participated. More than 10 State units & 40 Local branch units of Disaster Management has been established by now. Indian Medical Association HQ is trying to establish in all 29 states & in each local branch (at Taluka level) to form Disaster Management Cell. A special 3 hours awareness programme & 9 hours certificate programme has been designed for IMA members. It has been planned to train even paramedics in emergency first aid.

Indian Medical Association HQ Disaster Management Cell is in a process of designing a correspondence course with project and contact teaching. Members of Indian Medical Association is also a part of Society & we wish to train at least 1 to 2% of the members for Disaster Management. On this platform, we extend our co-operation to the Government & other NGOs to work together and coherently for better planning.

The details of the work so far done & planned to do for IMA members and Society will be discussed in detail in full length paper.

Disaster Management Concept and Red Cross Movement: A Glance

Bhuwan Joshi

Indian Red Cross Society, Uttarakhand State Branch, Dehradun

joshibhuvan@yahoo.co.in

Abstract

Globally the beginning of Disaster Management Concept and Origin of Red Cross Movement (1859), after Solferino War Disaster, initiative taken by a Swiss Businessman Henry Dunant, seems to be contemporarily to each other. Europe experienced a Disastrous War in 1857 between Sardinia allied to France against Austria. By Chance, the Swiss businessman **Henry Dunant** who had gone to see the French Emperor found himself confronted with the suffering of thousands of wounded and dying soldier on the battle field of Solferino nearby Castiglione Della Pieve. It was natural for Henry Dunant to try to help relieve the pain and suffering of the wounded. By temperament, tradition and training, he could do no less. He mobilized the local citizens of the small village who joined him to give basic assistant to the victims, Disaster war response victims (Community based Disaster Response).

This experience completely changed the course of Dunants life, he wrote a book called" *A Memory of Solferino*" and Published in 1862. Its effect was astonishing. In an incredibly short period of time it was being read and discussed from one end of Europe to the other. The publication of the book marks the beginning of the Red Cross Movement, *International Federation of Red Cross and Red Crescent (IFRC)*, *International Committee of Red Cross (ICRC)* and National Societies i.e. in India, *Indian Red Cross Society (IRCS)*.

The IRCS is statutory body established under Indian Parliamentary Act, has State/Union Territory Branches, with their more than 700 districts and sub district branches. His Excellency the President of India is the President of Society at National level whereas at State level, Governor of the state is the President of the Society. Disaster Management is a core activity of Red Cross, providing relief at the time of Disaster/ Emergencies and promoting the Health care to vulnerable people and communities. Capacity building, response, organizational network, establishment of strategically positioned zonal and regional warehouses as logistic arrangement are important DM components of IRCS. The organization is trying to being Disaster Response programmes more efficiently and quick to reach larger and most vulnerable community with 7, fundamental principles of Red Cross. **1- Humanity 2- Impartiality 3- Neutrality 4- Independence 5- Voluntary Services 6- Unity 7- Universality**

The aim of the presenting a paper is to disseminate the Disaster Management Strategy of Indian Red Cross Society, at various levels, for strengthening the coordination process, avoiding the duplication of the activities, knowledge sharing, to appreciate the involvement of the community volunteers, so that integrated approach can be adopted towards disaster management at every level with Red Cross.

Role of Communities, Civil Society and NGOs in Disaster Management

Mahesh Arora,
Jaipur
maurora@rediffmail.com

Abstract

Disasters Result in loss of life, damage to infrastructure and interruption of essential services .Magnitude of disaster could be so huge that it is beyond the capacity of affected local communities, regions and nations in cases of mega disasters like Bhuj Earthquake, Tsunami, cyclone Nargi s in Myanmar, earthquake in china and Kosi floods in Bihar ,To name a few recent mega disasters.

One such event wipes away developmental progress made in years. Despite great progress being made in science and technology over the years frequency, Intensity and magnitude of disasters with consequent losses have increased tremendously.

States with all kinds of resources at their command have the primary responsibility to respond to disasters effectively. Sheer magnitude and complexity of mega disasters makes it extremely difficult to respond effectively specially in the immediate aftermath of such mega disasters. Well meaning Help from outside agencies which have the necessary mandate, expertise, experience and resources may lend a crucial helping hand in state's effort in managing disasters more effectively.

Civil society organizations at international, national, state and local level can play critical supportive role .Besides the various kinds of resources they have willingness to work with less procedural constraints, flexibility and acceptability within the community make civil society organization, a great asset to govt in managing disasters effectively. Devastating disasters by nature require support ranging from saving lives to rebuilding dwellings, livelihood support, to all other variety of day to day mundane needs.

The concept civil society encompasses a wide range of organizations which in broad sense may include "All market and non state organizations and structures in which people organize to pursue shared objectives and ideals". Besides NGOs, associations of all kinds and shades (professional, farmers etc),CBOs, labor and other unions, formal, informal gaps.

These local level originations with willingness to help their own local community in a variety of ways along with international and national level organizations with all the resources and expertise make eminently useful external agency which can play significant vital role to help the state to manage disasters effectively.

Community Based Disaster Management - The Case of Bangladesh

S K Singh

Training Division, Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP),
Chemali House, 17, Topkhana Road, Dhaka – 1000, Bangladesh.
sksingh49@gmail.com; sksingh@cirdap.org

Abstract

This paper briefly deals with the approaches and modus operandi of Bangladesh 'Cyclone Preparedness Programme' (CPP). It is a unique, remarkable and successful experiment in this sub-continent. This experiment provides lots of lessons to be learnt in order to improve capabilities to meet disaster challenges.

Natural and anthropogenic disasters batter the earth and its inhabitants frequently with enormous loss of human lives, livestock and property. Consequently, entire development efforts are neutralized. Over the years, national and international agencies have developed a working system of disaster mitigation with fore-warning and prevention, preparedness, emergency response and post disaster recovery. However, these systems have not been able to reduce the vulnerability and risk to the desired level. It is evident from Gujarat and Orissa disasters experience and recent Tsunami in A & N and Tamilnadu, altogether a new experience and phenomenon.

What is prominently discernible is that communities are not integrated into these efforts. More pointedly local communities often lacked these essential elements of disaster preparedness of this magnitude. However, communities are the first responders to meet challenges of disasters. There is now a growing awareness at government levels that community preparedness, training and public awareness, linked with micro-income generating projects deserves high priority. Thus, there is a paradigm shift from centralize disaster management to 'Community Based Disaster Management' (CBDM). This approach has been reflected in the Yahoma declaration for safer world.

Bangladesh is one of the most highly disaster prone countries of the world. The country is frequently strike by various natural disasters such as cyclones and associated storm-surges, floods, droughts, tornadoes, riverbank erosions and earthquakes and also affected by anthropogenic disasters. In Bangladesh, as elsewhere in the developing world, the vulnerability of a large section of poor and socially disadvantaged groups of people to natural hazards poses a serious challenge to development. In a multi-disaster-prone country, with a high population density (over 900 people per square kilometer), practically no natural hazard occurs without adversely affecting a large number of people and their assets. Cyclones are the recurring phenomena in Bangladesh. Because of the funnel shaped coast, Bangladesh very often becomes the landing ground of cyclones formed in the Bay of Bengal. In the Bay of Bengal, cyclonic storms generally form in the months of April - May and mid September to mid December periods. The Bay of Bengal cyclones also move towards the eastern coast of India, towards Myanmar and occasionally into Sri Lanka. But they cause maximum damage when they come

into Bangladesh. This is because of the low flat terrain, high density of population and poorly built houses.

The national efforts in disaster management in Bangladesh have not remained at government level but NGOs like Bangladesh Red Crescent Society (BRCS) has been taking active part in it. Its effort over the years, stretched beyond relief and rehabilitation to forewarning and preparing community to manage. The experiment of 'Cyclone Preparedness Programme' (CPP) of Bangladesh is of its own kind. It involves community with full participation, increase the awareness of the community to have a practical approach of reducing risks and losses. It has developed a very good high frequency radio network system for forewarning reaching out each vulnerable village. Each village has a group of trained village volunteers with specific tasks to manage disaster at the local level without any assistance from higher level. Disaster plans are prepared at the local levels by mobilising communities for preparing and protecting themselves and increasing their own capacities to cope with and recover from disaster without looking for outside help. It has thus created a sustainable and disaster resistant community. It provides training in disaster prevention, preparedness and mitigation. There is involvement of local government institution, networking with NGOs and CBOs. The achievements of Cyclone Preparedness Programme are significant and impressive and it can be replicated elsewhere.

