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Photos: AIDMI
Overcoming Implementation Challenges for the HFA2: New Areas, Newer Insights

The Hyogo Framework for Action (HFA) was the seminal framework that guided the global response to the challenges of disaster risk reduction (DRR). Drawn for a period of 10 years (2005-2015), the HFA aimed to build the resilience of countries and communities against disasters. With less than a year left for the HFA to culminate, the efforts to chalk out a successor framework have been gaining traction. Several consultations, workshops and roundtables have taken place to discuss a post-2015 framework for DRR (commonly known as the HFA2). All these efforts with CDKN support have yielded a pre-zero draft of the HFA2 which was circulated a few weeks ago.

This pre-zero draft of the HFA2 states the overall purpose of the HFA2 to be ‘the management of disaster and climate risk in development at local, national, regional and global levels for the resilience of people, communities and countries’. However, to aptly serve its stated purpose the HFA2 needs to overcome certain implementation challenges which it is likely to face in the near future. This issue of Southasiadisasters.net is titled ‘Overcoming Implementation Challenges for the HFA2: New Area, Newer Insights’. It contains articles highlighting the challenges that the HFA2 implementation process is likely to be faced with and points out certain solutions. As the purpose of the HFA2 is to manage disaster and climate risk across the local, national, regional and global levels the articles in this issue have been arranged according to likely, implementation challenges at the regional, national and local level.

Regional Challenges
The challenges at the regional level highlight the implementation constraints that the HFA2 is likely to face at the Asia-Pacific region. This section contains articles that highlight the challenges of DRR in the Asia Pacific region such as the need for radical institutional changes to address the overlap between the DRR and climate change adaptation (CCA). This section also talks about the challenges of trade and DRR in Asia such as the resilience of supply chains. It also mentions the challenges of disaster response faced by rural livelihoods and livestock.

National Challenges
The section on national challenges explains the constraints that HFA2 is likely to face at the national level. It highlights the challenges of preparedness in India such as a dearth of experts in the field of disaster management, inadequate administrative set up, etc. It then expounds upon newer areas such as the need for intervention for meeting the challenges of lightning hazards in tropical countries, the role of state disaster management authorities in India and the importance of proper evidence in helping decision makers respond to humanitarian emergencies.

Local Challenges
Local level challenges include lack of training and know-how for disaster risk management at the ground level, enabling technologies such as the GPS for tracking school buses to monitor them, the need for accountability in DRR, limits to humanitarian response in conflict situations, etc.

By highlighting these implementation challenges to the HFA2, this issue of Southasiadisasters.net aims to help decision makers and relevant stakeholders in making the HFA2 more robust and effective.

– Kshitij Gupta

The following process chart explains the implementation challenges that the HFA2 process is likely to face at the regional, national and local level.
Foreword

The Hyogo Framework for Action, agreed at the 2005 World Conference on Disaster Reduction in Japan following the devastating tsunami, has helped countries around the world to better prepare and respond to disasters.

Because of its track record in implementing the five priority areas in Hyogo, India is recognized globally as a champion of disaster risk reduction, with many lessons and best practices to share. India has made disaster risk reduction a national priority and has strengthened disaster preparedness and response at all levels. It has made very good progress in identifying and monitoring disaster risk and using knowledge and education to create a culture of safety and resilience.

Building on Hyogo’s original five priorities and in response to emerging risks, a new global framework for disaster risk reduction is being negotiated through participatory consultations. The pre-zero draft of the new framework identifies eight priorities and expands Hyogo, giving more attention to the protection of livelihoods and productive assets and the need for rapid recovery after disasters occur. The proposed draft acknowledges that vulnerabilities differ based on economic status, gender, ethnicity, physical abilities and age and calls upon countries to incorporate these in disaster programming, budgeting, planning, implementation and evaluation.

As good as the pre-zero draft is, the proposed framework would be even stronger if the special risks faced by people in urban environments are incorporated. In many countries experiencing rapid urbanization, cities are being developed in unsafe ways placing urban populations at very high risk. The proposed framework might also be strengthened if countries are allowed to choose their own indicators against universal targets, encouraging countries to monitor progress on their own terms.

Reducing the risks from disasters is one of the most effective ways countries can protect their development gains. When disaster risk reduction is factored into all stages of the governance chain, more lives are saved when disasters occur, fewer assets are lost and countries bounce back faster and stronger.

Ms. Lise Grande, United Nations Resident Coordinator, Resident Representative United Nations Development Programme

Disaster Risk Challenges to the Asia–Pacific Region

Due to its geographic location, the Asia–Pacific region is one of the most vulnerable regions to natural disasters. Not only does it bear the largest share of natural disasters, it is also responsible for the highest number of disaster victims in the world. According to ADBI’s recent study on natural disasters, ADB member countries represent 60% of the world population and experienced 40% of all reported disasters in the world from 2002 to 2011, but accounted for 63% of global disaster deaths, 90% of the global affected population, and 48% of global economic damages.¹ Of the ten disasters with the highest death tolls across the world since 1980, seven have occurred in Asia. 2011 was an exceptional year for disaster exposure in the region. The Great East Japan earthquake resulted in 19,846 deaths and an estimated total economic loss of $201 billion. The South East Asia floods also caused massive devastation, particularly in Thailand where 813 people died with economic losses estimated at $45.7 billion.²

The project, titled *Disaster Risk Management in Asia and the Pacific*, was conducted by eight independent internationally based authors with extensive regional experiences in disaster risk management and climate change to produce a study that seeks to provide senior policymakers in the governments of the region with an overview of the steps that can be taken to reduce disaster risks. The study has provided five main conclusions:

1. **Current DRM is inadequate**
   Current risk reduction measures adopted in the Asia–Pacific region are not adequate for emerging demands. The challenge is to address increases in disaster risk with a holistic approach that addresses existing hazards and creates a culture of risk management to guide future development.

