

## 2<sup>nd</sup> India Disaster Management Congress

### Thematic session (F): Mainstreaming DRR in development & Financing Disaster Management

#### Concept Note

#### A. Introduction

Disaster is an issue for development. When disaster strikes it creates severe impact on the development process. People get deprived of the outcomes of development. People lose their lives and livelihood and get marginalized in the whole process of development. Poor and marginalised sections of the people are further pushed to traumatic, voicelessness and high poverty situation. The depth of poverty further gets deepened. Development, then become meaningless for whom development is intended for. Over the years it has been observed that natural as well as human induced disasters create lot of impacts on the development process. Annual global economic losses associated with such disasters averaged US\$ 75.5 billion in the 1960s, US\$ 138.4 billion in the 1970s, US\$ 213.9 billion in the 1980s and US\$ 659.9 billion in the 1990s (UNDP Report, 2008). Disasters triggered by natural hazards put development gains at risk. At the same time, the development choices made by individuals, communities and nations can pave the way for unequal distributions of disaster risk.

Today, 85 percent of the Global population exposed to earthquakes, tropical cyclones, floods and droughts live in countries having either medium or low human development. Natural disaster is intimately connected to the processes of human development. Natural disasters exert an enormous toll on development and doing so, they pose a significant threat to prospects for achieving the Millennium Development Goals in particular, the overarching target of halving extreme poverty by 2015.

The rush for growth can trigger haphazard development that increases risks of large-scale fatalities during a disaster. The destruction of infrastructure, the erosion of livelihoods, damage to the integrity of ecosystems and architectural heritage, injury, illness and death are direct outcomes of disaster. And, such disaster losses may set back social investments aiming to ameliorate poverty and hunger, provide access to education, health services, safe housing, drinking water and sanitation. Or, to protect the environment as well as economic investments.

#### Context

Until the 1970s a dominant view prevailed that natural disasters were synonymous with natural events such as earthquakes, volcanic eruptions and cyclones.. From the 1970s onwards, technical professionals, such as engineers and architects, began to focus on the fact that the same natural hazard had a varying impact on different kinds of structures, such as buildings. The characteristics of a disaster became more associated with its physical impact than with the natural hazard. Interest grew in the design and implementation of ways to mitigate losses through physical and structural measures to reduce hazards (for example, through building levees and flood defences) or to increase the resistance of structures. Unfortunately, the cost of physical mitigation meant that in many countries efforts to reduce risks by these means have been minimal.

In the 1980s and 1990s, researchers from the social sciences and humanities have argued that the impact of a natural hazard depends not only on the physical resistance of a structure, but on the capacity of people to absorb the impact and recover from loss or damage. The focus of attention moved to social and economic vulnerability, with mounting evidence that natural hazards had widely varying impacts on different social groups and on different countries. The causal factors of disaster thus shifted from the natural event towards the development processes that generated different levels of vulnerability.

By the end of the 1990s, it was clear that development processes were not only generating different patterns of vulnerability, but were also altering and magnifying patterns of hazard — an argument that has gained increasing currency as evidence mounts regarding the impact of global climate change. Risk management and reduction has been advanced as an integral paradigm that builds on and incorporates all the previous strategies from the perspective that all development activities have the potential to increase or reduce risks.

A very few literature available showing relationship of development with various facets of disasters. Now the time has come to collate our learning over the years and contribute with more research , documentation and literature as a regular feature of disaster development planning. The positivity and negativity of development planning then may be appreciated in the context of development per se, disaster and climate change related issues. This would enable development practitioners to integrate their thinking and make development more safe and sustainable.

**Objectives :** The broader objectives of the session are to

- discuss positivism and negativism of various issues related to disaster and development process
- initiate the process of developing framework for mainstreaming disaster management in development education
- initiate understanding of deigning development intervention keeping disaster risks in the forefront
- promote education ,research , training , documentation ,studies , under broader theme of knowledge development in development and disaster

**Expected Outcome :** It is expected that at the end of the session it would give a compressive understanding about need and methods of mainstreaming DRR components in development planning. It would also provide a framework for DRR mainstreaming.

**Session Plan :**Total duration 160 mts

number papers for oral presentation, 11 + 5 Each speaker will have 10 mts.

