

ON KNOWLEDGE: 4

Disaster microinsurance

Background

Due to climate change and other trends, the frequency and intensity of extreme weather events in South Asia is increasing. Disasters such as floods destroy or damage people's assets and reduce their earnings. In Pakistan, for instance, smallholders report a 77% loss of income during periods of flooding¹, while in coastal Bangladesh, agricultural labourers can experience long periods of unemployment after extreme climate events². Very few low-income households in South Asia enjoy the protection of insurance to cover such losses.

The Sendai Framework for Disaster Risk Reduction 2015–2030 calls for the promotion of risk transfer mechanisms, including insurance, in order to reduce the financial impact of disasters.



Microinsurance: affordable risk transfer

Disaster microinsurance is a type of risk transfer mechanism specifically designed for poor men and women. It enables them to transfer part of their risk to the private sector, in exchange for paying premiums. Microinsurance products may cover financial losses relating to the death of an income earner, the destruction of a house, the death of livestock or the destruction of standing crops. Premium levels are based on the specific losses people want covered, their risk levels and their ability to pay.

Although microinsurance is a valuable element of disaster risk management, it only covers short-term financial losses and it needs to be accompanied by risk reduction measures such as early warning systems.

This briefing looks at disaster microinsurance, designed to protect people from financial loss due to extreme events. Several types of microinsurance are available, and there are some successful schemes in South Asia.

Evidence suggests that microinsurance could play a significant role in disaster risk management in the region, but the market has developed very slowly up to now, due to supply- and demand-side problems.

There is a need to raise awareness of what microinsurance offers and to develop innovative products that meet poor people's needs. It is in the interests of governments and donors to support the expansion of microinsurance across the region.

About the series

The ACT on knowledge series focuses on key emerging issues related to climate change and how they affect South Asia. Each leaflet synthesises existing knowledge on a topic and aims to stimulate discussion. Suggestions for further reading are provided at the end. Please see the full list of topics at www.actiononclimate.today

¹ Larsen et al. (2014).

² Nasreen et al. (2013).

Instruments

The term microinsurance covers several specific instruments:

Traditional agricultural insurance

Traditional insurance policies cover farmers and herders against losses due to extreme events, for instance the death of livestock during droughts. From insurers' point of view, this type of business suffers certain problems which are well known in the business, including:

- Adverse selection – people who are at high risk are more likely to buy insurance than others, with a potential impact on payouts and profits
- Asymmetric information – the buyers of insurance often have better information about their exposure to risk than insurance companies do, so the premiums they pay may understate their true risk exposure
- Moral hazard – policy holders may decide not to reduce their own risks precisely because they know they are covered, or they may deliberately try to incur losses so that they can claim cash payouts
- High claims verification costs – agricultural insurance policy holders usually live in remote rural areas, which means that verifying their claims is time-consuming and expensive.

Index-based agricultural insurance

This type of insurance makes payouts based on measures of a pre-determined index. For instance, payouts may be linked to a rainfall threshold indicating likely crop losses. Index-based agricultural insurance has several advantages over traditional insurance:

- Because payouts do not depend on actual losses, it is always in policy holders' interests to avoid such losses, so moral hazard is reduced
- Individual loss assessments are not necessary, so payouts can be made quickly
- Payouts are based on objective data, which removes the problem of policy holders exaggerating their losses to insurers.

On the other hand, in some cases index-based insurance payouts do not reflect the actual losses incurred. If an index threshold has been set too high, policy holders do not obtain sufficient compensation for their losses. If it has been set too low, payouts are made even where there are no losses, which has a negative effect on the insurers' profit margins.

Agricultural insurance pools

Farmers' or herders' associations, rural finance institutions and cooperatives may buy group agricultural insurance on behalf of large numbers of their members. Such pool schemes make it easier for individual farmers to obtain cover. Also, insuring large numbers of people makes it easier for insurers to predict future losses using statistical data, which in turn enables them to set premiums at optimum levels.

Disaster microinsurance programmes

Disaster insurance products protect low-income households against extreme weather events. Policy holders are protected against the loss of assets, the loss of earning potential, and sometimes the loss of life.

Programmes in South Asia

South Asia has several pioneering microinsurance schemes, including Afat Vimo (see box).



The Afat Vimo microinsurance scheme in Odisha State, India

The All India Disaster Mitigation Institute (AIDMI) has worked with the Society for Women Action Development (SWAD), the United India Insurance Company and the Life Insurance Corporation of India, as well as other partners, to develop and market a disaster microinsurance product. It is called Afat Vimo, and it combines life and non-life cover for a premium of the equivalent of only a few dollars a year. After Cyclone Phailin struck Puri, in Odisha State, Afat Vimo customers and others were surveyed to find out how effective the microinsurance had been. The survey established that policy holders had been able to use their payouts to repair their damaged homes, and that the insurance cover had strengthened their resilience to extreme weather events.

According to the researchers who conducted the survey, several factors contribute to Afat Vimo's success:

- The combination of life insurance and non-life cover is appealing to people on low incomes
- SWAD works closely with the target communities, which helps to reduce information asymmetry and makes claims verification faster
- The insurance is mostly sold through women's groups, because the women in this community tend to be more receptive to the benefits of microinsurance than the men.

On the other hand, AIDMI's survey highlighted a continued lack of awareness among the target community about the potential benefits of insurance, as well as confusion regarding the claims process.