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² Davis, Ch. 1.1 “Background” In *Disaster Risk Management in Asia and the Pacific* (ADBI / Routledge, forthcoming)
2. The Threats of Disasters in the Region are Significant
The incidence of disasters has increased substantially from affecting 1 in 39 people from 1980 to 89 to 1 in 28 in 2000 to 2009. The majority of its increase is attributable to hydrometeorological or climatic events such as typhoons or floods. Although countries and economies cannot prevent hazards from occurring entirely, they can reduce their vulnerability and minimize their impact. Disasters impose significant socio-economic damages on affected economies. The 2004 Indian Ocean Tsunami caused losses equivalent to 97% of Aceh's economy, with 600,000 individuals losing their sole source of livelihood, increasing the rate of unemployment from 6.8% to above 30%.4

3. New Policies and Approaches are Needed
Not only is the frequency of disasters increasing but new threats are emerging. The Great East Japan Earthquake indicates the extent of damage that can be imposed by compound disasters on a developed country. Although the earthquake caused relatively little damage, the resulting tsunami impacted a wide area and resulted in 20,000 fatalities.5 New policies will need to be better evidence-based. Among other things, there need to be better safety nets and innovating financing schemes to protect the vulnerable. An important policy issue facing the region is whether to spend more on risk management prior to a disaster. Of the $91 billion in global official development assistance allocated toward disaster-related activities from 1980 to 2009, 96% went into ex-post response and relief, with only 4% into pre-event risk management activities.6

4. Radical Changes are needed in Approaches to DRM and CCA
Climate change adaptation (CCA) has significant overlaps with DRM. As DRM concepts become more widely popularized and accepted through international frameworks, they have become more closely associated with shared interests in CCA, green development, environmental awareness, and community resilience.

5. The Region Possesses some of the Richest Capabilities in the world to apply to DRM and CCA
The Asia-Pacific region possesses many rich capabilities to counter the enhanced risks based on region-wide approaches. Sub regional intergovernmental organizations in the Asia-Pacific have, in particular, been proponents of DRM. The ten member states of ASEAN adopted the ASEAN Agreement on Disaster Management and Emergency Response in July 2010, while SAARC members adopted a National Disaster Rapid Response Mechanism agreement to address trans-boundary disasters through regional cooperation.7 Both of these can be important vehicles for international cooperation and collaboration in experience, skill and resource sharing with a view to better disaster risk management for all.

Alongside the above study on disaster risk management, ADBI staff has also delved into emerging and pressing topics, which include: understanding compound disasters, incentives for business continuity plans by small and medium-sized enterprises, interface between climate change adaptation and disaster risk management, and disaster risk financing schemes. As part of this research, ADBI has proposed a systematic conceptual framework for analyzing compound disasters, and analyzed the role of DRM measures in global value chains and the incentives of SMEs to adopt business continuity plans.8

Based on the above research, ADBI is now considering an expanded program of DRM-related policy dialogues, beginning with the policy dialogue titled “Building Strong DRM Systems in Asia”, which was held from 10 to 12th June, 2014, in Chengdu, People’s Republic of China, in collaboration with the Institute for Disaster Management and Reconstruction, Sichuan University. Following an overview of the ADBI study and the conclusions drawn from the research, this policy dialogue delved into the effects of climate change and compound disasters on natural hazards with experts from Japan and the Philippines presenting case studies on the Great East Japan earthquake in 2011 and Typhoon Haiyan in 2013. These were then followed by a study tour of the site affected by the Sichuan earthquake in 2008 and in-depth discussions of the experiences and lessons from the Sichuan Earthquake with experts involved in the reconstruction process, and a case study of the Tropical Cyclone Phailin in 2013 with experts from India. The event concluded with a roundtable discussing and summarizing pressing issues of DRM in the region.

Debarati Guha-Sapir and Philippe Hoyois, Ch. 2.1 “Trends and Patterns in Disasters and Their Impact in the Asia-Pacific Countries of the Asian Development Bank” In Disaster Risk Management in Asia and the Pacific (ADBI / Routledge, forthcoming)

Anshu Sharma, Ch. 2.3 “The Social and Economic Challenge” In Disaster Risk Management in Asia and the Pacific (ADBI / Routledge, forthcoming)

Richard Eissner, Ch. 3.1 “Managing the Risk of Compound Disasters” In Disaster Risk Management in Asia and the Pacific (ADBI / Routledge, forthcoming)

Reinhard Mechler, Ch. 3.2 “Financing and risk financing Disaster Risk Reduction in Asia and the Pacific: Experiences and Innovations” In Disaster Risk Management in Asia and the Pacific (ADBI / Routledge, forthcoming)

Minquan Liu and Khan Kikkawa, Asian Development Bank Institute, Japan
Trade and Disaster Risk Reduction in Asia: Challenges Ahead

International trade is the principal channel of economic integration and a major development driver for many Asian countries. The increasing level of globalization is coming together with a rapid expansion of cross-border trade networks or global supply chains. While this process brings new opportunities to both producers and consumers due to increased levels of productivity and reduced price tags, among others, it also increases the exposure of the firms that integrate these networks to disasters that occur even in different continents.

Trade and business suffer the crippling consequences of natural disasters both directly and indirectly. On the one hand, natural disasters can destroy the human and physical capital of a business, as well as the public infrastructure needed to support its operations (energy, transportation, communication etc.). For example, the destruction of a bridge due to an earthquake may prevent a small steel business from timely delivering its steel plates to a large automobile manufacturer in the same supply chain. On the other hand, businesses can also suffer the impact of disasters indirectly; this is, when their operations are disrupted because their customers and/or suppliers are damaged by a disaster. Picking up the previous example, the large automobile manufacturer will see its operations disrupted even when its infrastructure has not been affected by the earthquake, since our small steel company will be unable to deliver the steel plates, a necessary intermediate input for the production of automobiles.

Because of this duality of natural disaster impacts on businesses, business continuity plans need to account for supply chain disruptions and ensure diversification in both the supplier and customer bases. One of the biggest challenges in this regard is to reconcile the need for supplier diversification with customer fidelity and trust. Another challenge is reinforcing the weaker nodes, which determine the level of resilience of the rest of the companies involved in the supply chain. These companies are usually second or third-tier suppliers, typically small and medium enterprises (SMEs).

