



GSDMA Newsletter

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Heartiest Greetings to all the readers with this second volume of the Newsletter.

Communities have limited resources to cope up with disasters. Microinsurance is emerging as an important tool for community to overcome the impact of disasters. This volume highlights the importance of microinsurance for building disaster resilient communities.

There are two proactive actions which GSDMA has taken for enhancing the preparedness of the State. One is the preparation of the State Disaster Management Plan for effective coordination during disaster and second is the launching of a new project 'Hospital Fire Safety Decision Support System' which will help in taking instant decision during hospital emergency.

In addition to this many capacity building programmes have continuously been conducted at district level as a part of the risk management programme.

I trust that this volume will update you on the current activities of GSDMA. I welcome your valuable feedback for our newsletter.

- R. Bannerji
(CEO-GSDMA)

EMERGING DIMENSIONS IN DISASTER MANAGEMENT

Towards a Demand - Driven Microinsurance Ecosystem for Building Disaster Resilience

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Communities and individuals draw from and rely on a diversity of capacities and resources to respond to, cope with and recover from a disaster. Increasing uncertainties associated with a changing climate and its impact on the frequency and intensity on many of the weather-related hazards have severely impacted these capacities because of limited access to and benefit from these resources. Various approaches have been designed and adopted to build and strengthen the capacities of communities to tide over such uncertainties and crises and subsequently rebuild their lives and livelihoods. Among such initiatives and innovations, microinsurance has emerged as one of the most effective and efficient market-linked risk transfer instrument that facilitates poor and vulnerable people's access to much-required cash in the immediate aftermath of a disaster. Realizing the potential of microinsurance in the context of vulnerability reduction and resilience building governments, businesses and international agencies have forged long term partnerships to ensure its reach among and benefit to the most vulnerable.

**Views expressed are those of the author and don't reflect that of Concern Worldwide or any of its programmes. This article draws on the Microinsurance Scoping Study undertaken by the author as part of the European Commission Humanitarian Aid & Civil Protection (ECHO) supported disaster preparedness (DIPECHO) project on Building Disaster Resilience of Vulnerable Communities in Odisha and West Bengal, India.*

While the growth and penetration of microinsurance has increased in recent times in India, there is a need to further strengthen and enrich this through establishing and institutionalizing a demand-driven microinsurance ecosystem which involves multi-level partnerships among various stakeholders and policies at various levels of governance.

Insurance in an Emerging Risk Context

Accumulating evidences categorically highlight the increasing trend in the intensity and frequency of natural hazards all across the world and this is categorically reflected in the economic losses which afflict nations and communities.

This increasing trend has put lives and livelihoods of many communities and life-supporting infrastructure and economics of nations at risk. Of primary concern is the spatio-temporal distribution and differential impacts of these risks across nations and societies. Existing socio-economic and political inequalities and vulnerabilities increase the risk many fold. It is the poor and marginalized in society who suffers the most because of lack of accessibility to and returns from productive asset base and resource entitlements.

Based on empirical evidences and robust analyses of four components of exposure, susceptibility,

coping and adaptation at the country levels, the World Risk Report (2011) concludes that 'disasters are not solely due to meteorological or geological

preparedness and mitigation measures of individuals, communities, businesses and nation states. According to a recent Swiss Re report much

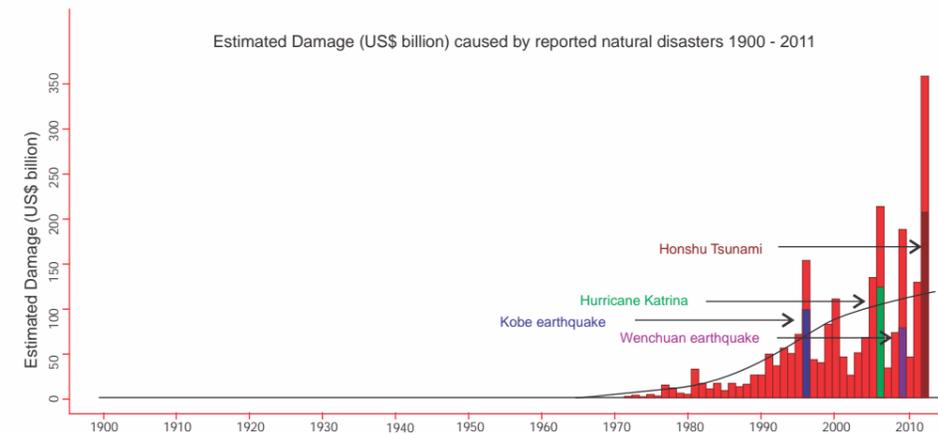


Figure 1:
Estimated damage (US \$ billion) caused
by reported natural disasters 1900-2011,
Source: EM-DAT

phenomena, but are also caused by social structures and processes within a society¹. And this reality is further corroborated by the findings of the 2012 Global Risk Index prepared by the World Economic Forum which categorically highlights a shift from environmental risks in 2011 to socio-economic risks in 2012. 'Major systematic financial failure' ranks first in the top five global risks identified in terms of impact².

2011 was the costliest year in history in terms of natural-catastrophes related economic losses. Estimates by the global reinsurance major Swiss Re put these losses at USD 350 billion, compared to USD 226 billion in 2010³. More importantly, 70% of economic losses in 2011 occurred in Asia only. 2011 was also the most expensive year for insurers who incurred massive insured catastrophe losses to the tune of approximately USD 108 billion, second only to 2005 (USD 123 billion). Munich Re estimates that around 27,000 people fell victim to natural catastrophes in 2011 (Table 01) and this figure does not include the countless people who died as a result of the famine following the worst drought in decades on the Horn of Africa, which was the greatest humanitarian catastrophe of the year⁴.