Finding from 2009 Regional Disaster Micro-insurance Evaluation: Overview

Rakhi Bhavnani

Consultant, Disaster Risk Reduction

UNISDR

Kailash Hostel, E-9, IIT Delhi, Hauz Khas, New Delhi 100116

rakhi@post.harvard.edu

Abstract

Since the late 1990s, a number of organizations in the South Asia Region have been providing insurance coverage for natural disasters to poor and vulnerable communities. Today, the NGOs implementing these programs have reached significant growth in their reach and programming for natural disaster risk reduction through insurance.

Globally, there has been general reference to the benefit of micro-insurance for reducing disaster impact for the poor, however, the real impact of such schemes and its implementing complexities has remained largely unstudied in a rigorous and quantitative fashion.

In order to bridge this gap, ProVention Consortium, in partnership with Disaster Management Institute (DMI) and the International Institute for Applied Systems Analysis (IIASA), funded a study to examine the impact of disaster micro-insurance in the South Asia Region.

Between 2008-2009, a total of 1600 clients of five organizations - Basix, AIDMI, and SEWA (India), Yasiru (Sri Lanka), and Proshika (Bangladesh) - were surveyed. In addition, 400 non-clients were surveyed to constitute a comparative control group.

In August 2009, the data collection and analysis will be completed and the results will be developed and disseminated to inform policy decisions on the usage of micro-insurance for disaster risk reduction.

The purpose of this paper is three-fold: i) to share the results of the quantitative assessment and data gathered from the region; ii) to gather feedback on the model, study, and its implementation; and, iii) to develop, in conjunction with other disaster professionals and micro-insurance providers, recommendations for future replication in the region or policy changes.

People's Partnership Power to respond to disasters - A Mobile Campaign by Saritsa Foundation across 12 states of India from Kanya Kumari, Tamilnadu to Tawang, Arunachal Pradesh - A Case Study.

N M Verma
Saritsa Foundation
Mumbai 400016
saritsafoundation.in@gmail.com

Abstract

Disaster Risks are on the rise throughout the world. It is assessed by United Nations International Strategy for Disaster Reduction (UNISDR) that since 1975, the number of disasters have risen from 75 to more than 400 a year. The physical, social and economic losses caused by these disasters are particularly harsh for developing countries since they have a long range effect in the development process and their endeavors for poverty eradication. Climate change related disasters have further aggravated the situation. The impacts of these disasters are deeply related with socio- economic condition, tradition and culture.

The initiative by United Nations International Strategy for Disaster Reduction (UNISDR) has now been able to sensitize international and national acknowledgements. It is fully recognized that efforts to reduce disaster risks must be systematically integrated into policies, plans and programs for sustainable development and poverty reduction. These issues be supported through bilateral, regional and international cooperation including sustainable development, poverty reduction, good governance, people's partnership and disaster risk reduction. These mutually supportive objectives are interwoven. This guides that in order to meet these challenges ahead, accelerated efforts must be taken to build the necessary capacity at the community and national level in that priority.

In assessing India's proneness to disasters and strategies needed to cope with these, it is noted with concern that India and disasters are somehow coterminous over the centuries. Their variety, intensity and form may differ, whether natural or man made. On reviewing overall proneness and vulnerability of India, it clearly and perpetually emerges that major losses occur due to frequent floods and earthquakes in India. Almost 59 percent of the land mass of India is prone to earthquakes. The recorded history of earthquakes in India indicated that India has faced four very high intensity earthquakes of magnitude 8.0 or higher since 1890. The relatively low damage and devastation caused by these high intensity earthquakes faced by India in Shillong in 1897 (M 8.7), Kangra in 1905 (M 8.0) Bihar-Nepal in 1934 (M 8.3) and Assam –Tibet in 1950 (M 8.6) was largely because of the types of construction and building materials used in such places. It is estimated that the occurrence of such a very high intensity earthquake now in any of the highly densely populated regions would result in very high loss of lives and injuries to large numbers of people beyond the coping capacity of the emergency medical services facilities and personnel in these areas. With the rapid spread of urbanization and economic development, trends in housing construction in most urban, suburban and rural areas indicate sudden increase in reinforced cement concrete (RCC) construction. In the areas of high seismic risk, structural

design parameters are rarely followed and normally ignored. This results in collapse or damage to such structures thereby causing loss of lives and injuries to people.

On analyzing about the key challenges to minimize risks from multiple disasters in India and goals and priorities laid down by Hyogo Frame Work for Action, National Disaster Management Authority of India (NDMA) has developed effective mechanism to build national capacity as well as formulation of needed guidelines to develop standard operating procedures at all levels for effective disaster risk reduction.

The Disaster Management act year 2005 (DM Act 2005) lays down institutional and coordination mechanisms for effective disaster management at the national and state level. As mandated by this act, the Government of India has created a multi-tiered institutional system up to district level and elected representatives of local authorities are co-opted into the system.

Evolution of this system has been set up to facilitate the paradigm shift from the hither to relief-centric approach to more proactive, holistic and integrated approach of strengthening disaster preparedness, mitigation and emergency response 6. Yet, on review of the ongoing process of disaster management, the results and indicators are precisely not as encouraging so far as was hoped and projected at various levels. Disaster management solutions at various levels have to be more thoughtful, imaginative, sensitive, sensible and realistic to adopt a path where power is transformed into partnership with people 7. Views from frontline – A local perspective of progress towards implementation of the Hyogo Frame Work for Action conducted by Global Network of Civil Society Organizations For Disaster Reduction has submitted its report at Global Platform for Disaster Reduction (Second Conference at Geneva from 16-19 June 2009). It presents a clear picture of progress at local level for disaster risk reduction. In its core recommendations the survey finds critical gaps in implementation of above state policies and guidelines at lowest level. Saritsa Foundation has been a partner in this survey and has recognized these concerns in states of Meghalaya, Assam, Maharashtra and Madhya Pradesh.

It is worth quoting a statement made by Mr. Bishop Donald Mtetemela, a development worker for over 25 years and Head of an East African Development Organization, during an interview for Views from Frontline, looked at the sky and said: “The people I work with every day see many clouds – International initiatives and plans, but very little rain – actual change at the frontline” 8. It is an image that sums up the challenge of turning the Hyogo Frame Work for Action 2005-2015 (HFA) into practical, sustainable activity at the frontline where people at risk live, eat and work. This is a challenge that must be met if a substantial reduction in disasters losses is to be achieved.

This identifies and strengthens the vital need to bridge the existing missing link to equip and empower people at lowest level. It requires setting of new inclusive bench marks and indicators of progress at national, regional and local levels to provide information, inculcate awareness and impart education by evolving innovative methodologies.

Basic And Community Policing: Foundation Stones Of Response To Disaster

Raghavendra H Auradker
rhairadkcrfa@gmail.com

Abstract

Disaster, Natural or Manmade, is an unforeseen event causing great suffering. In India, police is always the first respondent to any kind of Emergency, Prevention, Mitigation and Preparedness constitute pre-disaster phase and post disaster phase comprises of the Response, Rehabilitation and Reconstruction. Search, Rescue and Evacuation forming part of the Response phase require prompt, effective and efficient response at the time of disaster. Thus the routine policing like Prompt and sympathetic registration and investigation of cases, beat service, patrolling, surveillance of criminals, collection of intelligence about likely causes of emergency, pooling of resources and capacity building of policemen, developing a better community relationship etc. enhance the police credibility and equip them with physiological and geographical knowledge of local area, roads, culture and ethos of people because of continuous and ongoing contact with the community. An effective basic policing during normal times result in crime management, traffic management, VIP security, liaisoning with armed forces and other government agencies etc. during the crisis.

Community is a major stake holder as entire focus of disaster preparedness, response and recovery is intended to serve, the community itself Community, especially rural communities have high disaster response, capacity, established net-work, infra-structure and alliances. Empowerment, Encourage and involvement of community for an effective and responsive team is drawing together entire local population irrespective of Caste, Religion Ethnicity and Region apart from providing transparency in local decision making process. A top-down institutional frame-work to facilitate training and co-ordination blended with bottom-up appreciation for the role of community and cutting edge level police personnel can be implemented. This paper emphasises on an effective day to day professional policing coupled with transparent community involvement as part of Search, Rescue and Evacuation operations by police during disaster.

Empowering Communities to Understand Climate Change

Colin Fernandes, Banda Aceh, Indonesia

colin.angelo@gmail.com

Jerome D'Souza, Dan Church Aid, South Asia Office, New Delhi, India

jeromedsouza@yahoo.com

Abstract

The paper seeks to approach how development practitioners and local communities can work in risk prone areas where disaster vulnerable populations are subject to climate change. The paper will focus on how civil society and government can go beyond the policy and demonstrate practical and sustainable models to engage communities to prepare and mitigate climate change, especially in areas where these are linked to future disaster scenarios.