SMEs, which are the backbone of the economy, are however the most vulnerable due to the lack of capacities and resources to bounce back after a catastrophic event. For example, ten months after the Great East Japan Earthquake and subsequent tsunami in 2011, one-third of surviving SMEs were yet to restart their businesses. Very often, we tend to think exclusively about government-led solutions when it comes to DRR. While governments should provide an appropriate enabling environment (support, incentives and partnerships) for business investment in DRR, SMEs could also benefit greatly from the support of their larger peers, these are, large and multinational companies that interact operate in the same supply chain. In other words: business-to-business solutions. Multinational and large companies, which have greater capacities and resources than SMEs, should take the lead and start moving beyond mere first-tier supplier audits toward building the capacity of the weakest links in their supply chains, as well as implementing supply chain-wide business continuity plans. DRR in the global supply chain context is, after all, a strategic game for teams, not individuals.

However, businesses not only suffer the consequences of natural disasters, but can also contribute to building risk. For example, not complying with the maximum CO2 emission levels contributes to climate change, which is one of the major causes for the increase in the frequency of natural disasters. Also, taking higher risks than legally permitted, be it in the financial, chemical or energy industry, can lead to major human-made disasters. Governments need to make sure that adequate legal and regulatory frameworks are not only in place, but also enforced.

There is no doubt that natural disasters are currently one of the major challenges faced by humanity. Both the frequency and the impact of disasters have been increasing for the past decades, accounting for disproportionate levels of human and economic loss (68 billion USD per year only in Asia since 2003). As we have witnessed, natural disasters have important disruptive impacts on supply chains, trade and economic activity, very often with fatal consequences for businesses, especially for the smaller and more vulnerable ones.

Why is this important at the community level? Let’s remind ourselves that a bankrupt business means much more than a business owner losing his capital. It translates into more serious economic and social problems like unemployment, higher pressure on public budgets, and more important even; it leaves entire families without income at a time they need it most.

– Pedro J. M. Edo,
Business Consultant, Asian Disaster Preparedness Center (ADPC),
Bangkok, Thailand
Livestock, Livelihoods and Disaster Response: Key Lessons

South Asia accounts for about a fifth of the world’s livestock population, and many of the region’s inhabitants depend on livestock for their livelihoods, food security and nutrition. According to the UN Food and Agriculture Organisation (FAO), ‘the linkage between poor peoples’ livelihoods and livestock is perhaps stronger in South Asia than in any other region of the world’. In a region affected by disasters of increasing frequency and intensity, the impact on poor people and their livelihoods is intense.

Historically, emergency responses – particularly those organised by external agencies – focused on meeting immediate and life-saving needs. However there is now growing interest in incorporating livelihoods thinking into disaster response. The Livestock Emergency Guidelines and Standards (LEGS) are part of this movement. LEGS is a set of international guidelines and standards for the design, implementation, and assessment of livestock interventions in disasters. The aim of LEGS is to improve the quality and timeliness of support to small-scale livestock keepers in disasters (and beyond), targeting both livestock professionals and also general humanitarian practitioners, as well as donors and decision makers involved in funding livestock interventions. LEGS grew out of a concern to improve the quality of disaster response for small-scale livestock keepers, in order to support livelihoods not just lives in times of crisis.

Drawing on the experience of the Sphere Handbook, LEGS gathered evidence-based best practice from around the world, using a broad consultation process, and developed minimum standards, key indicators and guidance notes, supplemented by practical tools for participatory planning and implementation. The LEGS Handbook was published in 2009, and is now a formal companion to the Sphere Handbook, alongside similar standards in education, economic recovery and child protection.

The LEGS Training Programme uses training of trainers’ courses to create cadres of LEGS Trainers in developing regions of the world. They are equipped with the skills and materials to deliver a 3-day course to increase the capacity of practitioners providing support to livestock keepers affected by disasters. To date there are over 280 LEGS trainers worldwide, including 39 in the South Asia region, and 18 LEGS trainings have been carried out in the region.

Using the livelihoods framework, LEGS promotes the protection and rebuilding of livelihood assets. Tools for preliminary assessment, participatory response identification, and analysis of interventions and options, are followed by six technical areas: destocking; restocking; veterinary services; provision of water; provision of livestock feed; and livestock shelter.

The experience of LEGS provides a growing body of evidence that livelihoods-based livestock interventions – when appropriately planned and delivered in a timely way – can have a positive impact on the livelihoods of people affected by disaster, and ultimately help to strengthen their resilience and reduce their vulnerability to future disasters.

Cathy Watson, Coordinator, Livestock Emergency Guidelines and Standards (LEGS)

For further information, see: www.livestock-emergency.net


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PREPAREDNESS

Planning Preparedness: Challenges in India

It is well known that preparedness determines response. Therefore, for an effective response to any emergency, proper preparedness is imperative. However, preparedness in India is not accorded the attention that it merits. There are several challenges that need to be overcome for India to have a robust preparedness structure. Some of these challenges are:

1. The long time taken by various state governments in setting up state disaster management authorities and the need of proper systems and procedures in these authorities.
2. The need for awareness generation among the people of vulnerable areas about preparedness issues through dissemination of information by the concerned authority.
3. The need for greater fund allocation by the government for implementing preparedness activities at the grassroots level.
4. The need of experts in the field of disaster management for proper planning and implementation of preparedness activities.
5. The people of India are neither accustomed nor comfortable with the regular conduct of mock drill exercises which are a prerequisite for the implementation of preparedness activities.
6. The need of adequate resources at the ground level for the proper implementation of the preparedness plan.
7. The need for coordination at the local level, inadequate early warning systems and a slow response time are also very important constraints for implementing preparedness plan at various levels.
8. Need of a systematic search and rescue system and equipment along with proper community empowerment and participation of the social sector are also responsible for the poor preparedness.
9. The need of properly defined management structure of the administrative set up for implementing the preparedness plan.
10. The need to properly equip rural areas with strong village task forces to properly work on disaster preparedness.
11. Disasters are not only the product of the natural or manmade causes but of social, educational, cultural, spiritual, economical aspects as well so the implementation of planning should be according to the these issues.
12. The literature of preparedness plan should be according to the vulnerability of the particular area and should be easily available for common people and understandable that initiates the proper way of implementation of preparedness activity among the people.