Insurance has emerged as one of the most prudent and efficient risk financing instrument which complements all other risk reduction,

of the world still remains underinsured, mostly to earthquake risk, and this is primarily due to lack of risk awareness. While insurance is not the silver bullet but "appropriate insurance and other risk transfer mechanisms can greatly accelerate the recovery process."⁵ The extent of natural disasters related economic losses in India has significantly gone up in recent past (Table 02)⁶. It is in this emerging risk landscape the role of and innovation around insurance is absolutely critical⁷.

Realizing the urgency for a global and concerted effort to understand and address some of these issues in an emerging risk context, world leaders unanimously agreed at the United Nations General Assembly (A/RES/44/236, 85th plenary meeting, 22 December 1989) to declare the International Decade for Natural Disaster Reduction (IDNDR, 1990-2010)⁸. This initiated the emergence of a variety of institutional innovations including major policy decisions by governments to include and integrate disaster reduction as one of the key development goals and ensure affirmative actions through adequate financial investment in these measures. The Yokohama Strategy and Plan of Action for a Safer World, the main outcome of the mid-term review of the International Decade of Natural Disaster Reduction was adopted at the World Conference on Natural Disaster Reduction

Table 01: Natural catastrophes in 2011

| | The figures of the year 2011 | The figures of the year 2010 | Average of the last 10 years 2001-2010 | Average of the last 30 years 1981-2010 |
|--|------------------------------|------------------------------|--|--|
| Number of events | 820 | 970 | 790 | 630 |
| Overall losses in US\$ m (Original values) | 380,000 | 152,000 | 113,000 | 75,000 |
| Insured losses in US\$ m (Original values) | 105,000 | 42,000 | 35,000 | 19,000 |
| Fatalities | 27,000 | 296,000 | 106,000 | 69,000 |

Source: Munich Re NatCatSERVICE

in May 1994 (Yokohama, Japan) and it served as a blueprint in the field of disaster reduction. Based on the findings of the review of the implementation of this plan of action, the United Nations General Assembly resolved (through resolution A/RES/58/214 on 23 December 2003) to organize the World Conference on Disaster Reduction (WCDR, 2005) as a milestone event to increase the profile of disaster risk reduction in development planning and practice⁹.

The key outcome of this effort, which took place just a few weeks after the 2004 Indian Ocean

Tsunami, was the Hyogo Framework of Action (HFA, 2005-2015: Building the Resilience of Communities and Nations to Disasters). The HFA, being adopted by member states, outlines five priorities for action, and offers guiding principles and practical means for achieving disaster resilience. Concerted efforts of various stakeholders have been instrumental in ensuring substantial progress being made towards the Strategic Goals.

Microinsurance: At the Interface of Poverty and Vulnerability

Poverty and vulnerability reinforce each other in an escalating downward spiral (Churchill, 2006) and any hazard, natural or otherwise, differentially impacts the poor and low-income. Underlying the very genesis and growth of the entire discourse around microinsurance is the aim of protecting these poor and low-income people.

Different kinds of risks faced by the poor could be as idiosyncratic, which are specific to the household (health events, life cycle events like marriage and death, enterprise risk) and covariate or systemic which is common like drought, epidemic, crop failure and price fluctuations. Most of the pro-active risk management strategies (ex-ante and ex-post) of the poor like grain storage, savings, asset accumulation etc., have not been adequate and appropriate amidst in an emerging risk context and they have limited access to formal risk solutions (Table 03).

Microinsurance is “the protection of low-income people against specific perils in exchange

Table 02: Top 10 Natural Disasters in India for the period 1900 to 2012 sorted by economic damage costs

| Disaster | Date | Damage (000 US\$) |
|-------------------------------|------------|-------------------|
| Flood | 08/07/1993 | 7000000 |
| Flood | 28/07/2006 | 3390000 |
| Flood | 24/07/2005 | 3330000 |
| Earthquake (seismic activity) | 26/01/2001 | 2623000 |
| Storm | 28/10/1999 | 2500000 |
| Flood | 20/06/2004 | 2500000 |
| Flood | 28/06/2005 | 2300000 |
| Storm | 25/08/1990 | 2200000 |
| Flood | 25/09/2009 | 2150000 |
| Flood | 18/09/2010 | 1680000 |

Source: “EM-DAT: The OFDA/CRED International Disaster Database

Table 03: Strategies to cope with key risks and shocks faced by low-income families

| | Ex-ante measures | Risk/Shocks | Ex-post measures |
|----------|--|---|--|
| Informal | <ul style="list-style-type: none"> • Savings • Informal community schemes/associations | <ul style="list-style-type: none"> • Health • Lifecycle • Financial • Disasters | <ul style="list-style-type: none"> • Support from family/friends/community • Emergency loan • Sale of assets/property |
| Formal | <ul style="list-style-type: none"> • (Micro) insurance • Social Protection schemes including preventive healthcare | | <ul style="list-style-type: none"> • Public medical care • Loans from MFIs/mutual/cooperatives • Relief funds/support from governments, NGOs and development agencies |

Source : Swiss Re Economic Research & Consulting: Cohen, Monique and Pamela Young, Using Microinsurance and Financial Education to Protect and Accumulate Assets – Reducing Global Poverty: The Case for Asset Accumulation, The Brookings Foundation, Spring 2007.

for premium payments proportionate to the likelihood and cost of the risk involved” (CGAP, 2003). While the whole notion of insurance and protection in this definition remains similar to that of any mainstream insurance, according to Churchill (2006) the three words 'low-income people' makes a big difference.

