

Reducing Underlying Risk Factors: Assessing the Effectiveness of Risk Insurance Post-cyclone *Phailin* in Odisha, India

A case of 2013 Cyclone Phailin from Odisha

Briefing Note (April 2014)

About the Research Project

This project – Assessment of the Effectiveness of Risk Insurance Post-Cyclone *Phailin* in Odisha, India - undertook a rapid assessment of how effective an existing micro disaster insurance scheme in Odisha has been in contributing to building the resilience of vulnerable communities. It uses the recent cyclone *Phailin* as a ‘real life test’ to show the opportunities and limitations of risk insurance. This is in response to expressions of interest from a number of policy-makers at the national and state level, including the former head of the National Disaster Management Authority (NDMA), to learn more about how the scheme fared. The research study supported by CDKN and conducted by AIDMI¹. The learning from this exercise will be used to engage with policy-makers to increase their understanding of the potential of risk insurance as part of an integrated Disaster Risk Management (DRM) strategy and facilitate the first discussion on scaling-up.

Disclaimer:

This document is an output from a project funded by the UK Department for International Development (DFID) and the Netherlands Directorate-General for International Cooperation (DGIS) for the benefit of developing countries. However, the views expressed and information contained in it are not necessarily those of or endorsed by DFID, DGIS or the entities managing the delivery of the Climate and Development Knowledge Network, which can accept no responsibility or liability for such views, completeness or accuracy of the information or for any reliance placed on them.

The Climate and Development Knowledge Network (“CDKN”) is a project funded by the UK Department for International Development and the Netherlands Directorate-General for International Cooperation (DGIS) and is led and administered by PricewaterhouseCoopers LLP. Management of the delivery of CDKN is undertaken by PricewaterhouseCoopers LLP, and an alliance of organizations including Fundacion Future Latinoamericano, INTRAC, LEAD International, the Overseas Development Institute and SouthSouthNorth.

© 2014, All rights reserved

¹ All India Disaster Mitigation Institute (AIDMI) is a registered non-governmental organisation based in Gujarat, India. It is a community-based action planning, research and advocacy organisation, working towards bridging the gap between policy, practice and research related to disaster mitigation. Established after the 1987–89 Gujarat droughts, AIDMI has expanded its work over the years to cover a nine types of disasters in twelve areas of India and beyond to eight countries in Asia. AIDMI strives to link local communities to national and international levels of risk reduction, relief and long-term recovery policies and programmes. As an operational and learning organisation, AIDMI works towards promoting disaster risk mitigation and adaptation to climate change risk by supporting, capturing, processing and disseminating disaster related information, lessons and innovative. www.aidmi.org.

Introduction

As climate change fuels an increase in the frequency and intensity of natural hazards, the challenges faced by communities struggling to improve their lives and livelihoods have also risen. The question of how to build rural resilience against climate related risk is critical for addressing poverty. This brief note presents a summary of the final report of the project titled *Risk Insurance in Odisha*. This project was associated with capturing the experience and performance of disaster insurance after the 2013 cyclone *Phailin*. It outlines the performance of *Afat Vimo*, a disaster insurance product in the aftermath of Cyclone Phailin and findings from a study on how it is contributing to the protection of its vulnerable and poor clients. The findings are based on a 2-month survey of 150 households of clients of *Afat Vimo* in Puri District, Odisha.

‘*Phailin*’ – a severe cyclonic storm made its landfall in Gopalpur in Ganjam district in Odisha on October 12, 2013; affecting more than 13 million people and killing approximately 23 due to the cyclone and an additional 23 due to flash flooding in the aftermath of the cyclone (UNEP Global Environment Alert Service, 2013). The evacuation of more than a million people in the states of Odisha and Andhra Pradesh in response to effective early warnings resulted in a much lower death toll than a catastrophic cyclone of similar strength that struck in 1999, leaving 10,000 people dead (UNEP Global Environment Alert Service, 2013). However, several hundred thousands of homes were washed away when wind-driven tidal surges up to 3 meters destroyed the coastal belt. The storm brought additional rainfall to inland areas that had already borne the brunt of an overly active monsoon season. Many areas of the affected districts were inundated; houses, roads and embankments were damaged; and drinking water ponds were contaminated. Crops worth Rs. 2,400 crore were destroyed by the cyclone (The Hindu, 2013).

Microinsurance schemes to build resilience

For decades, the financing of disaster management in developing countries such as India has relied on a reactive approach. Such an approach accords a great deal of focus on providing relief after the event of a disaster while making little provision for preparedness against such events. Such ex-post funding approaches are usually not well coordinated and are often poorly targeted and insufficient.² This



Ms. Nibedita Nayak, Head, State Social Welfare Board, Odisha presented the settlement cheques to the *Afat Vimo* policyholders.

