



Committee on Disaster Risk Reduction (CoDRR) Workshop-2

WHY DISASTER RISK INSURANCE MATTERS

KEY CONCEPTS & BENEFITS



NATIONAL DISASTER MANAGEMENT AUTHORITY
IN ASSOCIATION WITH
DEPARTMENT OF FINANCIAL SERVICES

SEPTEMBER 20, 2024
GULMOHAR HALL, INDIA HABITAT CENTER, NEW DELHI

Contents

BACK	GROUND 3
KEY C	DBJECTIVES3
1.	Understanding the Role of Disaster Risk Insurance and its current status in India4
2.	Introduction to Innovative Financial Instruments4
3.	Providing practical tools and frameworks for implementing Disaster Risk Insurance Strategies4
4. Fin	Facilitating networking and knowledge exchange among stakeholders involved in Disaster Risk ancing4
WOR	KSHOP THEME/ SESSIONS5
1.	Practical design for Parametric Insurance products5
2.	Integration of Nat Cat Bonds in India's disaster risk finance profile5
3.	Using Global and Indian Risk Pool examples to design the growth of risk pools in India6
4.	Disaster Database for Insurance: Requirements, Design & Architecture6
WOR	KSHOP STRUCTURE6
TARG	ET AUDIENCE Error! Bookmark not defined.
EXPE	CTED OUTCOMES7
Inc	reased Awareness7
Enl	hanced Skills7
Act	tionable Insights7
Co	llaboration and Stakeholder Engagement7
Act	tion Plans7
Fra	mework Design7
CONG	CILISION & WAY FORWARD

Concept Note: One-Day Multi-Stakeholder Consultative Workshop

Why Disaster Risk Insurance Matters: Key Concepts and Benefits

20th September 2024, India Habitat Centre, New Delhi, 110003

BACKGROUND

<u>India is one of the world's most disaster-prone</u> countries due to its diverse geographic and climatic conditions. The country frequently faces a variety of natural hazards, including floods, cyclones, earthquakes, droughts, and landslides. In the past few years, climate change has had a profound effect on natural disaster patterns globally, and India, with its diverse geography and climate, is particularly more vulnerable.

<u>The impacts of climate change</u> are altering the frequency, intensity, and nature of disasters, leading to increased risks and challenges for disaster management and resilience. For India Climate Change is resulting in more frequent and severe cyclonic events, heavier and more intense rainfall increasing the likelihood of flooding and also landslides, more frequent and severe heatwaves, prolonged dry spells and intense rainfall events within the same season, and risk of coastal flooding & accelerated coastal erosion.

The losses due to natural disasters in India are extensive and multifaceted, impacting the economy, society, and environment. Addressing these losses requires comprehensive disaster management strategies that include risk reduction, preparedness, response, and recovery efforts. By improving resilience and investing in preventive measures, India can better mitigate the impacts of natural disasters and support long-term recovery and development. The management of funds for disaster response and recovery is a complex process involving various mechanisms and challenges and the need of the hour is to expand our financial mechanisms to include Disaster risk insurance and Financial Risk Pools in the Disaster Risk Financing Framework.

<u>To help enhance India's financial resilience</u> and manage the fiscal impacts of natural disasters in India, the National Disaster Management Authority (NDMA) along with the Department of Financial Resources (DoFS) is organizing a consultative & comprehensive workshop on Disaster Risk Insurance.

KEY OBJECTIVES

"By failing to prepare, you are preparing to fail." -Benjamin Franklin

This workshop aims to bring together industry experts, practitioners, policymakers, and academicians to facilitate vigorous dialogue on pivotal areas of Disaster Risk Insurance. This would help expand disaster risk insurance in India by improving awareness, and leveraging innovative financial mechanisms as these are essential steps toward building our country more capable of effectively managing and recovering from natural disasters. The workshop also intends to comprehend the necessities of India in the context of disaster insurance and the current enabling environment including the barriers, to explore ways forward in setting up

an innovative insurance mechanism, and to enhance and foster self-reliant disaster risk financing in India through public-private partnerships. Specifically, the workshop will discuss the following significant concepts:

1. Understanding the Role of Disaster Risk Insurance and its current status in India

Existing Programs: Initiatives such as the Pradhan Mantri Fasal Bima Yojana (PMFBY) for crop insurance and Parametric Insurance for extreme precipitation by State of Nagaland **Private Sector Participation:** Growing involvement of private insurers in offering disaster risk insurance products, though penetration remains limited

Micro-insurance: Efforts to develop affordable insurance products for low-income and rural populations, though uptake is still low

2. Introduction to Innovative Financial Instruments

Definition and importance of innovative financial instruments in disaster risk management. Overview of traditional versus innovative approaches in risk transfer and insurance.

Catastrophe Bonds (Cat Bonds): Mechanism of catastrophe bonds and their role in disaster risk transfer

- Case studies of successful cat bond issuance and utilization
- Benefits and limitations of cat bonds for both insurers and investors
 Parametric Insurance: Explanation of parametric insurance and how it differs from traditional indemnity insurance, examples of existing products
- Advantages of parametric insurance in terms of speed and transparency
 Risk Pooling Mechanisms: Overview of risk pooling and its role in spreading risk across multiple parties
- How risk pooling mechanisms contribute to financial stability in disaster-prone areas, few examples thereof
 - **Blended Finance Models:** Definition of blended finance and its application in disaster risk management
- Examples of blended finance structures combining public and private resources

Providing practical tools and frameworks for implementing Disaster Risk Insurance Strategies

Digital and Technology-Enabled Solutions: Role of technology (Space tech, AI) in developing innovative insurance products

- Future trends in technology-driven disaster risk insurance
 - **Public-Private Partnerships (PPPs):** Importance of public-private partnerships in expanding insurance coverage and enhancing risk transfer
- Strategies for fostering effective collaboration between public entities and private insurers
 Regulatory and Policy Considerations: Overview of regulatory frameworks governing innovative financial instruments in disaster risk insurance
- Challenges and opportunities in regulatory environments

4. Facilitating networking and knowledge exchange among stakeholders involved in Disaster Risk Financing

Case Studies and Best Practices: Analysis of real-world examples where innovative financial instruments have been successfully implemented

- Lessons learned and best practices from these case studies, application to different geographical and risk contexts
 - **Future Directions and Emerging Trends:** Exploration of emerging trends and future developments in disaster risk insurance
- Predictions for the evolution of financial instruments and mechanisms in the context of climate change and disaster risk

WORKSHOP THEME/ SESSIONS

The workshop will be structured around the following four sessions, each concentrating on significant facets of Disaster Risk Insurance:

1. Practical design for Parametric Insurance Products

- Advantages and limitations of parametric insurance
- Explanation of triggers in parametric insurance (e.g., weather events, seismic activity).
- Overview of various indices used in parametric insurance (e.g., rainfall index, temperature index)
- Customization options for different regions, sectors, and risk profiles
- Factors influencing premium calculations and coverage limits
- Streamlining the claims process in parametric insurance
- Overview of regulatory requirements for parametric insurance
- Future trends and technological advancements in parametric insurance
- Overview of successful pilot projects and case studies involving parametric insurance
- Common challenges faced in designing and implementing parametric insurance products

2. Integration of Nat Cat Bonds in India's Disaster Risk Finance Profile

- Explanation of natural catastrophe bonds, including how they function and their role in disaster risk financing
- Identification of existing gaps and challenges in India's disaster risk financing landscape
- How Nat Cat bonds can help diversify disaster risk financing beyond traditional mechanisms
- Approaches for assessing and modeling natural catastrophe risks specific to India
- Analysis of current policies and recommendations for supporting the integration of Nat Cat bonds into India's disaster risk finance framework
- Exploring opportunities for collaboration between the public and private sectors in Nat
 Cat bond issuance and key lessons learned
- Detailed case studies of successful Nat Cat bond programs in other countries that could serve as models
- Developing a roadmap for integrating Nat Cat bonds into India's disaster risk finance profile, including key milestones and timelines
- Suggestions for initial pilot projects to test and refine Nat Cat bond mechanisms in India
- Exploring long-term goals and vision for the role of Nat Cat bonds in India's disaster risk management