While social protection remains the key underlying principle of microinsurance, it also offers adequate opportunities for responsible and equitable business opportunities of a “new market” which would help access the Fortune at the Bottom of the Pyramid (Prahalad, 2005). Because of these dual opportunities through microinsurance, it has been aptly compared to Janus, the Roman god with two faces and one body (Churchill, 2006). According to the United Nations Development Programme (UNDP, 2007) commissioned study 'Building Security for the Poor - Potential and Prospects for Microinsurance in India' 13 around 90% of the Indian population - some 950 million people - are not covered by insurance and this untapped market is worth US\$2 billion. Among others, the report highlighted the need to address the demand-supply gaps and appropriate products and pricing through need-

based product customization and diversification. The private sector could substantially contribute in terms of meeting these unmet insurance needs of the communities through innovation at the bottom-of-the-pyramid (BOP). Of the nine key sectors identified as part of opportunities for the private sectors in the Urban Climate Change Resilience Building (UCCRB), microinsurance tops the list (Intellectap, 2011)¹⁰.

Benefits of Microinsurance:

Microinsurance is a powerful tool for:

- ▶ Protecting the poor and their assets from negative external shocks;
- ▶ Compensating the effects of covariate shocks (e.g., natural disasters);
- ▶ Addressing gender-specific vulnerabilities;
- ▶ Freeing up household capital for investment in small enterprise;
- ▶ Helping households avoid poverty traps; and
- ▶ Expanding informal insurance schemes and social protection.

Limitations of Microinsurance¹²:

- ▶ Improperly designed insurance contracts (that do not reward risk-reducing behavior) can also

- lead to "moral hazard";
- ▶ High risk of insurer insolvency and defaults on claims in the case of large or repeated catastrophes;
- ▶ Issues of responsibility and accountability (based on Polluter Pays Principles); and
- ▶ Influence and impact of market on social fabric of kinship and cohesion in traditional societies.

Microinsurance in India

India with a total population of 1.29 billion is the second most populated country in the world (Census of India, 2011), more than 37% of which are Below Poverty Line (BPL). As per the recent Multidimensional Poverty Index (MPI) around 55 % India's population, which translates to a whopping 645 million, is poor. More than 70% of its population is dependent on agriculture, one of the climate-sensitive and hence most at-risk productive livelihood bases. The country and its communities have endured significant losses because of natural disasters of various kinds. Annual loss and damages because of lack of disaster management practices in the country has been pegged at a \$17.5 billion.

At present, the penetration of life and nonlife insurance is very low at 10% and 0.6% respectively (FICCI, 2011). Empirical evidences suggest the enabling role of 'financial and insurance education' which positively influences farmers' decision for purchasing rainfall insurance (Gaurav, Cole and Tobacman, 2011). Thus marketing strategies resulting in greater uptake of microinsurance products should also take in to account the level of understanding target beneficiaries have on insurance.

In India a whole range of progressive social protection measures are adequately backed by legislation and in turn bringing about a paradigm shift from charitable gesture to justifiable right (Devereux, 2011). Renewed emphasis on and affirmative action towards 'more inclusive growth' by the Government of India is reflected in the

paradigm shift in the entire focus of Five Year Planning (FYP) from 'Towards Faster and More Inclusive Growth'20 (in 11th FYP, 2007-2012) to 'Faster, Sustainable and More Inclusive Growth'21 (in 12th FYP, 2012-2017). This has been instrumental in bringing about major sectoral policy decisions including initiatives around inclusive social security systems; the Aam Admi Bima Yojna (AABY, 2007) and the RSBY (2007) being part of this initiatives. Financial inclusion has been one of the underlying components of this inclusive social security system and the Government of India constituted two expert committees to better inform and support the development of comprehensive, coordinated and concerted policy measures in this direction.

Recommendations of the Committee on Financial Inclusion - 2006 under the Chairmanship of Mr. C. Rangarajan (Chairman, Economic Advisory Council to the Prime Minister and the High Level Committee on Financial Sector Reforms - 2008 under the Chairmanship of Dr. Raghuram G. Rajan (Professor, Graduate School of Business, University of Chicago) emphasized on the 'affordability' and 'timeliness and effectiveness' aspects of various financial services, including insurance.

The Insurance Regulatory Development Authority (IRDA) of India, with a mission to 'Protect the interests of the policyholders, to regulate, promote and ensure orderly growth of the insurance industry and for matters connected therewith or incidental thereto', is the nodal state agency for insurance in the country. Government of India's emphasis on and support for the insurers in contributing to the development and sustenance of a robust insurance system for the poor and vulnerable is legislated through Section 32 B (Insurance business in rural or social sector) and 32 C (Obligations of insurer in respect of rural or unorganized sector and backward classes) of the Insurance Act, 1938 and the IRDA (Obligations of Insurers to Rural or Social Sectors) Regulations, 2000. The Authority, which has been vested with

developmental responsibilities apart from its regulatory functions, therefore sought to not only expands coverage but also to correct the imbalances in availability/distribution of insurance across geographic locations and economic classes. The state's continuous efforts to refine and strengthen these regulations which would institutionalize a gradual change from a regulatory regime toward a more facilitatory regime is reflected in the series of amendments this particular piece of legislation has gone through; the most recent one being the IRDA (Obligations of Insurers to Rural or Social Sectors) Fourth Amendment Regulations, 2008.

In 2003, Government of India constituted a Consultative Group on Microinsurance to examine existing insurance schemes for rural and urban poor with specific reference to outreach, pricing, products, servicing and promotion and to examine existing regulations with a view to promoting microinsurance organizations with specific reference to capital requirements, licensing, monitoring and review, etc.