It is now acknowledged that some of the world's poorest people live in regions which are disaster prone and highly subject to the changing course of climate. There is adequate documentary evidence of this and while policy frameworks have been developed, the community engagement on the ground is yet to find a voice in these legislations.

Given this situation, civil society organisations working with disaster vulnerable populations are looking beyond conventional means of disaster preparedness and risk reduction. With this is the added threat of climate change and the yet to be disseminated key issues as to how these are to be managed and adaptation.

The paper therefore attempts to propose a model for community based climate change empowerment and management, combining a theoretical base along with a case study from Indonesia, a country under real threat since the Tsunami in 2004.

It is hoped that this will be a useful and key document for future understanding of how climate change issues for both vulnerable communities and policy makers can come together to manage and adapt with this impending phenomenon.

Empowering Panchayati Raj Institutions For Disaster Risk Reduction

Shakti Kumar

shaktikumar85@gmail.com

Abstract

Panchayati Raj is a system of governance in which gram panchayats are the basic units of administration. It has 3 levels: village, block and district. Panchayats are local self-government institutions nearer to the people and they have a vital role to play in disaster management. PRIs are to be involved in identifying vulnerable areas; population for taking preventive, protective and proactive steps in mitigating disasters through appropriate steps aiming at national development.

Disaster management components are to be incorporate with Panchayati Raj Institutions. The District Disaster Prevention and Mitigation Plan and the District Contingency Plan to be made by the Zilla Parishad .The Plans made by the Zilla Parishad are to be periodically updated. Periodic mock drills and training exercises for the members of Panchayat Samities and Gram Panchayats are to be taken up through the initiatives of the Zilla Parishad. Zilla Parishad is to be facilitated for drawing up Community Based Disaster Preparedness Plans. There has to be a Disaster Management Unit at Zilla Parishad Level. Information, education and communication aiming at both structural and non-structural components need to be in place.

Panchayat Samities are to focus on planning, implementation, coordination and monitoring. Gram Panchayats to play a leading role in execution of disaster prevention, mitigation, response, rehabilitation and developmental activities with the participation of local people. Panchayat Samities and Gram Panchayats to be capacitated by the Zilla Parishads through the interventions and help from Government Departments and NGOs.

Need based training and orientation is to provided to the members of PRIs in the areas of disaster prevention, preparedness, mitigation, resource mobilization, rescue, relief, restoration, rehabilitation, reconstruction and development. In crisis people are united. Village Voluntary Groups to be formed by the Gram Panchayat with the help of Panchayat Samities and Zilla Parishads. Thus, we can cope and manage more effectively with disasters by empowering PRIs.

Institutional Dynamics In Disaster Management: Implications For Climate Change Adaptation In Bangladesh

Ronju Ahammad, Stockholm Resilience Centre, Stockholm University, Sweden
Mizan R Khan, North South University, Bangladesh
Mohammed Abdul Baten, Stockholm Resilience Centre, Stockholm University, Sweden
ronju222@yahoo.com

Abstract

Bangladesh, one of the most vulnerable countries to the impacts of climate change, is progressively bringing institutional initiatives for adapting to climate induced disaster. However, major institutional arrangement is only concerned with reactive short-term responses to disaster management, particularly focusing on the relief and rehabilitation programmes. This paper examines current disaster management policies of Bangladesh and role of multi-level stakeholders for adapting to climate changes. The study reveals that centralised decision-making process, weak local government agencies and their little coordination with NGOs, civil society and target vulnerable population impedes successful adaptation practices to a large extent. Despite disaster is a negative phenomenon, the paper argues, it also creates a window of opportunity for policy makers to learn about the barriers of disaster management, as well as, address the key social, physical and economic components of the vulnerable communities and strengthen local government agencies for facilitating adaptation practices.

Reducing Vulnerability to Technological Hazards through better Risk Communication

Debanjan Bandoapdhyaya¹, Nilanjnn Paul², Anandita Sengupta¹

International Institute of Geo-information Science & Earth Observation (ITC)

The Netherlands

dbandyopadhyay@itc.nl, sengupta1552@itc.nl

Abstract

With the unplanned development of industrial clusters housing units with high hazard potential, the risks arising as a result of technological hazards in India have gone up manifold. Prevailing low perception on technological risks and lack of awareness amongst key stakeholders and the public in general can play a significant role in aggravating damage caused by an industrial accident as has been witnessed during the Bhopal gas tragedy. Though initiatives for technological risk communication like Risikokart in Netherlands. Toxic Release Inventory chemical database in US have gained ground in developed countries, not much of progress in this direction has been made in India to improve risk perception and awareness amongst decisions makers, stakeholders of interest and the community in general. Nevertheless, with rapid advances being made in information technology in the country, there is an immense scope to harness IT tools in advancing societal awareness on technological risks in an efficient and effective manner and thus help to reduce vulnerability. The Environment Risk Reporting and Information System (ERRIS) project implemented in the industrial towns of Haldia and Durgapur in West Bengal demonstrated a GIS based technological risk communication tool that can provide selective information to various relevant stakeholders thereby strengthening their ability to cope with potential hazards arising out of an industrial accident and minimize damage to lives and property. HRRIS is built on a distributed GIS platform and provides vital spatial as well as attribute information on hazards, control mechanisms available with industries, capabilities and resource availability with public response agencies, sensitive receptors, contact information of key people, transportation and evacuation routes and guidance on risk prevention to the community through web-based information system. One of the key features of ERRIS allows most information to be updated online through web based forms through secure access.

Potential of Community in implementing the disaster risk reduction schemes by themselves

Firoj Ahmed

Abstract

Bangladesh through the Comprehensive Disaster Management Programme (CDMP) with UNDP, has been achieving some notable success in directly involving the community people with the disaster preparedness activities. For last couple of years the community people had their active roles in conducting Community Risk Assessment (CRA), a community based approach to prepare an implementation plan for combating natural disasters. But recently EC component of the programme added a new dimension of community participation creating the scope of implementing the action plan by the community themselves, absolutely by their own management. Community people, with the support from CDMP are now implementing a number of schemes related to rural infrastructural development for disaster risk reduction. The study would attempt to analyze the potential of the community for undertaking such tasks, the difficulties they are facing and possible ways to resolve those.

Community people forming the Project Implementation Committee (PIC) are purchasing the materials, motoring the construction works and having an overall supervision over the total infrastructural development works like BSF road construction toward cyclone shelter, construction of cyclone resilient houses, excavation of pond and embankment raising for safer drinking water and installing PSF and tube well and so on. Partner NGOs are providing technical support to PIC like making design and estimate for the schemes, setting an effective work plan and all other guidance needed for smooth accomplishment. The fund from CDMP is directly moving to community account and PIC themselves taking consent of other members are utilizing the fund. This helps escape undue impedance in fund flow experienced in earlier conventional process. The greatest achievement of this new approach of involving the community people in scheme implementation is, they now own the total scheme more than ever before and thus they are very concerned about the quality of the works.

Preparing Communities for Disaster Management : Myths and Challenges

S.M.Patnaik

Department of Anthropology
University of Delhi, Delhi, India
smp_du@yahoo.com

Abstract

The Himalayan regions of South Asia are at high risk of natural disasters. People's vulnerability to disasters like flood, landslides, flash floods and snow avalanches acquire alarming proportions due to chronic poverty, involuntary migration, and unplanned settlements. Attention of Nation State and International Non Government Organisations (INGOs) has been diverted towards planning for disaster prevention and preparing local communities in developing the capacities.

This paper is derived from an empirical study carried out in the year 2007 to assess the programmes aiming to strengthen community resilience to disasters in three districts of Nepal viz. Rupandehi , Makwanpur and Sarlahi and stretches of Indo Nepal border. The overall objective of the evaluation was to reflect on the role of INGOs and their accountability, to document the learnings for future initiatives, to use the findings in promoting good practices in Disaster Risk Reduction (DRR), and finally to assess the value of these initiatives in formulating a long term strategy of integrating DRR in national development.

The data was collected through Participatory Ethnographic Method (PEM) where the ethnographic insights were validated through people's participation in the interpretation of social-economic and political data.

The paper underlines some of the challenges emerging from the grassroots such as conceptualizing the notion of 'community,' sustaining people's committees, integrating indigenous people, gender concerns, resource sharing, mobilizing the youth, locating the indigenous knowledge, issues of communication, replicability and scaling up of programmes. Comparative issues of citizenship, civil rights and governance have been discussed along contested structural and cultural terrains in the Indo Nepal border. Through anthropological insights, the study suggests for further inputs into policies concerning development experiences in Nepal and India.