These are some of the issues which are mentioned here as challenges regarding implementation of preparedness plan. Overcoming these challenges through multi disciplinary approaches for implementing the disaster preparedness plan at various levels is extremely important.

– Dr. Aniket Sane,
Planner for Disaster Risk Reduction, Indore

CLIMATE CHANGE ADAPTATION

Climate Compatible Development in Theory and Practice

Development literature abounds with terms such as climate, development, poverty, resilience and livelihood. However, the key concept of Climate Compatible Development (CCD) is yet to find considerable traction in the development literature. A concept to which the Climate and Development Knowledge Network (CDKN), CCD proposes bundling together migration, adaptation and global transformation for the benefit of poor people at country and sub-national levels. Gradually, with time the CCD approach will also get due importance and coverage in development theory and practice. The following three books allude to the different aspects of the CCD approach:

1. Climate Change and Development
   By- Tom Tanner and Leo Horn-Phathanothai
2. Planetary Economics
   By- Michael Grubb, Jean-Charles Hourcade and Karsten Neuhoff
3. Convenient Action
   By- Narendra Modi

To read a detailed review of these books follow the link: (http://www.simonmaxwell.eu/blog/climate-compatible-development-in-theory-and-practice-three-book-reviews.html)
Lightning Hazard in Tropical Countries: Need for International Policy Intervention

Lightning, a very common climate-related natural phenomenon is still awaiting its acceptability as a natural hazard amongst the disaster management community. Tropical countries are more prone to lightning hazards in terms of their frequency and intensity. Tropical climate, agriculture-based and labour-intensive economy, poor infrastructure, lack of safety measures and low awareness all combine to increase the risk of lightning hazards. Heavy electrical discharge in lightning incidences has caused enormous loss of human and animal life in many countries and also catastrophic physical, economic and infrastructural damage. Pereira et al on analyzing the OTD/LIS lightning flash data during 1998-2009 observed an increasing trend in lightning activity globally and a similar trend was also observed in the Indian subcontinent¹. More than 20000 people are affected by lightning every year and the number injured or undergone psychological trauma would be much higher². Can we find the lightning casualty figures and damage details in any of the global disaster data sets? Have we considered lightning as a natural hazard? How far have we succeeded in implementing lightning risk reduction measures? To the best of the author's knowledge, there is no global database or platform systematically documenting lightning fatalities and economic damage. International databases like EM-DAT and Desinventar have not even categorized lightning under natural calamities. The criteria set forth by such data bases consider the fatality and damage figures resulting from stand-alone incidents whereas lightning impact is an outcome of multiple incidents over a wide geographical area. Proper documentation of sporadic lightning incidents in many of the countries will reveal that lightning casualty is several fold higher than that due to other conventional disasters. For example, in India, analysis of 45 years of natural calamity data discloses that lightning is the most damaging natural disaster in the country vis-à-vis loss of lives. The average annual mortality between 1967 and 2012 due to lightning is 1775 whereas it is 795 for flood, 670 for landslide, 573 for cold stroke and 673 for heat stroke³.

Even though lightning fatality figures are high, lightning has not received due importance, thereby making it an underestimated disaster or persona non grata amongst disasters³. Several standards have been recommended for the installation of lightning protection structures at national and international level. But the safety aspects at the grass roots level are yet to be communicated in most of the tropical countries. South Asian Lightning Awareness Program (SALAP) implemented in Sri Lanka, Bangladesh and Bhutan is an exemption. Appreciable efforts were undertaken by a group of research and scientific institutions in these countries in conducting lightning awareness programmes for the general public, students, engineering community and researchers. Public awareness about the do's and don'ts during thunder and lightning, lightning protective measures etc should be promoted through mass campaigns. Realizing the gravity of the problem, national and internal policy interventions are required to treat lightning under the umbrella of disaster risk reduction and proper risk reduction measures are to be derived for the vulnerable communities. — Faisel T. Illiyas, Assistant Professor, Institute of Land and Disaster Management, Thiruvananthapuram, Kerala

**DISASTER MANAGEMENT**

## Role of State Disaster Management Authorities in India

Disaster is a curse for any nation. It also pushes any nation, in quest for progress, back by several decades. Thus, for a developing country like India, where population exploration is a burning issue, saving those population is also a big challenge. If we observed very consciously in recent time, the frequency and intensity of disasters are increasing day by day. It’s from coastal Tsunami to Mountainous Landslides, desert drought to seismic earthquake. In this condition common people demanding good governance, it is very important to deal very effectively with the devastating impact of disasters.

According to the Disaster Management Act, 2005, (23 December 2005), all State Governments are mandated under Section 14 of the act to establish a State Disaster Management Authority (SDMA). The SDMA consists of the Chief Minister of the State, who is the Chairperson, including eight members appointed by the Chief Minister of the State Executive Committee (Section 22). It will, inter alia approve the State Plan in accordance with the guidelines laid down by the NDMA, coordinate the implementation of the State Plan, recommend provision of funds for mitigation and preparedness measures and review the developmental plans of the different departments of the State to ensure integration of prevention, preparedness and mitigation measures (NDMA / NPDM, India 2012).

There are some common roles and responsibilities of SDMA in India:

- Lay down policies on disaster management which is approved by NDMA.
- Approve the National Plan and implement the plans properly.
- Follow the guidelines of NDMA by the State Authorities in drawing up any State Plan.
- Lay down guidelines to be followed by the different Ministries or Departments of the Government of India for the Purpose of integrating the measures for prevention of disaster or the mitigation of its effects in their development plans and projects.
- Coordinate the enforcement and implementation of the policy and plans for disaster management and also recommend provision of funds for the purpose of mitigation with proper excuse.
- Take such other measures for the prevention of disaster, or the mitigation, or preparedness and preparedness.
capacity building for dealing with threatening disaster situations or disasters as it may consider necessary.