Based on these recommendations the Government of India brought out the Insurance Regulatory and Development Authority (Microinsurance) Regulations 2005 whose main features are:

- ▶ Adoption of the Partner-Agent model whereby the insurer would provide technical expertise in the form of risk underwriting, while the agent would bring network, reach and trust among communities to the table.
- ▶ A new class of distributors called Micro insurance agents was created, whereby Micro Finance Institutions (MFIs), Non- Governmental Organisations (NGOs) and Self Help Groups (SHGs) have been allowed to take up distribution of microinsurance products. Differential commission rates are allowed to micro insurance agents in view of low ticket size of these policies and the additional servicing responsibilities involved. The regulations have relaxed the

requirements as regards qualification, examination and licensing; but mandated a 25-hour training to be imparted to the employees of microinsurance agents by insurers.

- ▶ Composite products, whereby multiple risks faced by low income families such as life, health, accident, dwelling, livestock and tools & implements, could be covered under a single policy through a tie-up between life and general insurers.

- ▶ Sum assured limits have been defined for products to qualify as micro insurance to ensure that the products cater specifically to the needs of micro insurance segment.

The main thrust of microinsurance regulations is protection of low income people with affordable insurance product to help cope with and recover from common risks with standardised popular insurance products adhering to certain levels of cover, premium and benefit standards. These regulations have allowed Non-Governmental Organisations (NGOs) and Self Help Groups (SHGs) to act as agents to insurance companies in marketing micro insurance products and have also allowed both life and non-life insurers to promote and sell different microinsurance products.

Over these years there has been a robust growth not only in the number of new microinsurance policies being purchased (Table 04 and Figure 02) but also in the numbers of premium underwritten and claims paid. While a sizeable portion of the group microinsurance has been supported by government sponsored social security schemes, the 3.6 million individual life policies are mostly self-funded which indicates that the target segments are willing to purchase insurance if the right kind of supply is made available. Renewal premium (life) under micro insurance too has grown to a substantial amount. In the year 2010-11, the individual renewal premium was INR 181 crore while the group micro insurance renewal premium for the year was INR 682 crore.

Table 04: New Business Microinsurance Premium (Life) Amount in INR Crore

| Year | Individual | | Group | | |
|---------|-----------------|---------|----------------|--------------|---------|
| | No. of Policies | Premium | No. of Schemes | No. of Lives | Premium |
| 2007-08 | 937768 | 18.23 | 7598 | 12242027 | 201.27 |
| 2008-09 | 2152069 | 36.56 | 6897 | 12551809 | 205.95 |
| 2009-10 | 2983954 | 158.22 | 5207 | 16842070 | 234.81 |
| 2010-11 | 3650968 | 130.40 | 5469 | 15259001 | 155.23 |

Source: Based on IRDA Annual Report 2010-2011

Demand-driven Microinsurance for Disaster Resilience in India

The foregoing discussion on the disaster-induced losses vis-à-vis microinsurance cover in India highlight the urgency to work towards a systematic institutional mechanism which would build and strengthen a demand-driven microinsurance ecosystem in the country. A first step towards this direction would be to develop a strategy of institutional interplay among different actors and the policies.

Actors : A diversity of actors contributes across the microinsurance continuum; starting from the IRDA through its regulatory mechanisms through to insurers, both public and private, and the community-based organizations which facilitates insurance uptake. These actors are localized and operate at different levels and hence the need for a common framework of information sharing and collaborative action that would ensure the timely communication of the need and capacity of the poor and vulnerable to the insurers and then to the larger state machinery and its allied institutions. Such a mechanism would also facilitate larger awareness among the targeted population about various social security schemes, including insurance, of the state and generate more demand and accountability from the service providers. Such an instrument would also contribute to a larger process of socio-political empowerment among the most vulnerable as they influence the process as active participants

Growth in Microinsurance (Life) Cover

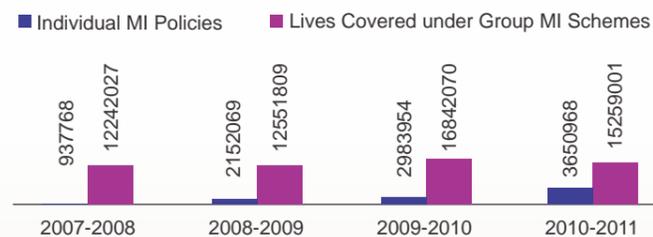


Figure 2: Growth in Microinsurance (Life) Cover

rather than passive recipients. Role and leadership of the Insurance Regulatory Authority of India (IRDA), the National Disaster Management Authority (NDMA) and the respective State Disaster Management Authorities (SDMAs) are critical in this. The private sector, with a significant market share in the insurance sector, could contribute through some of the initiatives like the UNISDR's Private Sector Advisory Group and the recently launched UNEP FI Principles for Sustainable Insurance¹³. Industry associations like the Confederation of Indian Industry (CII) and the Federation of Indian Chambers of Commerce and Industry (FICCI) could take this forward and institutionalize as part of their regular services and support. Various international donors like the European Commission Humanitarian Aid & Civil Protection (ECHO) through its disaster preparedness programmes (DIPECHO) and other bilateral and United Nation agencies could contribute through their sectoral expertise and similar experience in other countries.

Policies : A systematic analysis of various sectoral policies like the Disaster Management Act (2005), Disaster Management Policy (2009), disaster management acts and policies of respective states, various regulations under IRDA, policies on various social security initiatives programmes by different ministries (like Agriculture, Rural Development, Health, Women & Child, Labour & Employment etc.) would help to identify and locate scopes through which commonalities could be established to facilitate and strengthen informed engagement and collaborative actions by the above mentioned stakeholders.

The following framework (Fig 03) attempts to identify some of these actors and describes how

some of their actions could be systematically integrated and further developed through broader institutional interplay. Such an institutional framework on demand-driven microinsurance would help achieve the following need being identified and emphasized by the Advisory Group on the Post-2015 Framework for Disaster Risk Reduction and the Global Platform, an ongoing process towards a post-2015 framework:

Reinforce that a multi-stakeholder approach is required to reduce the risks of disasters. We need to recognize and work with the drivers and actors that produce change. This will require more local engagement and consultations with partners and stakeholders¹⁴.