Turbulent Terrain and Threatened Livelihood

Suneet Naithani, Naveen Juyal and M.M Doval
DMC Uttarakhand Academy of Administration,
Uttarakhand, India
suneetnaithani@gmail.com

Abstract

Himalaya is one of the youngest and geologically active mountain active mountain chains in the world and experience frequent earthquakes. Uttarakhand state of India, which lies in the central segment of Indian Himalaya had already witnessed two major earthquakes during 1990 and 1999. In addition to this, state is susceptible to hazards like the landslides, flash floods, avalanches and forest fire.

Considering the sensitivity of the terrain, local inhabitants developed a tradition of judicious utilization of natural resources. However, with the advent of modernization the terrain was tempered so much so that the delicate environmental equilibrium was violated. As a result, number and frequencies of terrain instability are on the rise. Particularly during the summer monsoon, life gets exceedingly difficult. The reason being, during every monsoon one village or other disappears from the map of India and with every passing years.

In this paper an attempt was made to bring out the sensitivity and nature of threat that is prevailing in the region and ways to combat the frequent hazards. The methodology adopted is to collect the data on a format that takes into consideration the multifarious issues related to natural and man made hazards. This is followed by the sensitization and orientation of the villagers particularly the youth and school children (future generation). In addition to this, the subject experts invited from various institutes conducted capacity building and training for youth on rescue and relief. Following this, district level coordination workshops was organized followed by a state level workshop in order to share the experience of community and develop better coordination among different stakeholders. The data present here is obtained from Uttarkashi district of Uttarakhand

Learning to Live with Disaster

Narottam Sahoo and Bindu Nair

Gujarat Council of Science City, Science City Road, Ahmedabad 380 060
narottam.sahoo@gmail.com

Abstract

Nature is always changing and moving. We human beings are a part of the nature and our quality of life depends on all the living things that share this planet with us. We must take care of our mother nature, because our wellbeing depends on it. This happens in different ways, for instance through natural phenomena that occur quite regularly, such as rain, winds, earth tremors or the natural processes of soil erosion. The more we learn, the more we understand that we must nurture the Earth as we would our children, for their sake.

Earthquake, floods, fires, volcanic eruptions, tropical storms, tornadoes, landslides, droughts, plagues and other phenomenon such as El-Niño and La-Nina are a part of nature, just like the sun and the rain. These natural phenomena affect almost the entire Earth. Today, the world has a wealth of knowledge and information on disaster risk reduction at its disposal; the key is sharing and using this in a pro-active way through awareness-raising and educational initiatives so that people can make informed decisions and take action to best protect themselves, their property and their livelihoods during natural hazards.

The National Bioresource Development Board under the Department of Biotechnology (DBT), Government of India has launched a new activities targeting to the large number of school children to form DNA Clubs (DBT's Natural Resources Awareness Clubs for School Children) in their school premises to work on Biodiversity and sustainable development. The Gujarat Science City (GSC), working under the aegis of Department of Science & Technology, Government of Gujarat is taking a bold step in designing an exciting hands-on and minds-on activities and science programme in environment education integrating with to develop awareness, knowledge, and skills related to understanding our world. GSC has been recognized by the DBT as a Regional Resource Agency for the DNA Club programme and coordinating the activities with lots of innovation and creativity that inspire curiosity and supports life long learning.

The activities are an ideal way to integrate classroom curricula, stimulate the academic and social growth of young students, and promote the conservation of the natural environment and aims to provide opportunities to be actively involved in restoring, and protecting the environment as well as to minimize the risk of disasters.

We can not stop natural phenomena from happening, but we can make them less damaging if we understand better why they happen and what we can do to prevent or mitigate them. There is a great role for the younger generation in understanding about various natural catastrophes and to orient the family and the community to challenge the situation.

Stakeholder Participation in Managing Coastal Disasters

I. Arul Aram

Coordinator

Science and Technology Communication

Anna University Chennai

Chennai-600025

arulram@yhao.com

Abstract

Fisher folk are a section of population worst prone to disasters, mainly that of cyclone. They have been ever prone to dangers at sea: be it sickness at sea, drifting of boat, breakage of boat, losing the sense of direction, piracy, or attack by armed forces of a neighbouring country. Although cyclone is a recurring phenomenon, it is tsunami of 2004 which raised awareness about the coastal disasters in Tamil Nadu. Before the tsunami struck, fisher folk were left to fend for themselves. Not even their family members were involved in disaster management. The only institution involved – that too, marginally – was the Fisheries Department. But soon after tsunami, many non-government organizations entered the field for relief and rehabilitation. The section of population which was earlier relatively untouched by NGOs and government agencies, particularly because of its virulent nature, was swamped by several influences. The positive outcome is that NGOs of different shades helped organize not only fishermen but also their women and children. Even the permanent houses built for tsunami victims took into account hazard safety and cultural practices of local communities. Not only NGOs but also educational institutions and government agencies conducted disaster awareness workshops in schools in coastal areas to ensure participation of children in disaster management. The idea is that if schoolchildren are sensitized to disaster management the message will reach their parents as well, besides the children themselves playing an active role during disasters. The influences of NGOs in disaster management are multi-fold. Government agencies such as the Coast Guard and the Fire Service already have disaster management-related programmes. In the post-tsunami phase, they have multiplied their activities vis-à-vis disaster management with the ample support of NGOs. The focus of all these activities is empowering communities to take part in disaster management initiatives, which the paper shall examine in detail.

School-based Disaster Risk Reduction: Lessons from Child's Right to Safer School Campaign and 2009 School Safety Audit in India

Vishal Pathak

Coordinator—Child's Right to Safer Schools Campaign
All India Disaster Mitigation Institute, Ahmedabad, Gujarat
saferschools@aidmi.org.

Abstract

Unsafe schools are a reality in India. With the spread of education, more and more children go to schools that are vulnerable to fire, floods, earthquakes, cyclones, pollution, food poisoning, stampede and so on. At repeated great cost, this has been seen many times in the last decade. Despite the opportunity of using schools as safe facilities for public shelter following disasters, school buildings are an additional liability, and the worst place to concentrate our children. Indian children remain exposed to risks in schools. It is an unfortunate reality that not enough is done to mitigate risk faced by children at school. A recent school safety audit in 60 schools in six hazard-prone states of India revealed that school safety is not a high priority for either public or corporate officials. The audit covered schools in a range of disaster-prone areas; flood-affected portions of Assam, Rajasthan, and Maharashtra; earthquake-affected portions of Gujarat and Jammu and Kashmir, and tsunami-affected portions of Tamil Nadu. In each of these areas the audit assessed the staff understanding of hazard safety, the structural safety and preparedness plans, and the impact of existing mitigation measures. The influence of non-school actors—government, non-governmental organizations (NGOs) and corporate – on school safety was also reviewed. This research study on school safety reflects not only the vulnerable situation of India's schools, but also sheds light on aspects related to the school community, its needs and the realities it faces. This paper highlights experiences and lessons of the All India Disaster Mitigation Institute and shares the results of a recent school safety audit in India. The paper is intended to inform policy decisions, develop school safety measures, and spread awareness to a broad audience of concern agencies.

“Involvement of Community, NGOs, and Civil Society in Disaster Management”

Jesu Rethinam

Director – SNEHA

snehangt@gmail.com

Abstract

SNEHA recovery program is one of the most important women lead tsunami recovery in South India. Thus the programme is also one of the most important inclusive tsunami recoveries in South India. This recovery is made by the organization that itself is a tsunami victim. SNEHA has suffered loss of members and workers and income and development gains made over years. SNEHA's recovery is an example of recovery made by a local and a victim organization reaching out to a large number of its members through relief and recovery projects as well as advocacy activities to access relief, rehabilitation, and recovery resources from the state and other donors in favor of women and excluded groups.

SNEHA's tsunami recovery program is one of the largest shelter recovery programs in tsunami affected coastal South India. The shelter program is almost entirely driven by the victims, almost all of them women, as suited to their needs and pace of recovery and not as suited to the donor or international organization's budget deadlines. In addition, SNEHA's recovery program is one of the remarkable livelihood recovery initiatives in South India with dual focus on fishery as well as allied sectors in coastal areas of South India.

The tsunami recovery program has built large scale domestic asset base for the women and their communities in the 51 villages of Nagapattinam and Karaikal districts where SNEHA has been working for over a decade before tsunami, enhancing the status of the tsunami effected women workers in the coastal communities. SNEHA's tsunami recovery program is prominent in terms of its focus on the children and in its attempt to reestablish victim children's right to education after tsunami.

SNEHA is now in the process of taking the existing achievements forward through *deepening, spreading, and multiplying* the outputs and outcomes.