3. Using Global and Indian Risk Pool examples to design the growth of risk pools in India

- Explanation of what risk pools are and their role in managing and distributing risk
- Overview of different types of risk pools, such as public, private, and mixed risk pools
- Lessons from international experiences and their relevance to India
- Overview of existing risk pools and insurance schemes in India (e.g., the National Disaster Management Authority's (NDMA) initiatives, and state-level insurance schemes)
- Adapting global and Indian examples to fit the unique socio-economic and environmental context of India
- Effective governance structures and management practices for risk pools
- Sustainable financial models and funding mechanisms for risk pools
- Overview of regulatory requirements and considerations for establishing and operating risk pools in India
- Developing a phased approach for implementing and scaling risk pools in India
- Recommendations for pilot projects to test and refine risk-pooling mechanisms

4. Disaster Database for Insurance: Requirements, Design & Architecture

- The role of disaster database in managing disaster risk and supporting insurance activities in India
- Types of data needed, such as historical disaster data, real-time event data, risk assessments, and exposure data specific to India
- Identifying key data sources, including government agencies (e.g. IMD, NRSC), research institutions, and satellite data providers
- Ensuring data accuracy, completeness, and relevance to Indian geographic and socioeconomic contexts
- Methods for processing and analyzing real-time data to provide actionable insights
- Implementing security protocols to protect sensitive disaster data from unauthorized
- Ensuring compliance with data privacy regulations and protecting personal information
- Developing a roadmap for designing, developing, and deploying the disaster database

WORKSHOP STRUCTURE

The workshop will be a one-day event, systematized into four technical sessions, each dedicated to the key segments listed above. Two sessions will feature a 60-minute panel discussion led by two technical experts to facilitate interactive dialogue among four subject matter experts (panelists), followed by a 15-minute group discussion and a 15-minute Q&A session with the participants of the workshop. The remaining two sessions will have a 45-minute panel discussion followed by a 10-minute group discussion and 5-minute Q&A.

EXPECTED OUTCOMES

The key outputs of the workshop, include the following:

Increased Awareness: Participants gain a solid understanding of DRI and its benefits along with Practical insights into successful case studies and best practices

Enhanced Skills: The workshop will impart practical knowledge and understanding to participants to advocate for and implement DRI solutions

Actionable Insights: Attendees leave with practical insights and strategies that can be applied in their region/ States

Collaboration and Stakeholder Engagement: The workshop seeks to solicit insights and foster collaboration and engagement among key stakeholders from various agencies

Action Plans: Concrete strategies and recommendations for integrating DRI into existing frameworks

Framework Design: The workshop will help in understanding the requirement of the country for having a Disaster Risk Insurance mechanism and its key features

CONCLUSION & WAY FORWARD

There is a clear need for increased awareness and education regarding the benefits and mechanisms of disaster risk insurance. Effective disaster risk financing requires collaboration between government agencies, insurance companies, NGOs, and local communities. Building partnerships and creating platforms for ongoing dialogue will enhance the design and implementation of insurance solutions. Policymakers should be engaged to create an enabling environment that encourages innovation in disaster risk insurance and ensures the protection of vulnerable populations. Insurance providers should focus on developing products that are affordable, accessible, and tailored to the specific needs of different regions and communities. This includes exploring parametric insurance options that can offer more precise and scalable coverage.

The one-day workshop on Disaster Risk Insurance will successfully highlight the critical role that insurance could play in mitigating the impact of natural disasters in India. Through a series of insightful presentations and interactive discussions, we will deepen our understanding of how disaster risk insurance can be a powerful tool for enhancing resilience and supporting recovery efforts. Let us remember that disaster risk insurance is not just a financial instrument but a critical component of a comprehensive disaster risk management strategy. We can work towards a more resilient and prepared India by taking collective action and committing to the recommendations discussed today.