Key Note address : **Dr. Indra Rajaraman, Hon'ble Member, 13<sup>th</sup> Finance commission**

Chair : **Dr. PK.Mishra, Chairman, Gujarat Electricity Tariff Regulation Authority**

**COMBINED SESSION PLAN  
FOR  
THE MAINSTREAMING IN DEVELOPMENT  
AND  
FUNDING DISASTER MANAGEMENT (THEMATIC SESSION F 1 & E 3)  
4<sup>TH</sup> NOVEMBER, 2009**

<b>SESSION TIMINGS</b>	<b>TITLE OF THE PAPER</b>	<b>AUTHORS</b>	<b>PRESENTOR</b>
<b>1200-1205</b>	<b>Introduction About the Theme</b>		<b>Facilitator</b>
<b>1205-1215</b>	<b>Chairperson's Address</b>		<b>Dr. PK.Mishra</b>
<b>1215-1230</b>	<b>Key Note Address</b>		<b>Dr. Sanjiv Misra, Hon'ble Member, 13<sup>th</sup> Finance commission</b>
<b>1230-1240</b>	<b>Reduction of Poverty- An Important key to Mitigation</b>	Maitreyee Chatterjee	Maitreyee Chatterjee
<b>1240-1250</b>	<b>Mainstreaming Disaster Management into developmental Efforts</b>	Dr. Pavan Kumar Sing & Dr. S. K. Jain, NDMA	Dr. Pavan Kumar Sing
<b>1250-1300</b>	<b>Learning to Live with disaster</b>	Dr. Narottam sahuo & Dr. Bindu Nair	Dr. Narottam sahuo
<b>1400-1410</b>	<b>Disaster Management</b>	Syedun Nisa	Syedun Nisa
<b>1410-1420</b>	<b>Lessons Learnt from Chabhar Free Trade and Industrial Zone Disaster Management Master Plan as a Sustainable Development Framework</b>	Shri Bijan Yavar & Shri Maisam Mirtaheri	Shri Bijan Yavar
<b>1420-1430</b>	<b>Is Indigenous Knowledge enough to live with floods?? An Assessment in Indo- Nepal Flood Plains</b>	Dr. Sanjay Srivastava Shri Vinod Shakya Shri Ranjan Kumar	Dr. Sanjay Srivastava
<b>1430-1440</b>	<b>Disaster as</b>	Prof. Utpal Sharma	Prof. Utpal Sharma

	<b>opportunity for Development: Social Impact Assessment of Gujarat Emergency Eq Reconstruction</b>	Prof. Madhu Bharti	
<b>1440-1450</b>	<b>Empowering Panchayati Raj Institutions for Disaster Risk Reduction</b>	Shakti Kumar	Shakti Kumar
<b>1450-1500</b>	<b>Mainstreaming DRR in Development IN India : Incentives, Instruments and Measures</b>	Nisheeth Kumar	Nisheeth Kumar
<b>1500-1510</b>	<b>Disaster and development: An anthropological enquiry from policy to Practice</b>	Sunita Reddy	Sunita Reddy
1510-1520	<b>Mainstreaming DRR: Reconstruction to Development – A case study of Gujarat</b>	V. Thirupugazh	V. Thirupugazh
1520-1600	Question Answer Session		

Break

**Funding Disaster Management**

1600-1610	<b>Financial arrangements for Disaster Management</b>	Pavan Kumar singh & Nawal prakash	Pavan Kumar singh
1610-1620	<b>Innovative Disaster Financing mechanism for India : Leveraging market capital</b>	Rupalee Ruchismita Javed Hazarika Mangesh patankar	Javed Hazarika
1620-1630	<b>Insurance mechanism and Funding of Post disaster Relief</b>	Dr. George E. Thomas	Dr. George E. Thomas
1630-1640	Disaster Management and commercial	Bibhuti Mahapatra	Bibhuti Mahapatra

	Banks		
1640-1650	Funding Disaster Management	Sanjay Srivastava	Sanjay Srivastava
1650-1700	Question Answer Session		

### **Brief outline of the papers**

#### **1. Reduction of Poverty- An Important key to Mitigation**

By : Maitreyee Chatterjee

Poor people have less flexibility in protecting their livelihoods and homes against disaster due to lack of financial and material resources. Poverty forces people to live in risk-prone areas increasing their vulnerability. When disaster strikes, assets bought with loans (for example, a cow) can be instantly destroyed. This makes the poor, poorer, since they have to pay back the loan for an asset long lost. Poverty in its multiple dimensions has a strong influence on people 's vulnerability to disaster, and vice versa. Finally, identifying the problems and thereby reducing the vulnerability of poor can become a key mitigation measure reducing potential losses from future disasters.

#### **2. Mainstreaming Disaster Management into developmental Efforts**

Dr. Pavan Kumar Singh & Dr. S. K. Jena

Disasters disrupt progress and destroy the hard-earned fruits of painstaking developmental efforts, often taking nations decades backward in their quest for progress. At the national level, India has put into action a paradigm shift, from the erstwhile relief-centric syndrome to a proactive prevention, mitigation and preparedness-driven approach to DM. The mainstreaming of DM concerns into the overall developmental effort. This essentially means looking critically at each developmental activity from the perspective of reducing disaster vulnerability in its plan as well as implementation.