Involving Community, Civil Society and NGOs in Disaster Management

P.C. Joshi

pcjoshi@anthro.du.ac.in

Abstract

Generally speaking, the role, responsibility and contribution of the civil society and the NGOs in disaster management is not fully acknowledged and appreciated. There always remains an element of doubt and even suspicion on their role and contribution. But, it is also a fact that these two agencies are far closer to community than the rest. One of the most important players in disaster management is the government, which controls the funds, technology and technical manpower in disaster management. But government alone is meaningless, if disasters are to be managed efficiently, effectively and sustainably. In Indian context, time and again, it has been seen that these three non-government players have contributed immensely whenever any disaster has struck us. The role of these non-government players becomes further important if the disaster is of sudden impact type, like the earthquake. Such events provide very little time for the people to be warned and the government machinery to gear up. The initial hours (golden hours) in such events are when the community and the organizations near to the community are to fend for themselves. It has been seen in Uttarkashi as well as in Gujarat earthquake, how the community had organized itself and rescued the lives of many people and provided them with food and shelter. The civil society groups and the NGO being near and accessible to the people in good as well as the bad times are easily able to link and liaison with people. The government sector, on the contrary has to work within the defined set of activities and rules. Thus the flexibility with which the non-government organizations work or can work plays a very critical role in the management of disaster. In recent times, there has been a healthy growth of NGOs specializing in disaster management having professional skills and trained manpower. There is a need to acknowledge and incorporate this aspect in the governmental disaster management programmes.

Role of Communities and Formal Panchayats in Reconstruction of villages after Tsunami: An Experiment in Seventeen Gram Panchayats in Nagapattinam District

G. Palanithurai

Rajiv Gandhi Chair for Panchayati Raj Studies
Gandhigram Rural University
Gandhigram – 624 302
gpgri_rgc@yahoo.com

Abstract

In a supply driven development paradigm, demand driven activities have no place. It is applicable to natural disaster also. As per the established relief and rehabilitation code the relief and rehabilitation activities should be on the basis of demand of the communities and people. Reality is contrary to the established codes. The communities have got strength, energy, skill, coping mechanism and yet they are not facilitated to be on their own on all the occasions including during the time of natural disaster also. As a result the people and the community are termed as 'beneficiaries' and 'petitioners' and they submit petitions submissively and thereby they are disempowered.

This was the scenario in Tsunami affected areas in Nagapattinam in December, 2004. Having seen the plight, an experiment has been designed and carried out in seventeen Gram Panchayats in tsunami affected areas with the active participation of the communities, Gram Panchayats and civil society organizations to reconstruct the villages with the ultimate aim of empowering the communities and panchayats. Its ultimate aim is to keep the panchayats and communities ready for disaster preparedness work. The seventeen Gram Panchayats have prepared micro plan for disaster management and executed the same with the active participation of people, civil society organizations, panchayats, government, bilateral and multilateral organizations. The whole process of planning and execution of activities in the seventeen Gram Panchayats were done in integrating women, Dalits and other marginalized groups. Thus panchayats emerged as key stakeholder, communities and civil society organizations have emerged supportive organizations, government and donor agencies acted as facilitators. It is a unique experiment supported by the Hunger project, New Delhi with the active cooperation of SDC.

Community Participation in Disaster Management

Hemixa Rao

Department of Sociology
Saurashtra University Rajkot
hemixarao@yahoo.co.in

Abstract

The word 'Disaster' is defined a serious disruption of the functioning of a society, causing widespread human, material or environmental losses, which exceeds the ability of the affected society to cope using its own resources. Disasters has been basically grouped in two broad heading Natural Disaster and Manmade Disaster. Environmental change and natural disasters are linked. Climate variability and related extreme weather events having particularly severe impacts on India are likely increase. Improve the regional monitoring of the human aspects disaster reduction.

Disaster prevention could be achieved by encouraging greater awareness and networking through capacity building and strengthens networks of stakeholders together with improving government and programmes for disaster reduction on short and long term basis.

Disaster mitigation plans need to be implemented to enable communities to be resilient to hazards while ensuring that development efforts do not increase to these hazards. Village level disaster mitigation plan is therefore emerging as an important tool for disaster management. Communities can foster better understanding and knowledge of the causes of disasters. They are further consulted in developing coping strategies according to local environment, socio-economic conditions and level of indigenous technology. This involve programme related to education, public awareness and professional training to face the challenges during disasters. The development of community participation through village assembly gives every one an opportunity to freely discuss, decide and implement disaster preparedness plan.

In this paper I have discussed the community based disaster preparedness components and roles and responsibilities of the disaster management team e.g. early warning team, rescue team, shelter team, water and sanitation team, medical and first Aid team, relief and coordination team, trauma counseling team etc.

Accessibility Index: Determining community access to critical services during disaster.

Shailendra Singh Bisht, Vishal Mishra, Sanjay Fuloria
ICFAI Business School
Donthanpally Village, Shankarpally Mandal
shailendrabisht@ibsindia.org

Abstract

Accessibility Index: Determining community access to critical services during disaster

The focus of most of disaster management programs is to send resources both physical and human from outside the disaster zone. This inherently implies delay in disaster mitigation efforts and subsequent loss of human lives and economic resources. This also delays the much needed economic and social recovery of the disaster zone. We must explore ways in which the recovery could be fast and also timely.

One possible solution is to be able to map out the resources both social and physical available on ground which could be utilized for disaster management and recovery. The present paper argues for development of an index to determine the availability of systemic resources in a geographic region which could be utilized during disaster. Such an index could be based on information collected and disseminated by Census of India.

The present paper uses the **Indian census data of 2001 and develops the methodology** for creating an accessibility index for a geographic unit. The paper also discusses the use of the accessibility index (AI) as a tool for evaluating the preparedness of various administrative units at the block, district and state level.

Various variables which were indicators of physical and human resources useful in disaster management efforts were analysed with **Principal Component Analysis using SAS 9.0**. The Eigen Vectors were used to create weights for the indicators and subsequently the accessibility index at various administrative levels was computed.

This index could be used to map the existing service provision facilities available in the region and can also help the **relevant decentralized authorities** to evaluate immediate, intermediate and long term recovery needs and resource requirements for the region.

A comparative analysis of major global Disaster risk management standards

Sapna Rakesh, Swati Singh, and Alok Singh

Institute of Technology & Science ,Ghaziabad,U.P.

sapna.rakesh@gmail.com, aloksinghiit@gmail.com, swatisingh2620@gmail.com

Abstract

Disaster risk management standards Provides specifications on risk management, consisting of the following components:

- A system that executes risk management,
- Background to the introduction of a risk management system,
- Identification of risks that can be significant for an organization,
- Analysis and assessment of identified risks,
- Deliberations on measures for risks,
- A mechanism for monitoring risks,
- A mechanism for reviewing risk management programs, and
- Measures for raising awareness among members of the organization, education and training, and enhancement of risk management capabilities.

Purpose of the research

A comparative analysis of global Disaster risk management standards such as AS/NZS 4360:1999; CAN/CSA- Q850-97; PD 6668:2000; JIS Q 2001; NFPA 1600 on the basis of different parameters like Role for the civil society; Public-Private Partner; DRM Structure; Sectoral Risk Reduction Programs; Budget & staff allocation; Compliance/ enforcement; Codes and standards; Risk Reduction in Development Plans; Risk Reduction Strategy; early warning dissemination; Risk scenarios in use; early warning forecast quality; Hazards recorded and mapped are analysed and presented.

Review of literature

In order to promote international trade, ISO has already started to consider creating international standards as a means of removing obstacles to trade activities. It was agreed to start with the preparation of documents on risk management terminology, and Japan took the lead in the compilation of “ISO/IEC Guide73: Risk management - Vocabulary - Guidelines for use in standards.”

The global trend in risk management is summarized below.

AS/NZS 4360:1999 (Australia & New Zealand) - : The world’s first risk management system developed in 1995. Revised in 1999. Regarded as indispensable for risk management in strategic planning by organizations and enterprise management. There is a move to globalize this standard.

CAN/CSA- Q850-97 (Canada) - : A risk management system developed in 1997 .These guidelines defines the purpose of risk management as “identifying great risks and taking appropriate measures to minimize the risks to the reasonably achievable extent.

PD 6668:2000 (United Kingdom) - : Developed by British Standard Institution in 2000.Regarded as a preliminary standard used during the development of a full-fledged risk management system.