² Margaret Arnold, The Role of Risk Transfer and Insurance in Disaster Risk Reduction and Climate Change Adaptation, March 2008. Commission on Climate Change and Development.
<http://202.46.9.39:8889/attachment/book/Risk%20Transfer%20and%20DRR-CCA.pdf>.

gap can be partially addressed by using risk transfer, which are financial mechanisms formulated to reduce vulnerability to disasters by employing structured instruments to spread risks in exchange for a premium. One of the most widely discussed is microinsurance. The intent of microinsurance is to serve low income clients by offering limited cover and greatly reducing their transactions costs.



The discussion with clients revealed that microinsurance with require long-term planning and commitment of multiple agencies with different

performance.

Cyclone Phailin provided an appropriate opportunity to test the emancipatory potential of *Afat Vimo*. As the findings of the survey aver, *Afat Vimo* was indeed extremely beneficial for the affected policy holders. Thus, in a field mired with tried and convential approaches, the project ‘Risk transfer in Odisha’ offered positive results through innovative and exceptional

Insurance inherently deals with risk and climate change has modified the global risk landscape and in many areas increased the likelihood for climatic extreme events. Thus, it is logical to call insurance as one of the many adaptation tools at the local level. Insurance may not prevent climate change from unfolding but can play a useful role in broader efforts to mitigate the adverse effects of climate change especially on low-income populations. Insurance against floods, droughts and storms is, if combined with preventive measures, a promising tool to manage the impact of climate change.

A recurrent theme that is emerging in the post- Hyogo Framework for Action (HFA) consultations is that of risk transfer mechanisms for the poor and vulnerable communities. The mid-term HFA progress report (2010-2011) shows a dismal picture of the efforts taken by private and international financial institutions to increase the access of the poor and vulnerable to risk transfer measures like insurance.

With climate change exacerbating the severity of disasters in the developing world, a tool like microinsurance is of the utmost importance. It helps low income families to recover from the loss of livelihoods in the aftermath of a disaster by offering a way out of the vicious cycle of poverty. The disaster microinsurance scheme empowers the marginalized communities to live with dignity and not be dependent on the charity of others.

Across the region in the households interviewed in Puri district in Odisha, it was found that microinsurance could play an important role in making rural households less vulnerable to loss and damage by providing them with an adequate financial coping mechanism during exigent times the key findings of this project are discussed below:

Key Findings

The economic losses of disasters are relatively higher for the poor. Loss estimations mostly do not include their loss of income and livelihoods. They usually suffer the longest and the most compared to other social groups. However, a vast majority of disaster victims have limited access to microinsurance and other microfinance services, especially after a disaster or during recovery. Market penetration in the lower income strata is low and even lower in disaster-prone areas.

Building Back Lives: It was found through the interviews conducted with the cyclone *Phailin* affected households that risk transfer decreases the need for disaster aid and offers a dignified life to the poor. It can help to break the cycle of poverty by providing low-income households, farmers, and businesses with rapid access to post-disaster liquidity, thus protecting their livelihoods and providing for reconstruction. A protection tool like *Afat Vimo*³ can help bring back the communities to where they were before the shock without dependency on relief. Cyclone *Phailin* affected people who received claim settlement amount due to their enrolment with the *Afat Vimo* (microinsurance policy) recovering faster, while others non-clients had to cope with the economic loss and damage by using parts of their savings, borrowing money from SHG group, private money lenders and relatives and relief.



The microinsurance product was perceived positive among clients. On areas of important clients suggested faster process of claim settlement, and higher number of awareness actions at field level.

³Afat Vimo (Disaster Insurance), it is a microinsurance product developed by AIDMI during Gujarat earthquake recovery efforts with affected communities. The scheme replicated with some changes in Odisha (2012) during ECHO supported project facilitated by Concern Worldwide India.

Covariant risk⁴: Disasters affect everyone – entire communities or regions and thus claims must be paid to all. This can be difficult for the insurer. Local, national and international stakeholders, therefore, face special challenges in ensuring the long term viability of microinsurance schemes, and developing them as an effective climate and disaster risk management tool for the poor (Arnold,2008). A careful diversification and reinsurance with the involvement of government becomes essential for the insurer to stay solvent. The involvement of government is crucial through providing subsidies to poor households; lawmaking for flood insurance pool; subsidies to the private insurance system so that it becomes affordable to low-income households; provision of reinsurance by government.

Up scaling the scheme: One of the main challenges faced by AIDMI and SWAD is to scale up the *Afat Vimo* scheme. From the demand side, affordability of the premium is a key requirement for its viability. Fortunately in India, the Indian regulatory authority since 2000 has made it mandatory for formal insurance providers to increase their shares of low income clients over time (ClimateWise Compendium, n.d). Low levels of awareness about *Afat Vimo* and other microinsurance, claim procedure, general mistrust against the insurance companies and uncertain future benefits are major hindrances for microinsurance uptake. The administration cost for operating agencies is another big challenge. Without the support from government and/or humanitarian donor agencies, it becomes rare to provide the scheme at an affordable premium and to large mass at different locations by operating agencies. Around 89% non-clients respondents showed interest to have microinsurance and also expressed their interest in specific life and non-life coverage however the demand cannot be fulfilled without proper administration support for several years.