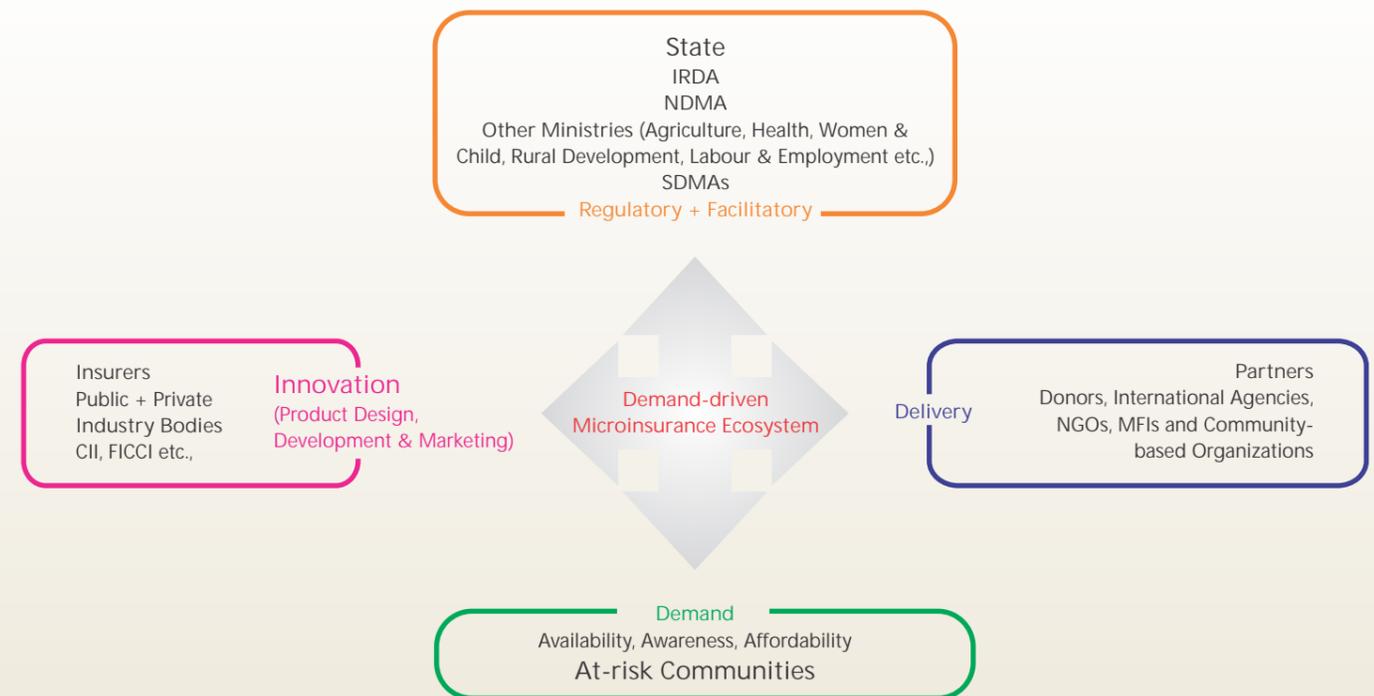


Figure 3 : Framework for a Demand-driven Microinsurance Ecosystem in India, Source: Author

1 The World Risk Report 2011. UNU-EHS, Bonn. www.ehs.unu.edu/file/get/9018
 2 Global Risk 2012, World Economic Forum <http://reports.weforum.org/global-risks-2011/>
 3 http://www.swissre.com/media/news_releases/nr_20111215_preliminary_estimates_2011.html
 4 http://www.munichre.com/en/media_relations/press_releases/2012/2012_01_04_press_release.aspx
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 6 www.em-dat.net/Universit%C3%A9%20Catholique%20de%20Louvain%20-%20Brussels%20-%20Belgium/
 7 http://www.munichre.com/app_pages/www/@res/pdf/media_relations/press_releases/2012/2012_01_04_munich_re_natural-catastrophes-2011-overview_en.pdf
 8 <http://www.un.org/documents/ga/res/44/a44r236.htm>
 9 <http://www.unisdr.org/2005/wcdr/preparatory-process/why-wcdr.htm>
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 11 Maleika and Kuriakose, 2008
 12 Mechler, Linnerooth-Bayer and Peplatt, 2006
 13 www.unepfi.org/work_streams/insurance/index.html
 14 <http://www.preventionweb.net/posthfa/documents/External-Key-messages-Post-HFA-Advisory%20Group.pdf>



PROJECTS AND PROGRAMME

State Disaster Management Plan

For efficient and coordinated management of any disaster, it is vital to evolve a comprehensive Disaster Management Plan at the State level. Considering this as a corner stone, Gujarat State Disaster Management Authority has prepared a State Disaster Management Plan (SDMP) and distributed among the stakeholders. This plan provides for institutional arrangements, hazard risk and vulnerability profile of the State, roles and responsibilities of various stakeholders in various facets

of disaster management such as preparedness and response, as well as action plans for various hazards.

Training of Trainers (ToT) on USAR and MFR is being coordinated by GSDMA at Vadodara under plan scheme of "Strengthening of Fire & Emergency Services in the Country" by MHA. 46 participants from fire & emergency services were trained in two different batches (each batch of 21 days).

Urban Search and Rescue (USAR) and Medical First Responders (MFR) Training to Fire Personnel

Training of Trainers (ToT) on USAR and MFR is being coordinated by GSDMA at Vadodara under plan scheme of "Strengthening of Fire & Emergency Services in the Country" by MHA. 46

participants from fire & emergency services were trained in two different batches (each batch of 21 days).