(Source: www.ndma.gov.in)

As it is known to every Indian now in the budget of 2014 the Government of India is very much focusing on using Geo–Spatial technologies. Total railway network will be digitized, as it was proposed in the rail budget, 2014. Geo–Spatial technologies are incredibly very useful and effective tools in disaster management if we use this technology in a proper scientific way. During the disaster prevention stage and post–disaster scenario, RS & GIS is very useful in managing the total disaster situation and also helpful for vulnerability and risk assessment. This technology can play a vital role at National level, State level to village and individual level for disaster mitigation, measurement, prediction, preparedness even up–to rescue point view. But it should need more capacity building training programmes provided by central and state government not only to the professionals but also for the grass–root people who will be fighting with disasters at the initial stage. Capacity development programme in any state includes:

- Maximum programmes in each and every districts connecting more number of people.
- People awareness propaganda through media and also making the common people aware about implementing geo–spatial technology in disaster management and emergency preparedness.
- Prime institutes of the state should take care about it.

So, these should be some basic roles of SDMA in using geo-spatial technologies in DM. □

– Subhajit Bandopadhyay, Indian Institute of Remote Sensing (IIRS) Indian Space Research Organization (ISRO) Dehradun, India

Reference:


Sharma A K & Joshi V., Use of remote sensing and GIS in disaster management in Gangtok area, Sikkim.

Web References:

www.ndma.gov.in
http://www.geospatialworld.net/
http://www.slideshare.net/
http://www.sciencedirect.com/

The Challenges of Reducing Risk in the Pacific

Though reducing risks from natural disasters is a universal goal it unfolds in different regions with different challenges. The Pacific region offers a peculiar range of challenges to reduce risks. The four of them are as follows:

- Scattered data and evidence on regional and international efforts made to reduce risks in the region is a challenge. Evidence is not available to shape policy or projects. Though a few database and initiatives exist, far more work is needed in this direction. Since 2005 Southasiadisasters.net has published 100 issues on Disaster Risk Reduction (DRR) by over 345 authors belonging to 188 organisations. But data or case study on the pacific was always most difficult to find.
- Limited economic upswing at local level for DRR action is another challenge for finding economic support for local DRR initiatives by the communities and businesses. Economy is stable, and distinct from global upswings. Accelerated economic growth is yet to spread in the region. And without economic growth, public money to invest in DRR is scarce in the pacific.
- Due to distances-physical and socio economic-transparency and accountability of the DRR initiatives is not easy to realize. Monitoring projects is costly. Site visits are difficult. Use of new technologies is possible but only where the technology is available and accessible.
- Some thinking on ecosystem based disaster risk reduction in the pacific has started. But this initial thinking needs far more action-learning in the region to come up with workable Pacific region wide initiatives. The work of IUCN on Ganga, Brahmaputra, and Meghan (GBM) delta in Bay of Bengal may offer one way to address this challenge.

The above four challenges have shaped the performance of Hyogo Framework for Action (HFA) in the region over past years and will also shape the HFA2 that is coming years. □

– Mihir R. Bhatt
You’re in Sri Lanka, and a tsunami has turned a beautiful day into utter devastation. Everywhere there are ill people, injured people; distraught people: you’re worried about epidemics of cholera, measles and the risks of malnutrition. You know that some interventions will be better than others in this situation, and that some that sound plausible may actually be harmful. You need a way to tell them apart – What do you do?

Hundreds of millions of dollars are spent each year on disaster relief and humanitarian aid with the intention of improving the lives of those affected and reducing the impact. Experience in health care has shown us that no matter how good the intentions some interventions are useless or even harmful. Interventions that are not based on evidence can waste vast resources and hinder effective approaches that would speed up recovery and improve health outcomes.

There is increasing recognition that the choices we make in our lives and work should be based on reliable and robust evidence. In the case of interventions and actions, evidence about the effects of the interventions need to considered. Reliable and robust evidence will help decision makers to know which interventions work, which don't work and which remain unproven. And, for those interventions that work, evidence shows how effective they are, so that they can choose the most appropriate and effective intervention in a specific circumstance.

One of Evidence Aid’s first successes was to inform psychiatrists and psychotherapists responding to the Indian Ocean tsunami that counselors should not use ‘brief debriefing’ (a single-session counselling service designed to prevent psychological trauma) as a means of preventing PTSD, given Cochrane Review evidence that this intervention is not effective, and, if anything, might be harmful. This decision not only led to better health for the affected population but also saved resources that were used in the deployment of more effective interventions.

When it comes to identifying robust findings of research to identify effective interventions and actions, the evidence should come from systematic reviews of all similar studies. This avoids undue emphasis on the findings of single studies, minimises bias, maximises the power of existing research and makes best use of the investment in that research. This should be no different for disasters and other humanitarian emergencies.

Evidence Aid is seeking to provide the evidence base for people involved in disaster risk reduction, planning, recovery and response. It is a co-ordinated, international initiative to provide effective and timely access to systematic reviews of relevance to disasters and other humanitarian emergencies. It was established after the Indian Ocean tsunami of 26 December 2004, by members of The Cochrane Collaboration, the world’s largest organisation dedicated to the preparation, maintenance and dissemination of systematic reviews of healthcare interventions. It has grown since then to include partnerships with many different types of organisations (e.g. aid agencies, government departments, non government organisations, and
Evidence Aid’s work encompasses three main areas of activity:

1. Providing an urgent response to the evidence needs that arise during and immediately after a natural disaster or humanitarian emergency.

2. Developing context-specific resources for the evidence needs that arise during the subsequent weeks and months following a disaster.

3. Gathering information about the need for evidence and ensuring up-to-date systematic reviews of relevant research take place.