Other successful microinsurance schemes in South Asia include:

The National Agricultural Insurance Scheme (NAIS) in India

This vast scheme operates in the majority of Indian states and by 2011 had provided rainfall-based crop insurance to 176 million farmers.

Flood insurance in Bangladesh

In 2013, a partnership involving the public and private sectors and civil society successfully piloted an index-based flood insurance scheme covering poor households in Sirajganj District; the scheme has since been expanded³.

Preparation of a low-cost risk insurance instrument in Pakistan

In Pakistan, the Climate and Development Knowledge Network has been assisting the National Disaster Management Authority to prepare a risk transfer mechanism that protects lower income groups against extreme events. The work has involved conducting a survey to assess demand, and preparing a detailed insurance strategy.

Developing microinsurance markets: the challenges

Despite the existence of successful schemes, only a small proportion of poor families in South Asia is covered by disaster microinsurance. Given the region's increasing vulnerability to disasters there is an urgent need to expand microinsurance markets. Before that can happen though, certain barriers need to be addressed, including:

Low demand

There is widespread lack of awareness and misunderstanding about what insurance offers, and a consequent unwillingness to pay for it. At the same time, because microinsurance premiums are very small, insurance companies have to sell large numbers of policies in order to make significant profits. Substantial financial investment is required to increase awareness and raise demand, for instance through mass media campaigns.

Need for innovative products

Insurers, working in partnership with government departments, aid donors and NGOs, need to develop innovative products tailored to poor people's needs. This might, for instance, involve designing products that combine disaster cover with loans.

Lack of reliable statistics for assessing risk

The insurance business depends on insurers knowing the statistical probability of a hazard occurring; they also need reliable data on the scale of potential losses. Such information is often lacking in South Asia.

It is in the interests of South Asian governments, as well as aid donors, to support the development of microinsurance in the region. Governments can play a role by formulating and implementing the required laws, regulations and policy frameworks. Experience has shown that partnerships involving government agencies, insurance companies and NGOs can be highly effective in designing and running schemes, although such partnerships can entail challenges too. Aid donors can work with governments by supporting pilot microinsurance programmes targeting the most vulnerable communities.

³ Quayyum (2013).

KEY MESSAGES

- Disasters are increasing in frequency and intensity in South Asia, and they affect the region's poor households, farmers and herders disproportionately
- The Sendai Framework of Action promotes insurance as an effective means of transferring risk
- Microinsurance is an inexpensive risk transfer instrument aimed at people with low incomes
- The term microinsurance includes index-based and group agricultural insurance, traditional insurance for individual farmers, and insurance to protect low-income urban households
- While various microinsurance schemes currently protect poor people in South Asia from extreme events, only a small proportion are covered, due to persistent and well-known problems
- Governments and aid donors can help to develop microinsurance markets.

Hellmuth, M.E., D.E. Osgood, U. Hess, A. Moorhead and H. Bhojwani (eds) (2009). Index insurance and climate risk: Prospects for development and disaster management. *Climate and Society* No. 2. International Research Institute for Climate and Society (IRI). New York: Columbia University.

IRIN (2014). New-concept flood insurance could help Bangladesh's poor. <http://www.irinnews.org/report/99928/new-concept-flood-insurance-could-help-bangladesh-apos-s-poor>

Larsen, O., J. Oliver and E. Casiles Lanuza (2014). Developing a disaster risk insurance framework for vulnerable communities in Pakistan: Pakistan disaster risk profile. Report No. 16. Bonn: United Nations University Institute for Environment and Human Security (UNU-EHS).

Nasreen, M., K. Mokaddem Hossain and M. Abul Kalam (2013). Climate Change and Livelihood in Bangladesh: Experiences of people living in coastal regions. Proceedings of International Conference on Building Resilience, Ahungalla, Sri Lanka, 17–19 September.

Stein, D. (2015). When theory about insurance doesn't fit with reality. World Bank Chief Economist. <http://blogs.worldbank.org/developmenttalk/when-theory-about-insurance-doesn-t-fit-reality>

World Bank Group Disaster Risk Financing & Insurance (2012). Business Lines. http://siteresources.worldbank.org/EXTDISASTER/Resources/WBG_DRFI_Business_Lines.pdf

Quayyum, M.A. (2013). Flood insurance for river basin people. Oxfam blogs. <http://oxfamblogs.org/bangladesh/flood-insurance-river-basin-people>

United Nations Office for Disaster Risk Reduction (2015). Sendai Framework for Disaster Risk Reduction 2015–2030. Geneva, Switzerland: The United Nations Office for Disaster Risk Reduction (UNISDR).

Sources and further reading

All India Disaster Mitigation Institute (2014). Summary report on reducing underlying risk factors: Assessing the effectiveness of risk insurance post-cyclone Phailin in Odisha, India. Ahmedabad, Gujarat, India: All India Disaster Mitigation Institute.

All India Disaster Mitigation Institute (2015). Risk insurance and adaptation: managing urban risks. *Southasiadisasters.net*, Issue No. 130, May. Ahmedabad, Gujarat, India: All India Disaster Mitigation Institute.

Climate and Development Knowledge Network (n.d.). Disaster risk insurance for vulnerable communities in Pakistan. <http://cdkn.org/project/disaster-risk-insurance-for-vulnerable-communities-in-pakistan/>

Department of Financial Services, India (n.d.). Government sponsored socially oriented insurance schemes: National Agricultural Insurance Scheme. <http://financialservices.gov.in/insurance/gssois/nais.asp>



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