The clients of microinsurance are living in flood and cyclone prone areas and poor locations. The majority clients are from micro livelihoods related to both - farm and non-farm.

Demand for microinsurance is very large and constantly increasing. There are several factors contributing to this reality including frequency of disaster events due to high vulnerability, increasing population and awareness of insurance (Bahera P. 2013: 8)⁵.

The small businesses are highly exposed to loss and damage due to disasters. Generally these businesses do not receive compensation in post disaster recovery

⁴**Covariant Risk** – Covariant risk arises when many farms/households in one area are adversely affected by a single phenomenon such as a natural disaster, epidemic, unexpected change in world prices, macroeconomic crisis or civil conflict. This is distinct from individual risks, which randomly affect individual households.

⁵Bahera P. (2013) Reducing Loss and Damage of Poor: A case of non-life insurance protection mechanism. Southasiadisasters.net Issue No. 99, October 2013 on When Preparedness Works: Case of Cyclone Phailin. AIDMI: Ahmedabad. Available at: <http://reliefweb.int/sites/reliefweb.int/files/resources/99%20Cyclone%20Phailin.pdf> (accessed on December 19, 2013)

efforts. A microinsurance product specific for small businesses needs to be designed to reach out to these vulnerable businesses. The demand also needs to be studied for proper product design targeting small businesses.

The poor and vulnerable families require microinsurance that covers the **non-life component** especially shelter and livelihood in climatic hazard prone areas (coastal, delta, river basin, high-altitude). Single party cannot do this effectively. A combination of insurance companies and non-government organizations can produce the desired result through institutionalizing risk transfer.

The female clients contributed effectively to the achievements made so far and building ownership and sustainability of the product. Women have been found to be more financially responsible in such actions. **Participation of women** in microinsurance is one of key factors towards better awareness and sustainability.

Microinsurance is not a panacea for disasters. There is a need to promote **long-term disaster risk reduction in conjunction with microinsurance**. Microinsurance and other such protection tools for risk transfer should be promoted as part of a wider approach of climate change adaptation.

Way Ahead

In conclusion, if appropriately embedded among risk reduction measures and with the right incentives, microinsurance has the potential to reduce disaster risk. There is a large potential for microinsurance in the developing world: for changing the way organizations provide reliable and dignified post disaster relief and support adaptation to climate change (IDRiM, 2011). Pilot programs such as *Afat Vimo* in Odisha post cyclone *Phailin* offer a testing ground that should be carefully monitored and built upon by the government, international development organizations and climate change practitioner community. However, microinsurance cannot be a standalone measure for risk



Women leaders, clients of disaster insurance and cyclone Phailin affected community sharing their experience of loss and damage; recovery and adaptation efforts at Jaipur village of Puri district, Odisha on March 31, 2014. Binapani Mishra leads this progress of risk transfer. Need for more financial tools to transfer disaster and climate change risks were explored.

reduction. It must be bundled with other risk financing products and non financial services that are very crucial in order to sustain risk transfer models. From the experience of *Afat Vimo* it was learnt that the following considerations must be made while designing microinsurance: (i) careful coordination and planning in implementation of insurance with disaster risk measures (ii) raising awareness amongst communities about microinsurance and its procedures.

References

Arnold, M. (2008). *The Role of Risk Transfer and Insurance in Disaster Risk Reduction and Climate Change Adaption*. Available at:

<http://202.46.9.39:8889/attachment/book/Risk%20Transfer%20and%20DRR-CCA.pdf> . Last accessed March 13, 2014.

Adaptation to Climate Change: Linking DRR with Microinsurance, southasiadisasters.net, March 2014. Issue no. 106. AIDMI.

Bhatt M. (2007), Risk Transfer: Agenda for Microinsurance,

<http://www.preventionweb.net/english/professional/publications/v.php?id=1149>.

ClimateWise Compendium. (n.d.). *ClimateWise Compendium of disaster risk transfer initiatives in the developing world*. Available:

<http://www.climatewise.org.uk/storage/climatewise-docs/Note%20on%20ClimateWise%20Compendium.pdf> . Last accessed March 13, 2014.

IDRiM (Journal of Integrated Disaster Risk Management). (2011). *Insurance against Losses from Natural Disasters in Developing Countries. Evidence, Gaps and Way Forward*.

Available http://www.idrim.ir/index.php/idrim/article/view/13/pdf_4 . Last accessed March 16, 2014.

The Hindu. (2013). *Cyclone Phailin wreaks havoc in Odisha, 17 killed*. [Online]

Available at: <http://www.thehindu.com/news/national/phailin-wanes-9-lakh-affected-crops-worth-rs-2400-cr-destroyed/article5230926.ece?ref=sliderNews> . Last accessed March 15, 2014.

UNEP Global Environment Alert Service, 2013. *Cyclone Phailin in India: Early warning and timely actions saved lives*. Available at:

http://www.unep.org/pdf/UNEP_GEAS_NOV_2013.pdf . Last accessed March 15, 2014.