Since Evidence Aid was established, nearly 1.6 billion people have been affected by disasters globally, with the estimated total cost of damages totalling over $1.3 trillion (USD) for the same period (2005-2013).1

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1 The Centre for Research on the Epidemiology of Disasters (CRED), which maintains The EMDAT (Emergency Events Database). http://www.cred.be/

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In June 2013, ALNAP launched its Evaluation of Humanitarian Action Guide (EHA Guide). This Guide supports evaluation specialists and non-specialists in every stage of an evaluation of humanitarian action, from initial decision to final dissemination. Freely available, it has an interactive format making it easy to navigate and use. It includes the latest examples, methods, tips, key questions and definitions to help agencies better commission, manage or complete evaluations. The Guide can be downloaded here: www.alnap.org/eha.

**The Pilot Process**

The EHA pilot Guide, co-authored by John Cosgrave and Margie Buchanan-Smith, benefitted from the inputs and steer of an inter-agency advisory group that brought together evaluators and programme staff from donor agencies, INGOs, the Red Cross Movement, UN agencies, and academics.

However, we also realised that in order for the Guide to be more practical and utilisation-focused, we also needed to incorporate inputs from users - starting with evaluators and M&E staff from within the ALNAP Network.

This is why ALNAP also launched an 18-month, pilot and feedback process to further strengthen the utilisation focus of the Guide and make it even more relevant for field-based practitioners. The pilot will conclude in December 2014. Little feedback has been shared by organisations based in Asia.

**How to give feedback and on what:**

The Guide can be piloted in a variety of EHA activities including: managing complete evaluations; carrying out single process steps as part of a larger evaluation; facilitating EHA training or capacity building, or developing guidance materials. We wish to know what users like, dislike, what was missed and what could be elaborated.

There are many ways to provide feedback. We recommend the use of the confidential feedback buttons at the bottom of every page of the Guide. However, ALNAP is also reaching out to users to capture feedback over the phone and email. If you would like more information, please send an email to eha@alnap.org.

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- **Alexandra Warner,**
  Researcher Evaluation, Learning and Accountability, ALNAP, UK
The size of the student population in India is the second largest in the world, with 24.6% of its population in the age group of 5 to 14 years. A vast section of the 25.3 crore children in that age group use one of these means of daily commute – buses, omni-vans, tri-wheelers and rickshaws. The demographics are very similar in other SAARC countries.

With such a massive section of school going population left vulnerable due to unpredictability of our roads, rivers, railway crossings etc. it is our responsibility to ensure their safe commute to and from their schools on a daily basis. With recent incidents of natural disasters that left students marooned in their schools – like the floods and Mumbai, and the more recent man-made floods in Himachal Pradesh that claimed lives of numerous students – the parents are increasingly seeking more visibility about the safety of their children from the schools.

It is unfortunate that during such disasters end up losing more lives because our rescue and salvage teams are unable to locate the disaster site within the crucial first 30 minutes of the disaster striking. In this age of omnipresent mobile waves and devices, it is natural to expect real-time data on students’ locations, status, etc. so that the stakeholders (school authorities, rescue teams and parents) are able to quickly locate the last location of the disaster and respond to it instead of losing valuable time trying to locate the address.

With the increasing mobile coverage in developing economies of the SAARC countries and with the power of smart-phones, such real-time tracking solutions no longer require any investment from schools. With solutions like the one provided by Bus-i.com, school buses can be tracked if the schools provide a low cost smart-phone to the driver or attendant. The completely self-service nature of such solutions means there is no human interface whatsoever from installation to usage, hence even low cost schools can install it on their phones at absolutely no cost.

Such low cost GPS solutions automatically raise the level of safety and security for students using school buses, and in the unfortunate event of an accident or a fire, rescue personnel can immediately head to the right location by seeing the last bus location on the map. It also gives parents and guardians complete visibility about the location of the school buses as it arrives at their nearest stop. They can view the location of their children on their mobiles, so there are no anxious moments waiting at the bus stops or making calls to the school.

This is not just an improvement in safety and disaster management, but also an overall improvement in transparency with information sharing about the current bus location, the time at the last stop, running delays and distance from the next stop being made public. Additionally, there is a potential to add premium features like in-bus webcam, speeding alarms, detour warnings, starting and termination alarms, delay notifications, and general broadcast messages from schools for traffic bottlenecks, planned changes to bus number, timings, routes etc.

The absence of human interface means that the solution is unconditionally and forever free for non-profit schools that cater to the poor and the under-privileged. This is a disruptive change in the area of GPS based tracking solutions, and will be a positive change in the way our schools view child safety and security.

– Praveen Gupta, Founding Partner at Bus-i.com, Hyderabad Area, India

1 Census of India – Age Structure and Demographics http://censusindia.gov.in/Census_And_You/age_structure_and_marital_status.aspx
2 Record rainfall brings chaos in India http://www.theguardian.com/world/2005/jul/28/india.randeepramesh
3 24 Hyderabad students washed away in Himachal Pradesh, five bodies recovered http://indiatoday.intoday.in/story/hyderabad-students-feared-drowned-himachal-pradesh-dam-water-release/1/365983.html
4 Bus-i.com | School Bus Tracking on GPS | http://www.bus-i.com/
Enabling Local Level Action for DRR

Asian Disaster Reduction and Response Network (ADRRN) is a network of national and local civil society organizations working to enhance disaster resilience of communities affected by disasters and climate change in Asia. There are 48 members from 19 Asian countries covering South Asia, South East Asia and the Pacific. ADRRN works very closely with various national governments, regional UN agencies and other important stakeholders including communities at risk in the field of disaster response, risk reduction and climate change adaptation.

Current development and growth models practiced in the region have created new vulnerabilities especially for populations living in fragile areas with meager resources. Against this backdrop, most of the disasters are in fact the collateral damage of pursued growth–driven development approaches.

Hence, any future framework for ensuring risk prevention, reduction and management demands stronger community — local government partnerships for improving both the relevance and effectiveness of development policies and programmes. Engaging citizens directly will allow them to get fully acquainted with the process and report on local challenges and opportunities for disaster risk reduction. Participatory spaces should be provided to citizens with adequate legal support, transparency and an inclusive approach thereby ensuring mutual accountability in local DRR interventions.