Hospital Fire Safety Decision Support System

A variety of incidents may threaten the security of a hospital—with regards to the geographical location of an individual hospital, earthquakes, floods, windstorms, and other natural hazards either may be excluded or may only have a minor probability of becoming an event. Remaining in the front row are technological events, such as a fire or prolonged interruption of electrical power. Every hospital must have a plan to support immobile patients who do not possess autonomous escape capabilities.

Although every hospital needs and perhaps has a security plan for the support of immobile patients who do not possess autonomous escape capabilities, little information exists to assist in the development of practical patient evacuation. Hospital fires become more disastrous as health care facilities inmates are patients who, in most cases, are incapable of assisting themselves.

Considering the vulnerability and sensitivity of hospitals to fire hazards - GSDMA has decided to establish IT based Hospital Fire Safety Decision Support System (HFSDSS) which will be scaled to cover multi hazards - multi disciplinary incidents.

HFSDSS will play an essential role in disaster risk management because of the supporting abilities which help the decision makers improve their performance and make better decisions in real time without needing to solve complex problems while reducing human resources needs. Decision making process is a critical factor in reducing the damage and losses during incident(s), it is extremely important to make the right decisions at the right time by combining available risk information with advanced web technology like Geographic Information System (GIS) and Decision Support System (DSS).

JOURNEY AT GRASS ROOT LEVEL

Anand

► Safe Uttarayan Week was being celebrated at District level for Sensitizing Community and Shop keepers District level School Mock Drill was organized at Sardar Patel high school, Anand to exercise Mock Drill in school and to check the response of SFMC and other line departments.

► Organized an exhibition on Disaster Management in the Celebration on Republic Day to make aware to government officers and community people

► Emergency Operation Center (EOC) Management Training has been organized for class-3 officers of EOC.

► Disaster Management Orientation was organized for college and school level students at different villages and Talukas

► IOCL offsite Mock Drill have been organized at Sanjaya village of Petlad Taluka

► Search & Rescue and First Aid Training have been organized at District level for all Taluka Response group (Talati, Sarpanch, Swimmers, Home guards, NSS, NYK Members, Fire officer, fire man, fire operator, fire driver). The purpose of this training is to make them train and build the capacity.

► Disaster Management orientation programme was organized for NGO Volunteers of Nirmal Mahila Kalyan Kendra from Darbhanaga District of Bihar State

► Various community awareness and sensitization programme was organized regarding Disaster Management through 'Bhavai' (Gujarati folk).





Ahmedabad

► Emergency Operation Centre Management training has been organized for the better functioning of DEOC. This training has been given to the government staff of EOC.

- Mock drill on fire safety was organized at IOCL
- An orientation programme has been conducted at different Municipal schools of Ahmedabad City, also Mid-Day-Meal staff oriented regarding disaster management.



Amreli

► School Fire Safety Mock Drill has been

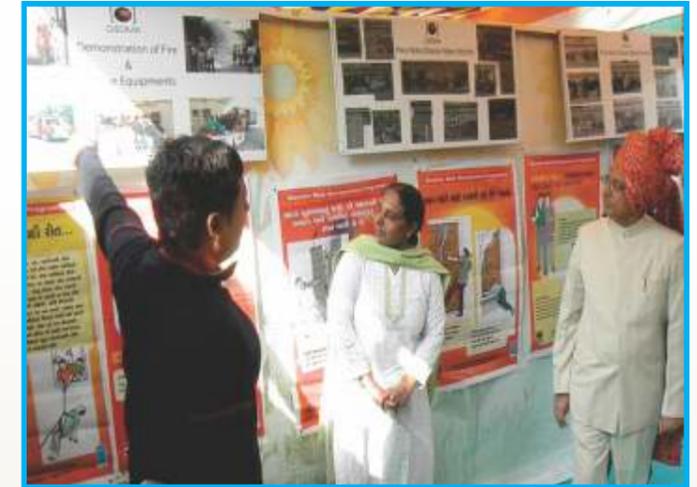
conducted at different primary schools of Amreli

► Search & Rescue training for ITI Student &



Super Gas Babra Block Plant Staff has been conducted

- Polytechnic students have been oriented regarding disaster management and disaster preparedness.
- New Deputy Mamltdars have been oriented regarding disaster management.
- A Stall on Disaster Management has been kept for mass awareness on Republic Day at Amreli



Banaskantha

► Fire Evacuation Drill was held at Government Higher Secondary School to orient the student about the school safety program and to make learnt the student about how to response and

evacuate at the time of fire

► One Day First Aid and Search & Rescue Training programme was conducted at different colleges of Palanpur for NSS students and also for the staff of Hindustan Petroleum Corporation



Limited to make them aware about their response as a first responder of First Aid and Search & Rescue in Emergency Situations.

▶ Three Days First Aid and Search & Rescue Training programme has been organized for the SRPF Group-3, Madana, Palanpur.



Bharuch

▶ Two days workshop on Fire Safety and First Aid has been organized for Mid-Day-Meal Organizer Staff at Vagra Block, Jambusar Block, Bharuch Block and Hansot Block.

▶ Two days workshop on Fire Safety and First Aid has been organized for Fair Prize Shop persons for the safety of their godown.

▶ Two days workshop on Disaster management for Primary Teacher in Hansot Block as well as for



traffic bridge staff has been organized to make them sensitize about disaster management

▶ Off-site Mock Drill in Amod-Hazira Pipeline has been organized by IOCL to check the response during the disaster. The target group of this mock drill was different departmental staff like Police, health, Fire etc

▶ High School Disaster Management Orientation programme was held to orient the students regarding use of fire extinguisher during the time of disaster.