JIS Q 2001 (Japan) - : Established as a JIS standard in 2001. Applicable not only to private enterprises, but also to public and private organizations. Helps to construct risk management systems on the basis of the same management system as ISO 9000 and ISO 14000

NFPA 1600 (United States) - : Developed in 1995 by the National Fire Prevention Association (NFPA) of the United States, and approved as an American standard in 2000. The one and only risk management system (program) specifically for disaster prevention. Views disaster prevention not just as countermeasures against disaster but also as a means of ensuring business continuity. To be revised in 2004 with the inclusion of another article “Mutual Assistance.”

Research Methodology

It is a research paper based on secondary data. Secondary data would be collected through journals, internet and research papers. After that the secondary data would be analysed on the above mentioned parameters

Major Results

A comparative matrix would be prepared for the analysis having all the parameters mentioned vs. Global disaster risk management standards, to analyse the effective standard among these.

Administrative Thrusts and Community Demands in Disaster Management - An Evaluation of Post Tsunami Disaster Proceedings in Kerala, India

Faisel T. Illiyas, Shibu K. Mani

Division of Disaster Management, School of Environmental Sciences, Mahatma Gandhi
University, Kerala Pin-686560, India.
faiselses@gmail.com

Abstract

The need of interdisciplinary contribution demands more stake holders in disaster management than any other field of operation. Among them the most inevitable are the exposed community at one end and the district administration upon which many powers rests at the other end. A stake holder cannot work as an autonomous body whereas it requires coordination, cooperation, consultation and communication (4Cs) as the foundation of disaster management which are usually breached. An effective participation of stakeholders in its due seriousness shall lead to the development of a safer community. Partnerships of multiple stake holders can act as links between the administration and society for bridging the community needs and the authority thrusts. When there are imbalances between administrative focus and community demands, the decisions taken by the government for the betterment of the community might not reach at the aimed destination. An assessment of the post disaster phase of tsunami reveals how the stake stakeholders can work proficiently to achieve a common goal. The study looked in to the management strategies adopted by the authorities to tackle the issues and the role played by stake holders in each phase of the tsunami related proceedings. Analyses of the decisions and actions as well as pointing out the gaps would help the decision makers with lessons to empower the response and management mechanisms. The multiple stakeholders' participation directly or indirectly has changed the face of the tsunami affected areas of Kerala coast. Even though tsunami had lead to the livelihood destructions, prompt utilization of resources and funds with the community participation brought many infrastructure developments and contributed to capacity building which would possibly help the community to go up the development ladder. The gaps identified can speed up that process, if adequate measures are taken in the coming days.

Disaster Risk Reduction By Interactive Community's Participation In Agroforestry

A.D. Kaushik

National Institute of Disaster management
IIPA Campus, I.P.Extension, Ring Road, New Delhi-110002.
adkaushik@gmail.com

Abstract

The geographical location of India and its climatic conditions, which vary widely across the country, is susceptible to a number of natural disasters. Nearly two thirds of the States/ Union Territories are disaster prone in one way or the other and both natural and man-made disasters inflict the worst type of physical and financial misery to countless numbers. Even after prolonged five decades of planned development and disaster mitigation and prevention, the fury of natural disasters of all sorts has paradoxically increased over the years. In present scenario, the participation of community has become a necessity in the Agro- forestry programmes for protection and raising plantation on agricultural, private, urban and rural lands to reduce the possible risks of hydro-meteorological and geological disasters. The participation of community is a process of empowerment where everybody has the opportunity to contribute its might in social welfare. The community particularly NGOs bridge the communication gap between the community and government for better understanding of the advantages of agro-forestry as per the guidelines of National Forest Policy (1988). The participation of community in agro-forestry is probably based on continuum of approaches such as employment, collaboration, consultation, information and exclusion. The interactive community's participation basically involves the active publicity carried out by various agencies like Voluntary Organizations, Sports Organizations, National Service Schemes, Schools, Colleges & Universities, Local clubs and Central and State Government publicity wings, etc. In author's view the interactive community's participation, which involves physical participation as educating, motivating, organizing, guiding and preparing people for agro-forestry programmes, may be a major bridge for reducing the risks of climate change induced natural disasters particularly wind storms, floods, droughts, cyclones, landslides, coastal erosion, avalanches, heat waves and cold waves, etc. of a region.

How Much Vulnerable We Are !!!...

Er. J. C Dhondiyal,
DMC, Uttarakhand Academy of Administration, Nainital
opnainital@yahoo.com

Abstract

The vulnerability of our nation/world and its populace is demonstrated by the fact that almost 1.5 million houses in our country are lost due to natural disasters in various forms and sizes. The loss of life and property is immense and retards the national progress significantly. This demonstrates the fact that a huge number of our existing building stock both residential as well as non-residential across the country is highly vulnerable to natural disasters like earthquakes, floods, storms, cyclones, cloud bursts wind storms etc. The resulting damage to buildings and loss of human lives has time and again proven the inadequacy of buildings to withstand the impact of the adverse forces during such calamities.

Since the appearance of humans on the world scene nature disasters have been taking a terrible toll in vulnerable communities. Scientific publications have warned that very severe earthquakes are likely to occur any time in the Himalayan region, which could adversely affect the lives of several million people in India.

A disaster, Natural or Man Made, can strike in the workplace, at home or abroad. In order to plan, prepare, educate and fight disasters cross boundaries, we need to exchange and share views and technologies on the lessons to be learned from all disciplines of disaster and emergency management.

In Uttarakhand itself 1200 villages are under threat of land slide, out of these 350 villages need immediate action. It is out of the study of Wadia Institute, IIT, CBIT. And Geological Survey of India. 90 villages are exceptionally sensitive and 260 villages are highly sensitive.

Man-made disasters are preventable. If the buildings are constructed according to the prescribed bye-laws. Factory Act prescribed safety conditions. If all manufacturers adhere to those safety measures, there would be fewer industrial accidents. On the other side, Natural disasters may not be averted under all conditions. If we are prepared for a disaster, there would be minimum suffering and losses.

People's Methodology for Community Based Disaster Risk Management – An experience from Uttarakhand State

Surya Parkash

National Institute of Disaster Management, Delhi

suryanidm@gmail.com

Abstract

The experiences of recent past disasters like Munsiyari Landslides (2009), Kosi Floods (2009), Indian Ocean Tsunami (2004), Earthquakes in Bhuj (2001), Chamoli (1999), Latur (1993) and Uttarkashi (1991) have well established the fact that community participation is a vital key component for any effective disaster management strategy. Keeping this perception in mind, an effort was made through an NGO to develop, test and implement people's methodology for community based disaster risk management in a part of Uttarakhand State. An attempt was made to integrate the scientific approach for disaster risk management with community practices and traditions. Fifty villages in the Rudraprayag district of Uttarakhand were selected for practicing it at ground level with support from village people, community workers, members of the village level task forces for disaster management, village Panchayat and a local community based organization.

The planning approach for community based disaster risk management was followed through six steps in two parts. The first part of the approach dealt with disaster risk assessment and involved three steps – i) Multi-hazard Assessment, ii) Vulnerability & Capacity Assessment and iii) Risk Assessment and Prioritization. The second part of the approach is based on the outcome of the first part and emphasizes on avoidance, prevention and reduction of the risks through the next three steps – iv) Hazard avoidance, prevention and reduction, v) Vulnerability Reduction & Capacity Enhancement and vi) Action Strategy, Implementation, Review and Updation.

The above planning approach was shared with the village people, community workers and the local community based organization, who carried out these tasks and came out with the community based disaster risk management plans for their respective villages. Such plans included not only the information about the village, hazards, vulnerable elements, resources and risks but also provided sketch maps and data tables pertaining to individual elements at risk and the degree/level of risk as well as the strategy to manage these risks.

Enhancing the Roles of NGOs in Disaster Management through Capacity Building

Anuj Tiwari

India Center Foundation & Development Consultant
248/5-B, Railway Officers Colony
P. K. Road, New Delhi – 110001
anujtiwariin@yahoo.com

Abstract

NGOs are considered as a vital link between the Government and the people. They act as a vehicle for carrying out welfare schemes of Government to the people who need it. In addition they are also expected to create and raise awareness amongst the people about their rights and how to achieve them. Their regular presence in the community and rapport with them is their main strength which any government or outside agencies wishes to capitalize on in case of emergent situation. But there are some basic questions that must be answered before approaching these NGOs in case of an emergency or any natural disaster:

1. Are these NGOs capable of effectively carrying out the tasks entrusted on them? and
2. Is there any mechanism for ensuring the regular strengthening of these NGOs capabilities?

Above mentioned questions become more important when it comes to managing a disaster. Their regular presence and contact with the affected community could be considered as one of the strengths at the time managing disasters but this should not be the sole criteria of taking their services for managing disasters.