In a community resilience survey carried out by ADRRN member organizations in 8 countries in 2013, it was found that... Hydro-meteorological disasters such as floods and cyclones are on the rise. The survey revealed that the rise in disasters has led to an increase in health problems and mental stress, and loss of livelihoods among the people affected. In fact, 27 per cent of the interviewed communities shared that in order to deal with daily shocks and stresses; they were forced to seek financial assistance from families and friends. Twenty-nine per cent of communities blamed (their hardships on) the lack of required skills and awareness for...
understanding and responding to disasters. Communities confirmed that acquiring training to deal with disasters could minimize their losses. The maximum percentage (44 per cent) of the respondents stated that losses from disasters could be reduced through a joint partnership between the government and communities for Disaster Risk Reduction (DRR) interventions. Most of the respondents (57 per cent) stated that citizen-led groups and volunteers could be locally mobilized to strengthen DRR.

Overall, 80 per cent of the respondents said that investing in DRR would lead to reduction of losses. However, the survey revealed that lack of in-depth training and/or information prevented integration of DRR into development works. Only 42 per cent of the respondents admitted that they are able to approach local government to address their problems and most respondents admitted they were unaware of any government programs aimed at reducing disaster risks. The lack of information and clarity of the role of government officials were stated as the main hurdles in gaining support from the local government. The findings of the survey also reveal that only 15 per cent of women actively participate and are included in the decision-making process, and participation of private sector in DRR has been negligible, so far.1

Thus, institutionalizing community-level DRM with local self-government planning is imperative. Where no formal structures yet exist, it can be catalyzed through local Disaster Management Committees that engage with their counterparts in the formal governance structures. DRM should be recognized as a key driver for local sustainable development and poverty reduction. Further demarcated budgets and clearly stated roles and responsibilities would ensure accountability, transparency and an understanding on DRR.2

The local communities along with local governments need to be actively involved and engaged in the identification, analysis and management of risks that would build understanding on local vulnerabilities and also strengthen capacities to reduce their impacts. Leadership is critical for any local level action towards DRR. Along with leaders, trained local citizen volunteers are the first people to respond to the immediate needs of the community when disasters hit. Governments need to realize the active involvement of volunteers to support governments and local communities with their disaster prevention and preparedness efforts. Women often get left out of formal mechanisms, therefore specific focus and special actions need to be designed to enhance potential leadership role to be played by women.3 Pro-active engagement with youth groups, women, and marginalized sections need to be enabled as a long term investment in strengthening social and local community structures.

The Bangkok declaration of the 6th AMCDRR reaffirms the importance of local level action. It states: that there is a need to encourage the institutionalization of integrated community resilience approaches into local development planning; promote comprehensive school safety; promote disaster resilient villages to serve as a strong basis for creating community based disaster risk reduction at the local level; promote inclusion and volunteer/community-based networks; strengthen the role of women as leaders in local level resilience building; develop community-local government and private sector partnerships and accountability, giving attention to meaningful participation and positive contribution of at-risk groups such as children and youth, the older persons, persons with disabilities, as well as other disadvantaged groups. Take advantage of traditional knowledge and communication scientific information in simple, accessible and understandable manner. Encourage the development of and the enforcement of laws and regulation to reduce exposure to risk. Recognizing the role of ecosystem based DRR and integrating livelihood resilience and natural resource management as a holistic approach to disaster resilient communities especially in coastal and mountain areas.4

ADRRN would continue in its efforts to strongly advocate recognition and strong endorsement of local level action towards DRR in the new framework for DRR to be declared in 2015. We would like to see a shift in communities from being passive observers to active and equal stakeholders in building safer and resilient future. — Manu Gupta, Chairperson, ADRRN

References:
ADRRN, UNISDR; Asia Pacific Input Document for the post-2015 framework for Disaster Risk Reduction (HFA2), Key area 6, Strengthening Risk Governance and Accountability.
ADRRN, UNISDR; Asia Pacific Input Document for the post-2015 framework for Disaster Risk Reduction (HFA2), Key area 3, Local Level Action Towards Disaster Risk Reduction.

1 Community Resilience Survey 2013, ADRRN.
2 Report of the Two-day workshop organized by the National Disaster Management Agency (NDMA) for the Media and security services including the private security on Disaster Risk Reduction (DRR).
4 Bangkok Declaration on Disaster Risk Reduction in Asia and the Pacific 2014.
CASE STUDY

Make Galle Disaster Free City

The city of Galle is located in southern Sri Lanka. Galle City spread within 16 square kilometers and consists of a natural harbor and a beautiful Dutch fort which are symbols of the city’s identity. Ten years after the devastation caused by the Indian Ocean Tsunami, the city of Galle has made considerable progress in ensuring the resilience of its citizens and heritage to any future disasters. Some of these initiatives are discussed below:

Redeveloping Community Mind
To get people out of the trauma and grief of the Tsunami, cleanup programs were started to help share ideas with each other in return for small amounts of money for working. This provided motivation to the affected people. Through this program, donations were collected which helped in rebuilding what the community had lost but the community didn’t stop at that level. People decided to collect 50% from to establish a revolving fund. This revolving fund was used to disburse loans and to redevelop villages and underdeveloped urban areas. Today, this fund is employed in many different ways. For instance, during emergencies such as floods, this fund helped proved very valuable to the community. Today they are registered under co-operative act of the country and have expanded their services under the name HOLDE Women’s Co-op.

Inter Village’s Community Exchange Program
With involvement of USAID and Young Asia Television the inter village’s community exchange program was launched. Usually it organized Road Show programs showing videos about how other village folk overcame Tsunami challenges without dependency. It also facilitated discussion among people and encouraged them to share their ideas about coping mechanisms.

Disaster Monitoring Committee
The Galle Municipal Authority facilitated the formation of a disaster monitoring committee. This committee implemented various disaster monitoring concepts and made a city plan. It planted trees in coastal belt of city. We could plant more than 100 trees in city. This committee was a collaboration between government and private players and showed how public private partnerships can be successful.

Control the Tunnel Drains of Galle Fort and City
Galle fort is one of the defining symbols of the identity of Galle as a city. There was a tunnel drain system in Galle fort to remove the water of the Fort which was built by the Dutch. After the Tsunami this tunnel was damaged resulting in widespread flooding. The Galle Municipal Council repaired it. This drain system was connected to the Galle city drain system to prevent flooding.