▶ A Tableau has been displayed on Republic Day for awareness generation on Disaster Management

Bhavnagar

▶ Training on First Aid and Search & Rescue has been given to students, Village disaster committee members, and village task force members.

▶ National level Fire demonstration in school was organized for the students.

▶ At village and school level poster exhibition on disaster management was organized for awareness generation

▶ Organized a rally for mass awareness on disaster management for the school students and community people



Dahod

► Disaster Orientation programmes was conducted at various school levels to make the students aware and sensitize about disaster

management as well as conducted mock drill on fire.

► Fire Extinguisher Training was conducted for United Tata Motor worker at Dahod.



Gandhinagar

► School Fire Safety programme was held to make the students orient about use of fire extinguisher

► One day disaster management Orientation programme has been conducted for BRC and CRC group



Jamnagar

► Search & Rescue and First Aid training have been conducted for primary, secondary and higher secondary school teachers and students at various Talukas.

► Auxiliary Force and Mid Day Meal staff has been trained for search & Rescue as they are vital responder during emergency situations.



► For mass awareness generation, a tableau on disaster management has been displayed on Republic Day.

► Mid-Day-Meal staff has been trained on First Aid and Search & Rescue to enhance their capacity.



Junagadh

► Fire & Evacuation Mock Drill and fire demonstration was conducted for school students and teachers

► Search & Rescue training was held for NCC cadets and for Children of Observation Home, Junagadh.

► Video show of Disaster awareness CDs and Mock drill with Children of Religious Education Centre was conducted at Junagadh



Panchmahal

- ▶ Mock drill on fire safety was organized for the polytechnic college students to make them aware about use of fire extinguishers
- ▶ A mock drill was conducted for the workers



of STYROLUTION ABS (I) Ltd, katol to make them about how to respond during chemical disaster happened in the industry.

- ▶ Training on Disaster Management Act was held for class-2 & 3 officers.



Patan

- ▶ For primary teachers & students and Anganwadi Workers; a School Safety and First Aid

Training programme conducted to train them different school of many villages of Patan district.

- ▶ A tableau was displayed on Republic day for awareness generation on disaster management.



Porbandar

- ▶ First aid Training Programme for Village women volunteer group and DMT Member were conducted to verify the roles and responsibilities according to the SOP.

▶ Fire and Evacuation Mock Drill at School Level has been organized to test the plan and build the capacity of the students and teachers of various primary and secondary school of Porbandar district.

- ▶ Fire demonstration and drama on disaster management was held on 26th January to make

the students and community people for mass awareness.

- ▶ Search and rescue Training Programme for Primary School Teacher of Parbandar Taluka to ensure role and responsibility during Manmade



and Natural Disaster.

- ▶ Ammonia Leakage Mock drill has been conducted at Saurashtra Chemicals Ltd., Porbandar for testing the plan and to check whether the roles and responsibility are according to the Standard Operating Procedure.

- ▶ Fire related Mock drill at Super Gas Zavar Ltd has been organized for the Staff and Worker and Respective Govt. Agency.



Rajkot

- ▶ Various awareness generation programme at school and college level has been conducted like First Aid Training, Mock Drill on School Fire Safety and Disaster Management Orientation to make

them sensitize regarding role of them as a first responder and how to use fire equipments at the time of any emergency situations.

- ▶ Many Anganwadi Worker has been trained for First Aid at different blocks of Rajkot district



Sabarkantha

- ▶ An orientation on Disaster Management has been organized for the students at NSS Camp of college level students,
- ▶ A live demonstration has been conducted by

NDRF on Republic Day regarding Disaster Management.

- ▶ Chemical Disaster Mockdrill has been conducted for Haczone Interchem Factory Staff evaluation of response time of district level line dept also check out safety masers during disaster



Tapi

- ▶ School level awareness generation programme on disaster like disaster management orientation, mock drill on fire safety has been held to make the students and teachers aware and sensitize for disaster management.

- ▶ Training on Search & Rescue and First Aid has been given to volunteers for management of the disaster.



Vadodara

- ▶ ASHA worker and Anganwadi worker at different Talukas have been given the training on First Aid as they are first responders of any disaster
- ▶ Search & Rescue training has given to Municipality staff of Dabhoi Municipality for better rescue work at the time of disaster

- ▶ Teachers and students of primary and secondary school were being given the training on School Fire Safety and Search & Rescue.

- ▶ A National level mock drill has been conducted on Fire and Evacuation to create fire safety awareness amongst the school staff and students



RECENT VISITS

West Bengal

During the 1st week of March 2013, a team comprising of senior members from Department of Disaster Management, Government of West Bengal visited GSDMA.

The team was headed by Mr. Amit Chaudhuri and Ms Rashmi Kamal (IAS) both are Joint Secretary in the Department of Disaster Management, Govt. of West Bengal. The purpose of the visit is to know about the HRVA project developed by GSDMA in the context of Gujarat, to visit State Emergency Operation Centre, to visit Gujarat Institute of Disaster Management, to understand Enforcement of BIS code after Bhuj Earthquake and to know about Kutchh Earthquake reconstruction programme.

Goa

A team from Goa comprising of members from Goa Rehabilitation Board (GRB) visited GSDMA during 3rd week of March 2013. The purpose of the visit is to know about the Kutch Rehabilitation and Reconstruction programme, to know the functioning of Gujarat State Disaster Management Authority, Gujarat Institute of Disaster Management (GIDM) and State Emergency Operation Centre. The team was headed by Mr. Keshav Prabhu, Chairman, Goa Rehabilitation Board (GRB).



Gujarat Institute of Disaster Management

Disaster Resilient Approach - Capacity Building

Gujarat Institute of Disaster Management (GIDM) created with specific mandate for Disaster Risk Management training and capacity building for State, concerned agencies and officials so as to enhance Gujarat State's capacity in disaster risk management. Recognizing, the need to strengthen specific capacity on mainstreaming disaster and climate risk management and to equip concerned officials of various state agencies with profound understanding and skills on the subject, GIDM will lead capacity building initiative on the subject.

