

Parametric Insurance Solutions for All: Starting with Nepal and India?

Introduction

On March 31, 2025, the All India Disaster Mitigation Institute (AIDMI) convened a virtual roundtable on 'Parametric Insurance Solutions for All' as a follow-up to the national workshop held by the National Disaster Management Authority (NDMA) on September 13, 2024, in New Delhi, India. The roundtable focused on advancing the parametric insurance industry, particularly in the context of disaster risk reduction and climate resilience in South Asia, with a focus on what is done and what works. Leaders from key sectors shared insights on existing initiatives, pilot programs, and policy frameworks aimed at strengthening the sector in the light of increasing risks and fragile resilience to extreme events. The discussion underscored the pressing need for collaboration among insurers, governments, and multilateral agencies to enhance policy alignment, data infrastructure, and inclusivity. Inspired by the special issue of [Southasiadisasters.net](https://southasiadisasters.net) produced by the panel members themselves and others, the discussion explored ways to make Parametric Insurance Solutions for All a reality.

A special issue titled "[Parametric Insurance Solutions for All](https://southasiadisasters.net)" was launched at the roundtable, offering cutting-edge ideas and insights based on ongoing national and local work.

Key Direction

1. Parametric Insurance for Disaster Resilience

Sara Orozco from the Micro Insurance Network of the International Labour Organisation underscored the role of parametric insurance in enhancing financial protection against natural disasters and extreme weather events. She emphasised the need for collaboration between insurers, governments, and multilateral agencies to raise awareness, improve data systems, and reduce costs for better and more urgent protection. A case study from Peru highlighted how agricultural insurance has provided security to vulnerable farmers against the impacts of extreme climate change. Sara called for increased investment in data infrastructure and policy alignment to mainstream parametric insurance for climate resilience, in addition to capitalisation of local initiatives at national and subnational levels.

2. Climate Resilience for Vulnerable Communities

Kathy Baughman McLeod highlighted the disproportionate impact of extreme heat on vulnerable populations, particularly women in the workforce. She advocated for an integrated approach to risk reduction that includes insurance, early warning systems, and physical interventions in addition to protection of life and health. A successful parametric insurance program in India, which provided cash support to 50,000 women workers during extreme heat events organised by the Self-Employed Women's Association (SEWA), was shared as a case study. She emphasised the need for heat risk literacy and data calibration to reflect the realities of affected communities within which women work.

3. Progress of Parametric Insurance in India

Shishir Agarwal from NDMA discussed India's accelerating progress in parametric insurance, citing pilot projects such as rainfall-based insurance in Nagaland and microinsurance for workers by SEWA. He addressed challenges such as basis risk and data reliability. NDMA is collaborating with ADB on pilot projects across three states – Kerala, Maharashtra, and Karnataka – and developing policy frameworks to urgently expand coverage. Shishir Agarwal emphasised the importance of tailored solutions, bridging the protection gap, a proactive private sector role, and enhancing insurance literacy to strengthen disaster financing in India for all citizens.

4. UNDP's Insurance and Risk Finance Work

Sumanta Kumar Sahoo from UNDP elaborated on global efforts in disaster risk finance and insurance. Operating in over 40 countries, UNDP is developing policies and innovative insurance products in partnership with reinsurers and governments. He highlighted projects such as a parametric insurance solution for coral reefs in Indonesia and smallholder farmers' insurance in India and Kenya, which encourage further work to cover more countries and communities. The UNDP is also collaborating with the NDMA to develop a nationwide catastrophic insurance pool, aiming to strengthen disaster resilience.

5. Parametric Insurance for Flood Risk Management in Nepal

Bikram Rana from Practical Action Nepal presented insights on a parametric insurance product developed for flood risk management. Implemented between 2020 and 2024, the product integrated existing flood alert systems and provided payouts in 2022 and 2024. Funded by the InsuResilience Solution Fund and the Zurich Foundation, the initiative demonstrated the effectiveness of insurance in managing residual risk. Plans for expansion into other river systems across Nepal were also indicated.

6. Enhancing Access for Vulnerable Communities

Speakers discussed strategies to improve the accessibility of parametric insurance for vulnerable groups. Kathy recommended bundling insurance with early warning systems and risk reduction-related capacity-building measures. Bikram noted that rapid payouts without loss assessments helped build trust among farmers in Nepal and laid a solid foundation for further, more substantial activities. The discussion also emphasised the growing recognition of extreme heat as a disaster and the necessity for interventions, such as insurance, to protect workers and at-risk populations.

7. Expanding Coverage and Inclusivity in India

Drawing from AIDMI's 2004 onwards work on disaster insurance after the Gujarat Earthquake, the South India Tsunami in 2005, and Cyclone Phailin in Odisha in 2013. Mihir R. Bhatt emphasised the importance of expanding national coverage in Nepal and India, with work starting in 2025, and the inclusivity of the affected women, workers, migrants, and various minorities, particularly in South Asia. Key recommendations included supporting protective policies, strengthening public-private partnerships, investing in data and technology to reduce premium costs, and raising awareness for action. The

discussion concluded with a call for exploring universal risk insurance solutions, starting with national coverages. Insuring some and leaving others does not work in the long term, he said, and added that “the time has come to move to national insurance coverage for all citizens, say against extreme heat, to start with”.

Next Steps

- **Urgently Expanding Coverage:** Participants are committed to broadening the reach of parametric insurance solutions nationwide.
- **Real Time Policy Support:** Continued advocacy for protective and profitable regulatory policies through ongoing dialogue.
- **Substantial Public-Private Partnerships:** Strengthening collaborations at all levels through demonstration projects.
- **Forecasting Data and Technology Investment:** Enhancing data infrastructure and technology to lower premium costs via pilot projects.
- **Awareness for Action Building:** Educating communities, policymakers, and businesses on the benefits of parametric insurance.
- **UNDP’s Role:** Exploring the feasibility of national or universal risk insurance coverage to start with in India and Nepal.
- **AIDMI’s Follow-Up:** Addressing participant queries via email and conceiving a response hub-type unit.
- **NDMA’s National Role:** Conducting additional strategic workshops on heat stress and extreme heat wave management in the light of parametric insurance.
- **Insurance Industry Innovation:** Developing new parametric insurance products in partnership with tech firms and CSOs for data-driven solutions for the poor and workers exposed to heat.
- **Government Action:** Assessing premium subsidies for parametric insurance to urgently and greatly enhance accessibility for vulnerable populations.

Conclusion

Over 70 academics, donors, foundations, CSOs, the private sector, authorities, and UN officials joined the session.

Vishal Pathak closed the session by thanking all participants for their valuable insights for action. He expressed optimism about the future of parametric insurance as a tool for enhancing climate resilience and reducing disaster risk in India, Nepal, and South Asia. The discussion underscored the importance of collaborative efforts in developing insurance solutions to protect vulnerable populations and in building a more resilient future.

Note: To watch the full roundtable discussion, visit the [YouTube link](#).