Establishment of a Beach Park
After the Tsunami, sea erosion had increased considerably. There was an urgent need to taken an immediate action. Thus, the Urban Development Authority, Galle Municipal Council has been design the beach park and named it ‘Marin Walk’ this beach park spreads across Galle. It covers the coastal belt of the city and has established a solar lighting system also. The first phase of this beach park has already been handed over to the citizens and second step has been finished almost 80%. Today people can walk through this “Marin Walk” and sea erosion has been stopped.

Awareness Programs
Even today the Disaster Management Centre implements awareness programs to prepare the people to face a disaster. Under this program, they provided a bag to put most necessary documents on a bag if faced with a disaster leave the house with that bag. This was done in the wake of people losing important documents like birth certificates, identity cards, etc. in the aftermath of the Tsunami.

– Pradeep Ehan and Darshana Maduranga,
E.C. Holdings, Sri Lanka

with special thank to Mr. Methsiri De Silva, Mayor, Galle
Introduction

The Northeastern region of India comprises the frontier states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. The region has a history which is unique, varied and extremely complex. The extensive international borders (the region shares frontiers with Bangladesh, Bhutan, China and Myanmar) also make this vast region extremely crucial to India’s geopolitical strategies vis-à-vis these countries.

The region has witnessed numerous insurgent movements that have engaged in armed action for a variety of political goals ranging from full independence to limited autonomy. The occurrence of armed violence is also accompanied by a high level of political instability arising out of a fractured ethnic landscape. The underlying competition for access (and control) over land resources by specific identity groups, the struggle for control over political institutions and a multiplicity of overlapping political claims makes the task of deciphering the politics of the Northeastern region extremely difficult.

At the same time the recurrence of forced internal displacement due to ethnic violence and the nature of the response by the humanitarian sector in India raises several questions in terms of the nature of preparedness, the designing of appropriate response mechanisms, the need for quality and accountability (both external and internal) and the capacity of the sector to operate in volatile settings.

The Kokrajhar crisis of 2012 (which can be argued is still ongoing) was the largest instance of forced displacement in India’s post-colonial history. Whereas explaining the politics that led to the onset of violence between Bodos and Muslims in the broader Bodo Territorial Autonomous Districts (BTAD) region in 2012 is beyond the scope of the article, it would be a critical exercise to examine some of the learnings that emanated from the crisis.

The article thus presents key findings and observations from a long-term research study being conducted since the onset of the crisis in order to encourage critical debate, self-reflection and discussion on mainstreaming response to the aftermath conflict (whether ethnic or religious); and, placing complex emergencies on the agenda for humanitarian organizations. The central argument being put forward is that protracted complex emergency situations, by their very nature, reveal both inter and intra organizational limitations which require serious systematic research. In fact by excluding contextually appropriate peace building strategies from the humanitarian response and without paying adequate attention to the post-emergency phase, actually adds to the pre-existing burdens on the affected population.

Contours of the Crisis
At the peak of the crisis in September 2012 there were 485921 persons displaced and who were residing in approximately 220 “formal” relief camps. These camps were ethnically segregated with Bodos and Muslims residing separately. A need to contextualize this is required in terms of scale. According to the United Nations High Commission for Refugees (UNHCR) the total number of "persons of concern" (refugees and IDPs) after 26 years of full-fledged war in Sri Lanka was 223055.4 Another hidden crisis which had serious consequences for the internally displaced persons (IDPs) was the destruction of habitat. In a sample sub-division alone 6268 houses were fully destroyed while 1001 were partially destroyed. The burning of houses occurred especially in Kokrajhar and Chirang districts with figures on total number of houses being unavailable.

Findings from the Field Study: Limits to Humanitarianism

Framing an Emergency
- There emerged a clear distinction between the types of relief operations conducted by locally based NGOs (of varying scale) and those conducted by larger organizations from outside.
- The most critical aspect of the latter’s functioning was the focus on large scale relief camp management and treating IDPs as victims of natural disasters, when the context was completely different.
- Another point of contestation was the central assumption that once the government set the date for return from camps, the emergency phase was over; thus, leading to the overlooking of the fate of the IDPs when they returned to villages that were destroyed.
- The framework of response (which was shaped by disaster response thinking) also led to the absence of systematic community based conflict transformation programming, peace building and long-term psychosocial care, despite the fact that humanitarian organizations were in a position to innovate and go beyond stated mandates.

Restricted Information Flows
- The crisis also showed the lack of information sharing between humanitarian organizations. While the government itself provided useful baseline data, there was no common platform for sharing of updated information among the few humanitarian organizations that were present.
- This also meant there was no updated conflict event reporting, no risk analysis and no independent verification of the numbers of people displaced (or the locations to where they were moving).

What HDR 2014 means for HFA2

What do the findings of 2014 Human Development Report (HDR 2014) mean for HFA2 process? All India Disaster Mitigation Institute (AIDMI) is working on finding areas for action in India. AIDMI is drawing from its work on water and sanitation services; cash transfer and social protection; and full employment or livelihoods for disaster victims in Uttarakhand and Odisha. A review of tsunami areas is also being conducted. For details contact bestteam@aidmi.org. 

- Mihir R. Bhatt

AIDMI’s Contribution to HFA2 Process

Advocacy

- AIDMI Submission to Margareta Wahlstrom, ISDR on Contributions to HFA during 2013

- Briefing Note: Submission to The Civil Society Dialogue with The High-Level Panel on The Post-2015 Development Agenda

- Discussion Note for the Global Thematic Consultation on Disaster Risk Reduction and the Post-2015 Development Agenda: Agenda for the Asia-Pacific

Experience Learning Series

- From Bangkok to Geneva: Donor Agenda for HFA2


AIDMI submitted a case study on participation of women teachers and their roles in building disaster resilient schools under the project "Pilot school disaster Management Plan" through model school approach. The case study was selected as one of the best and reflected in a HFA2 Key Area 4 paper by Duryog Nivaran.