#### **3. Learning to Live with disaster**

Dr. Narottam Sahoo & Dr. Bindu Nair

Nature is always changing and moving. We human beings are a part of the nature and our quality of life depends on all the living things that share this planet with us. We must take care of our mother nature, because our wellbeing depends on it. Earthquake, floods, fires, volcanic eruptions, tropical storms, tornadoes, landslides, droughts, plagues and other phenomenon such as El-Nino and La-Nina are a part of nature, just like the sun and the rain. We can not stop natural phenomena from happening, but we can make them less damaging if we understand better why they happen and what we can do to prevent or mitigate them. There is a great role for the younger generation in understanding about various natural catastrophes and to orient the family and the community to challenge the situation.

#### **4. Disaster Management: Key Concerns and Prevention Measures**

Syeedun Nisa

India is one of the most disaster prone countries in the world. This paper aims at discussing some of the pressing key concerns in India related to disaster occurrence & management. It also discusses useful prevention measures that may help in overcoming the disaster. The paper briefly outlines the Indian experience of disasters, discusses infrastructural, institutional and financial arrangements available for disaster management and the response towards these in the country. The paper concludes by suggesting some strategic measures to be taken after the occurrence of disaster in order to formulate safer environment for the country.

### **5. Lessons Learnt from Chabahar Free Trade and Industrial Zone Disaster Management Master Plan as a Sustainable Development Framework**

Shri Bijan Yavar & Shri Maisam Mirtaheri

Experience obtained through different disasters reveals that sustainability and especially sustainable development needs a safe and secured environment through which the activities can flourish. This environment will be more important when economical, commercial and trading action and activities should take part in that. The activities undertaken in the Chabahar Free Industrial Zone (CFZO) for Disaster Management and Master Plan and programs will be discussed with main facts, key lessons learnt.

### **6. Is Indigenous Knowledge enough to live with floods? An Assessment in Indo- Nepal Flood Plains**

Dr. Sanjay Srivastava, Shri Vinod Shakyas, Shri Ranjan Kumar

The diverse communities in perennially hazard zones Indo-Nepal floodplains, since centuries, have learnt to live, cope and reduce their disaster risks through the inherited indigenous knowledge. Originated within communities - based on local needs and specific to the locale specific culture and the context, this vast knowledge resource has withstood the test of time. It is important to recognize the value of indigenous knowledge and create the enabling mechanisms wherein this could be integrated better in disaster risk reduction. The present paper examines a variety of applications emanating from the case studies drawn from perennially flood-prone regions of Indo-Nepal boarder. The knowledge capital generated by seamless integration of indigenous and explicit knowledge forms the value chains for the community at risk.

### **7. Disaster as opportunity for Development: Social Impact Assessment of Gujarat Emergency Earthquake Reconstruction**

Prof. Utpal Sharma, Prof. Madhu

The Gujarat Earthquake Emergency Programme (GEERP) was launched with the State Government funding as well as assistance from Government of India, various Multilateral Funding Agencies like ADB, World Bank and others. This paper is an outcome of study carried for assessing the implementation, processes and social impacts of GEERP program on different stakeholders, covering both positive and negative impacts. Situational analysis of towns to form the basic premise to begin the Social Impact Assessment Study has been carried out.

### **8. Empowering Panchayati Raj Institutions for Disaster Risk Reduction**

Shakti Kumar

As per Disaster Management Act-2005 a local authority shall ensure that its officers and employees are trained for disaster management; the local authority may take such other measures as may be necessary for the disaster management. Panchayat Samities are to focus on planning,

implementation, coordination and monitoring. Gram Panchayats have to play a leading role in execution of disaster prevention, mitigation, response, rehabilitation and developmental activities with the participation of local people. It has a lot of new ideas but it is not adequate. There is a capacity gap between different levels of institutions. This paper will elaborate that what are the capacity gaps and how PRIs would be capacitated in the areas of disaster prevention, preparedness, mitigation, resource mobilization, rescue, relief, restoration, rehabilitation, reconstruction and development.

## **9. Mainstreaming DRR in Development IN India : Incentives, Instruments and Measures**

**Nisheeth Kumar**

This paper deals with the following questions: what constitutes mainstreaming DRR in development; how it works and with what results; how can the results be measured. The paper examines the nature and efficacy of instruments of mainstreaming DRR in development in India. This is done in terms of: one, the incentives for mainstreaming i.e. who wants to mainstream and with what interests, or in other words, who owns it; two, choice of the instrument/s of mainstreaming and factors determining that choice; three, the efficacy of the instrument used in terms of enabling disaster resilient development from a long term perspective. The core contention of the paper is that integration of disaster risk (both micro and macro) reduction elements in mainstream development initiatives calls for major policy and institutional shifts, accompanied with need based capacity development interventions at various levels. This is a challenge that is worth taking in order to make the rhetoric of disaster resilient development real.