This is the prime responsibility of government and other international funding agencies to focus on strengthening and capacity building of those grass-root NGOs which have their regular presence at the community level. It is important that the capacities of local NGOs and communities are built to observe, understand and prepare themselves for the worst impact so that they do not wait for help, they can stand on their own feet and mobilize self-help, before rescue and relief reaches them.

The capacity building of the NGOs should be planned in such a way that they are involved at every level of disaster management planning and implementation. The proposed paper on 'Role of NGOs in Disaster Management' would emphasize on the **needs of capacity building of NGOs** in disaster management and would also suggest the **measures to be taken** towards their strengthening to ensure effective disaster management.

Social Issues in Disaster Management: A Case Study of India

Durgesh Nandini

Faculty of Public Administration

IGNOU, New Delhi

dnandini@ignou .ac.in

Abstract

A disaster may be a natural or man-made event that leads to sudden disruption of normal life of a society, causing damage to life and property to such an extent that available resources remain inadequate to restore normalcy in the post-disaster phase. India is highly vulnerable to all types of natural disasters with the possible exception of volcanic eruptions. However, the natural disasters take place with various intensities in different regions due to unique and widely varying climatic, geographical and geological conditions. As a result, there is a significant regional and seasonal aspect in the occurrence of natural disasters. The natural disasters periodically visit the same geographical region, and set the development clock back by decades. They often result in destruction of fixed assets, loss of production capacity, market access or material inputs, and damage to transport, communications or energy infrastructure. In addition, loss of lives and migration of key social actors leading to an erosion of social capital adversely affect the society. In this context, lack of capacity to limit the impact of hazards remains a major burden on the society. Hence, the natural disasters are a potentially serious shock to the socio-economic development of the nation.

In this paper, keeping in view the impact of these disasters on socio-economic development in the affected area, study seeks to identify social dimensions of disasters. The second part, deals with significant issues in disaster management such as provision of shelter and housing, livelihood options, community participation, gender specific issues along with role of women as disaster manager, and special needs of children in post-disaster phase. Last but not least, this paper analyses the role of government and non-governmental organizations with special reference to the Corporate Sector in disaster management; and suggests the necessary measures to mitigate the impact of disasters on society.

Tsunami Reconstruction and CBDRR

K.M.Pariveian
pariveian@yahoo.co.uk

Abstract

The Indian Ocean Tsunami of 2004 brought in numerous changes in our perception of disasters, and related policies and practices as well. Notably it acted as catalyst for speedy introduction of National Disaster Management Act of 2005 and formation of institutional structures such as NDMA and other similar structures in State level, district level up to Panchayat levels. Emergence of such legal- institutional structures and mechanisms are on one side, there is larger emphasis on community resilience vis-a-vis multi-hazards on the other side. The post-tsunami rehabilitation and reconstruction itself had very many inbuilt community based disaster risk reduction (CBDRR) programmes. Many civil society organisations spearheaded the CBDRR movement. It complemented the GOI-UNDP Disaster Risk Management programme (DRMP). Now it time to take stock of CBDRR in the context of tsunamis tackling in particular and other hazards in general.

This paper intends to analyse the following salient issues:

- How effective is CBDRR in community resilience building
- Coastal community resilience assessment (CCRA) as tool to improvise community resilience building
- Lessons from various sectoral perspectives (shelter, livelihood, education, children protection, gender, water and sanitation, early warning systems) in post-tsunami reconstruction
- Institutionalisation and Integration issues in disaster management systems
- The recent tsunami alert on 11 august would be used as case study to understand the level of preparedness vis-a-vis CBDRR.

Involving Youth in Documenting Tsunami Reconstruction

Gopal Kumar Jain,
Youth Programmes, CEE
gopal.jain@ceeindia.org

Abstract

Natural disasters on a global scale are becoming more frequent, owing to an onslaught of weather-related crises compounded by rapid climate change conditions. The increasing number of disasters calls for greater mobilization of human resources for relief and reconstruction work.

Also, many small voluntary organizations involved in disaster reconstruction cannot give documentation the high level of priority it needs. This may be so for a variety of reasons, one of them being shortage of well trained and experienced staff, who can document.

Thus, utilising the endiuiasm and interest of young men and women in Asia to work for tsunami reconstruction, the South Asia Youth Environment Network (SAYEN) with technical and financial support of Oxfam America, groomed 50 volunteers with conceptual skill development and on-job training, over a period of two years. The young volunteers were involved in understanding the humanitarian response to Tsunami and developing case-study learning documents. These documents were strengthened with inputs from experts into a set of three publication "Lessons from Asian Tsunami- 2004" and prepared for sharing with humanitarian learners and practitioners.

Getting involved in tsunami reconstruction helped these youth volunteers in several ways. It refined their skills of documentation, provided knowledge about disaster reconstruction and of working with communities and organisations. Most of these volunteers today have taken-up either disaster rehabilitation or development work as their career. For organisations/institutions this has helped document rehabilitation activities without any biasness and thus a key resource for future reconstruction activities.

**Role of NCRC in Tsunami Rehabilitation
and Reconstruction- Annie George
(BERDOCC)**

annie@bedroc.in

Abstract

The massive impact of Indian Ocean Tsunami 2004, has many lessons and good practices to be incorporated in the future disaster management strategies. Nagapattinam was worst affected district in India and it required massive coordination to address gaps and overlaps. It is with this rationale NGO Coordination and Resource Centre (NCRC) swung into action as early as January 2005 itself. It went about facilitating several sectoral coordination ranging from Shelter, Livelihoods, Agriculture, Child protection, and other human rights issues. NCRC bridged the district administration and NGOs throughout the recovery process. Many good practices recorded would be shared at the II DM Congress.

Building Local Capacities for Disaster Response and Vulnerability Reduction – A Study on Community Resilience

Annie George

Building and Enabling Disaster Resilience of Coastal Communities (bedroc), No. 5, Mettu
Bungalow, New Beach Road, Kadambadi, Nagapattinam 611 001, Tamil Nadu
annie@bedroc.in

The years succeeding the South Asian tsunami has not wanted for resources, financial, human and the best of skills one could only dream of pre- tsunami and never, at the same scale, for any other disaster thereafter.

Granted this was the best time to unleash all previous learnings, to correct past mistakes, to right the wrongs of the world and to build back a brave new world. The tidal wave had washed out homes and communities leaving behind, as it were, an empty slate on which future could be rewritten or pasts unbuilt. We did all this and more. We rewrote and experimented and shouted from all available platforms on how post- disaster situations have to be managed. A veritable Tower of Babel, of voices and experiences. And the communities dealt with us the best way they could amidst the chaos that their own lives had degenerated to.

“What was right and what is left?” was the question a humanitarian expert asked and this question needed answers if only to justify the time, resources, energy and effort that was expended into building back better. BEDROC, with its enviable history as a Post- Tsunami Coordination and Resource Centre, was also extremely interested in answering this question, not to justify but to learn from this lifetime experience on what worked and what did not.

It was during this juncture that OXFAM America mooted this idea of doing a Study on “Building Local Capacities for Disaster Resilience and Enhancing Risk Reduction” building upon the lessons learnt during post- disaster interventions. As a Study, this was a perfect solution as it tried to understand the approaches that capacitated the local leadership without trying to point fingers on the rightness or wrongness of approaches or organizations.

This Study has been instrumental in bringing to light the inherent survival instincts and coping mechanisms that prevail in such vulnerable communities, which need to be identified and strengthened rather than eroded. A rugged community that has faced disasters with equanimity and will continue doing so, albeit with progressive deterioration, unless supported and enabled with positive external energy and tools.

Community Based Hazard Mapping for Coastal Disaster Risk Management

S. Rajarathnam* & Sunitha Kuppaswamy

Centre for Disaster Mitigation & Management

Department of Media Sciences

CEGC, Anna University Chennai, Chennai – 600 025.

cdmmindia@yahoo.co.in

Abstract

The Indian sub continent has been exposed to disasters from time immemorial. The increase in the vulnerability in recent years has been serious threat to the overall development of the country. Around 57% of the land vulnerable is to Earthquakes, 28% is vulnerable to Droughts, 12% is vulnerable to Floods and 8% of the land is vulnerable to Cyclones. Subsequently, the development process itself has been a contributing factor to this susceptibility. Coupled with lack of information and communication channels, this had been a serious impediment in the path of progress. Also, the growth of vulnerability is responsible for the increasing impact of disasters on development, which in turn further increases vulnerability. Understanding what vulnerability is and how it arises is as key therefore to the disaster paradigm for effective disaster risk management.