GIDM has initiated a joint program of Training Module development on Mainstreaming Disaster Risk Reduction (DRR) and Earthquake Vulnerability Reduction Courses with Asian Disaster Preparedness Center (ADPC), Bangkok, Thailand. GIDM conducted two consultation workshops with various Government Departments in Gujarat to discuss and improve upon the first and second draft of the training modules.

Mainstreaming DRR course will encompass wide array of disaster and climate risk integration into development agenda and fully institutionalized into development planning processes and across various sectors. This would include mainstreaming DRR into socio-economic development plan, planning and budgeting processes, investment policies, project cycle and key sectoral development interventions; and

hence ensure long term disaster and climate risk-resilient development and safeguard the State from risks induced by development actions. ADPC will submit the Final Module in April/May 2013 and conduct training workshops for senior government officials in Gujarat. GIDM envisages replicating the training program repeatedly to involve various stakeholders on DRR.

Given the Gujarat state's vulnerability to earthquakes, GIDM envisions to develop an advance level training module on Earthquake Vulnerability Reduction (EVR Course) for Engineers and Architects. This course would help in targeting key areas which need immediate attention such as Risk to Urban infrastructure, hospitals, roads and bridges, housing under government schemes etc.

In the calendar year 2013 – 14, GIDM will conduct twenty four regular training programs. In addition, number of new courses has been introduced such as Humanitarian Logistics, Role of Media in DM, DRR for Cultural Heritage, Complex Emergencies etc. The schedule and registration form can be downloaded from the GSDMA website. The list of courses is also published in every issue of GSDMA newsletter 'Phoenix'.

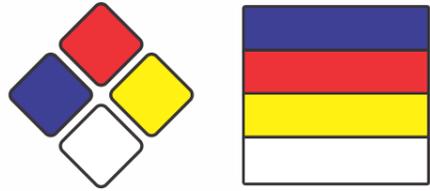
Upcoming Training Programme

| Sr.No. | Name of the Course | Venue | From | To |
|--------|--|------------------------|------|----|
| 1 | April - 2013 | Raisan, Gandhinagar | 02 | 06 |
| | Basics of Disaster Management | | | |
| 2 | Damage Loss and Need Assessment | Raisan, Gandhinagar | 24 | 26 |
| | | | | |
| 3 | May - 2013 | Raisan, Gandhinagar | 14 | 18 |
| | Flood Management Planning and Response | | | |
| 4 | Cyclone Preparedness, Planning and Response | Raisan, Gandhinagar | 28 | 01 |
| | | | | |
| 5 | June - 2013 | Raisan, Gandhinagar | 11 | 15 |
| | Epidemic Management | | | |
| 6 | Drought Mitigation and Management | Raisan, Gandhinagar | 25 | 29 |
| | | | | |
| 7 | July - 2013 | Raisan, Gandhinagar | 10 | 12 |
| | Application of Remote Sensing & GIS in DRR Planning | | | |
| 8 | Industrial (Chemical) hazards-Risks, Planning & Response | Raisan, Gandhinagar | 22 | 26 |
| | | | | |
| 9 | August - 2013 | Raisan, Gandhinagar | 21 | 23 |
| | Nuclear and Radiological Hazards | | | |
| 10 | Emerging Climate Risks and Planning | Raisan, Gandhinagar | 29 | 31 |
| | | | | |

SAFETY TIPS (Hazardous Chemical-BROMINE)

BROMINE (Br)

Bromine is a brownish-red liquid at ambient temperature. It has a similarly colour vapour with an offensive and suffocating odour. Denser than water and soluble in water. It is the only non-metallic element that is liquid under ordinary conditions, it evaporates easily at standard temperature and pressures in a red vapour that has a strong disagreeable odour. It is very corrosive to tissue and to metals.



Red 0 -Flammability: Will not burn
 Blue 3 - Health Hazard: Extremely hazardous - use full protection
 Yellow 0 - Reactivity: Normally stable
 White -Special: Oxidizer

Potential Health Hazard and First Aid Measures

| Hazard | Symptom | First-Aid |
|-----------|--|--|
| Skin | Bromine, both as a liquid and a vapour, is highly irritating when it comes in contact with the skin. | <ul style="list-style-type: none"> Remove all clothing that may have come into contact with the bromine. Rinse the skin immediately with plenty of water. Get medical attention if irritation persists after rinsing. |
| Eye | Lower exposures to bromine vapour can cause irritation and severe pain in the eyes as well. | Rinse eyes with water immediately. Get medical attention immediately. Continue to rinse with water. |
| Ingestion | Burns of mucous membranes. cardiovascular failure, respiratory arrest | <ul style="list-style-type: none"> Make victim drink plenty of water, Avoid vomiting (risk of perforation). Immediately summon doctor. |

Potential Fire Hazard and Response

- ▶ Non flammable
- ▶ Vaporises rapidly at room temperature. Reacts violently with reducing agents, metals, ammonia, alcohols and organic materials causing fire and explosion hazard.
- ▶ Emits toxic and corrosive fumes when heated to decomposition.

Fire Fighting

- ▶ Use: water spray, fog or mist. Alcohol resistant foam.
- ▶ Use self-contained breathing apparatus
- ▶ DO NOT use CO2 or dry chemicals

Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill:

- ▶ Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material.
- ▶ Do NOT get water inside container. Do NOT touch spilled material. Use water spray curtain to divert vapour drift. Use water spray to reduce vapours. Prevent entry into sewers, basements or confined areas; dike if needed.
- ▶ Call for assistance on disposal.