## **10. Disaster and development: An anthropological enquiry from policy to Practice**

**Dr. Sunita Reddy**

The focus on disaster is **more** of physical and geographical compared to socio-economic and **political**. The term 'disaster' is often misused in common parlance and **in** academic discourse it has undergone a **number of reformulations**. The recent definitions are more socially oriented **definitions**, clearly and fortunately replaced the very early referents in almost solely physical terms. Disasters are **undoubtedly** social phenomenon Yet ,anthropology had not explored much in **to** this area though it can contribute immensely **to** the disaster discourse due to its inherent multidimensionality and methodological rigor.. An increasing cooperation across disciplines is needed and a more fundamental problem is how to translate research into day-to-day practice in a local com in unit;'

## **11. Mainstreaming DRR: Reconstruction to Development – A case study of Gujarat**

**V. Thirupugazh**

Post-disaster situations are said to open a window of opportunity not only for building back better but also for long-term disaster risk reduction. Reconstruction undertaken in the aftermath of catastrophic disasters aims at vulnerability reduction of the built environment through hazard resistant construction. This presentation highlights how the post-disaster reconstruction opportunity was effectively used in Gujarat to mainstream some of the risk reduction initiatives. This presentation argues based on Gujarat experience, that a realistic understanding of the limits to mainstreaming is essential to prioritize the interventions.

## **Funding Disaster Management**

### **1. Financial arrangements for Disaster Management**

Pavan Kumar singh & Nawal prakash

The economy of India is the third largest in the world as measured by purchasing power parity (PPP). When measured in USD exchange-rate terms, it is the twelfth largest in the world, with a GDP of US \$1.0 **billion**. After independence, India opted for a centrally planned economy model to achieve **an effective** and equitable allocation of national resources and balanced **economic** development. The process of formulation and direction of the Five-Year Plans is carried out by the Planning **Commission**, headed by the Prime Minister of India as its chairperson. This paper will examine various available funding mechanism for disaster risk reduction and also funding post disaster reconstruction and recovery plans.

### **2. Financing Disaster Management in India: Possible Innovations**

Rupalee Ruchismita

Javed Hazarika

Mangesh patankar

Description of various types of catastrophes prevalent in India particularly focusing on nature of the risk, risk specific financing mechanisms etc. Experiences about financial risk management solutions from other nations. It will also discuss the Scope for risk specific replication of financial measures of disaster risk management and its viability both ex-ante (Insurance, Reinsurance, Capital markets, Government relief, International funds and other measures) and ex-post. ( Detailed risk specific analysis of possible mechanisms like mobilization of relief funds , CRF, NCCF, Loan, Grants etc

### **3. Disaster Management and Commercial Banks**

Bibhuti Mahapatra

Commercial banks touching lives of billions of people worldwide need to maintain their services 24 X 7, so that the world doesn't come to a halt because of some disaster or the other. This has been emphasized more by acts of terrorism, outbreaks of pandemics, and various widespread natural disasters. In 2004, the Financial Stability Forum and the Bank of England co-hosted a symposium on business continuity issues. A formal working group of the Joint Forum constituted after the symposium developed a set of high-level principles for business continuity, which could apply across the financial system globally. The current paper examines the importance of banking in post disaster funding with special focus on business continuity plan and financial sector demand.

#### **4. Insurance Mechanism and the Funding of Post-Disaster Relief**

**Dr. George E Thomas,**

Disaster management involves a multi-pronged approach. Ex-post approaches include mitigation response, relief, rehabilitation and the expenditure on all these activities. Ex-ante measures include disaster prevention, planning and preparedness for facing and mitigating the consequences of disaster and more than anything else, providing for the funds for meeting the costs of rolling the conditions back to normal and all related activities. Insurance contracts can cover a large section of physical losses like costs of repairing or reconstructing buildings, repairing or replacing contents thereof, repairing or replacing damaged or lost property/ vehicles/ personal belongings etc. Insurance contracts can also provide agreed compensations towards loss of life, loss of wages to workmen, operating losses of factories, loss of crop; as well as reimburse accident related medical costs.

#### **5. Funding Drought Risk in developing Countries: A Perspective Based on the Use of Products and Services from earth Observation Satellites**

**Sanjay Srivastava**

Agricultural insurance, aims at insuring farmers against production and price risks, is a new paradigm. The scheme envisages seeing the government giving a premium subsidy and guaranteeing farmers a minimum income to reduce their vulnerability. . The key advantage of this kind of insurance is that payouts are based on the occurrence of a weather event, rather than on actual crop losses., Success of crop insurance initiatives of insurance companies/banks lies in strong and dynamic 'Areas Specific' crop and weather statistics, for which awareness needs to be built upon.