Community participation has also been recognized as the additional element in disaster risk management necessary to reverse the worldwide trend of increasing frequency and loss from disasters, build a culture of safety and disaster resilient communities, and ensure sustainable development for all. This paper aims to study the effectiveness of community based hazard mapping technique deployed as a part of coastal disaster management in Kathivakkam, Chennai. Kathivakkam is a coastal hamlet surrounded by water on two sides and is highly vulnerable to coastal disasters like cyclone, flood and tsunami. Hazard mapping emphasizes the importance of engaging local communities, gathering information on different kinds of buildings and structures and presenting this information on the map. From the focus group discussions, information was gathered on all those things that could be destroyed or damaged during a disaster. Specific problem areas for disaster management like damaged buildings, sanitation pipes, drains, etc were mapped and possible evacuation routes, temporary relief centres are identified and suggestions for reducing the vulnerability are given.

Role of Youth Organizations in Disaster Management

Prabhas Chandra

chandra_prabhas02@yahoo.co.in

Abstract

The risk of living in modern world with all its vibrant charms has grown manifold which could be imagined by one fact; that during decade 1997-2007, due to disasters alone the mortality rate has grown 17 times and the economic cost has multiplied 35 times. The developing countries like India face main impact of disasters. In order to break the vicious cycle of Development-Disasters-Development one needs additional economic power which is hardly forthcoming in Today's world.

The main problem of Disaster Management in India is people -people-people. The high Population density, very high premium on land for settlement, agriculture and industries result in heavy damage to life and property (China, India and Bangladesh together account for 75% death due to hydro metallurgical related disaster alone). If that be so then the solution for these have to come from its people-people-people.

The paper seeks to find solution from India's point of view on aspects of managing Disasters from the problem domain itself (People) focusing on its one segment i.e. its youth and Youth organization as solution provider.

The very mechanization of disaster management in India because of its exclusive complexities spells one rule. Rule being: the first responder in a disastrous event has to be those who are affected by disasters itself. Under this rule naturally youth of the affected society emerge as the potential nucleus on which effective organization can be structured. India has one of the youngest populations so we have the necessary foundation to build an effective organization.

In India today due to materialistic needs the game rules of society have undergone many changes. Safety and security across the entire population segment is taken for granted at all times. We all have a very long list of expectations from the country but have virtually nothing on what the country expects. There are other hosts of such malice, which stem from selfish narrow vision. Youth and Youth organizations have to come forward to initiate a mind change 'one for all and all for one.' in the society.

NCC (1948) and NSS (1958), two dream projects of our first prime minister J L Nehru though have stood the test of time since their inception but they need to do some introspection and if need be change their mandate to become contemporary and meaningful asset to society in modern times.

NCC is a dynamic Youth organization; approximately 13 lakh cadre strong has been rendering an excellent Service to the nation. Considering its military orientation it can effectively be employed in various aspects of disaster management .But these have their inherent limitation .Notwithstanding , their potential can be synergized when dovetailed with other such organizations

Youth/Youth organizations need to be more society centric in times of disasters. The ethos should be to establish effective linkage between build-educate mobilize- learn .Their key result areas of works should be directed towards,hazard awareness graining and education plan ,evolve safety program and community risk reductipn activities. There is urgent need to re learn the charm of selfless service.

In country today knowledge and technology revolution providing basis for a fundamental transformation which has to be steered by its youth and youth organization .Timing is right now, stimulus has to make safety of people the highest law. What you do is a drop in Ocean but if you don't do, the ocean is less by that drop.

A Paramount Need For Involving Communities And Civil Society In Disaster Management

Satpal Singh and Dalbir Singh
satpalsinghrohill@gmail.com

Abstract

The paper examine the role played by different rural,urban communities and civil societies for mitigating various natural and man- made disasters at various levels.The people participation from villages and towns act as a great 'catalytic factor' in formulating and execution of disaster plans at various levels.It has been observed that the community-participation,especially at the grass root level,has been proved conducive to give a periodic feed back for the mitigative strategies and the preventive and curative measures,used for different natural,man-made and hybrid disasters in the disaster vulnerable or affected areas.

At a grass-root level,the contribution of rural community is specially appreciated for their valuable role,played for preparedness, recovery and responsiveness for pre and post disasterous situation.Their role in taking through structural and no-structural measures,supplying skilled and non-skilled man power to tackle the 'grim-situation' created by different types of disasters, have been boosted the importance of rural and urban community to tackle the "disaster menace" at local, regional, national and international levels.

Similarly, the role of civil society, which includes social groups, professional associations and voluntary organisations have been played a significant role to create awareness and chalkout the right strategies to make the disaster mitigative measures more responsive and conform to the local conditions,so that the right disaster mitigative policy may be formulated to tackle this global menace at various levels.

Condensed Disaster mitigation through a community based practical training programme using improvised methods under one roof.

Prem Mahant

Mountain Rescue Expert

Himalayan Lancer Trek India, Kullu, Himachal Pradesh

prem0431@gmail.com

Abstract

India is a vast country which is highly prone to disasters. The large number of disasters that visit us year after year in the form of floods, cyclones, earth quakes, land slides, fires, avalanches and road accidents cause a lot of loss to life and property. It is a matter of concern that nothing much is done in the area of disaster management at the community level and much of the critical work is left to the defence and paramilitary forces that are summoned on all such occasions of major disaster. It has been strongly felt that if we have a community based disaster management plan in place, the harmful and devastating effects of all natural and manmade disasters can be minimized. Much can be achieved in the area of prevention, mitigation and preparedness if such plan of disaster management is implemented at local levels. For this purpose unique training programme for disaster mitigation through a community based training programme that achieves its objectives by improvised methods and includes training in first aid, rock and snow craft, fire fighting, river rescue etc.

The main aim of the present programme is to improve the preparedness of the community to face all eventualities thrown up by a disaster that more often than not comes with a shocking suddenness. The training programme will successfully put in place a team of local volunteers, who by immediately responding to the disaster situation will provide maximum relief to the victims and also minimize other harmful consequences. Practical training to volunteers will form the core of the whole programme. As far as possible, maximum use will be made of local resources and materials, for this purpose improvisation will play a major role. The programme, as it is conceived, can not succeed without the active support of the government and other agencies such as civil defence, fire services, health department, police department, district administration etc. However, to start with the services of highly qualified and experienced persons of the locality, who have expressed their willingness to act as resource persons for the training, will be utilized. All these persons have firsthand experience of handling disasters and are from defence, police, and mountaineering and health backgrounds. Mock drills and elaborate exercises will form an important component of the training. Also available in the state, at the grass root level, are many young persons who already have experience of various adventure activities as they were either NCC cadets or mountaineering trainees at school or college level. They can, with a proper orientation in disaster management, through our training, be motivated to become the pioneering batch of our disaster managers.

In the state of Himachal Pradesh special preparedness is desired in areas dealing with floods, land slides, cloud bursts, fires and road accidents. Our training module has been designed keeping these specific factors in mind, though the overall aim is to equip volunteers to face and overcome all hurdles for providing speedy rescue and relief to the affected. Such training, in due

course of time, will raise the general awareness of the community as a whole and prompt them to work for prevention and mitigation of all kinds of disasters, particularly manmade ones like fire. In the last twelve months or so the state has lost much to the devastating fires. The memory of the large scale losses in fires at Malana, Mohini and Solang villages is still fresh in minds of people of the state. In all these cases if the fire could not have been prevented at least the amount of loss could have been lessened if the villagers had a team of trained disaster managers of its own. Our training programme will provide this much needed help at the community level. It will make the community self – equipped to help it self when faced with the disasters that come unannounced and normally can not be predicted. The end result should be a safer community.

Another positive fall out of this training programme of disaster mitigation is the possibilities of generating self employment opportunities for the youth of the state. This training module that includes training in snow craft, rock climbing, water rescue can easily be adapted to produce trained youth fit to take up careers in the field of adventure sports. This will only require minor modifications and additions to the existing training module. Himachal a popular tourist destination, will thus have trained man power at local level, to look after the tourist who come seeking the thrills of adventure in trekking, white water rafting, rock climbing, river crossing and the like.

The success of the programme can be a source of income to the state also. The state can become the hub for the training of disaster managers throughout the country. In due course of time, the state can come up with a state- of- the -art institute of disaster management which will train trainers for further disseminate of disaster management training to the remotest corners of the country.

If government take initiative to start a state of the- art institute as above mentioned can solve the below mentioned Solutions of the state and country. This community based module is desired by the Government of India as well as United Nation.

Solutions:-

Increase in community level initiatives.

Self equipped community. (Need of the time)

Capacity building, training & Education (Awareness)

Scholastic Safety in schools.

Search & Rescue in all districts, Tehsil & Block level.

Youth in Mainstream.

Promotion of Adventure Tourism.

Solution for generating self Employment and regular Employment.(unemployment is one of the big disaster)