

# MICROINSURANCE

## An Innovative Tool for Risk and Disaster Management

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# Contents

Preface	iii
Prefazione	v
Introduction	
<i>Emanuela Morelli &amp; Giorgio Amsicora Onnis</i>	1

## I Keynotes on Microinsurance

Integrated Risk Management in Microinsurance	
<i>Ralf Radermacher, Jacqueline Roberts Singh &amp; Siddharth Srivastava</i>	7
Microinsurance and Climate Change	
<i>Thomas Loster &amp; Dirk Reinhard</i>	39
Improving Access to Insurance for the Low Income Market – the Role of Enabling Policy and Regulatory Frameworks	
<i>Arup Chatterjee</i>	43

## II Life Microinsurance

Microinsurance through Mutual Benefit Associations in the Philippines	
<i>Camilo G. Casals</i>	81
Understanding the Context Is Understanding the Impact: Evidence from a Qualitative Microinsurance Impact Survey in Indonesia	
<i>Martin Hintz</i>	109
Zurich Bolivia: Demonstrating Key Microinsurance Success Factors	
<i>Raymond Risler &amp; Craig Churchill</i>	137

## III Health Microinsurance

SEWA's Model of Microfinance as a Risk Management Instrument for the Poor	
<i>Tara Sinha, Mirai Chatterjee, Jayashree Vyas</i>	157
Penetration by Lenient Method	
<i>Francis Somerwell</i>	173

Voluntary Affiliation to Micro Health Insurance and Social Capital among Resource-Poor Persons: Initial Evidence from India <i>Iddo Dror</i>	<b>187</b>
---	------------

#### **IV Disaster Microinsurance**

Robust Decision Making for Sustainable and Scalable Drought Index-Based Microinsurance in Ethiopia: Reducing Weather Related Disaster Risk With Rural Agro-Insurance <i>Jillian Dyszynski &amp; Takeshi Takama</i>	<b>211</b>
---	------------

Practical Experiences in Improving Affordability and Delivery Channels of Weather Index Insurance for Kenyan Smallholder Farmers <i>Rose Goslinga</i>	<b>247</b>
--	------------

Shock-Coping and Household Finance in Rural Vietnam: Evidence and some Implications <i>Niels Kemper &amp; Rainer Klump</i>	<b>269</b>
---	------------

Microinsurance and Public-Private Partnership in the Context of Catastrophic Risk Management: Examples from Indonesia <i>Barbara Rohregger &amp; Matthias Rompel</i>	<b>299</b>
---	------------

Resilience Against Disasters and Microinsurance – Managing Urban Risks in Jakarta <i>Mario Wilhelm</i>	<b>321</b>
---	------------

Disaster Insurance for the Poor: All India Disaster Mitigation Institute and <i>Afat Vimo</i> <i>Mihir Bhatt, Tommy Reynolds &amp; Mehul Pandya</i>	<b>341</b>
--	------------

Acknowledgements	<b>355</b>
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List of Authors	<b>357</b>
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# Microinsurance and Climate Change

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**ABSTRACT:** Throughout 2009, concluding with the Copenhagen world climate summit, one issue frequently debated was whether microinsurance is a viable means of adapting to the impacts of climate change. Microinsurance can be used to deal with weather and climate risks but the solutions have to be precisely geared to often very specific local or regional needs. Success depends on careful application of underwriting techniques and management tools.

**KEYWORDS:** Climate Change Adaptation, Weather Risks, Microinsurance

## 1 INTRODUCTION

The fourth status report of the Intergovernmental Panel on Climate Change, published in 2007, concluded that there is a highly significant link between global warming and the greater frequency and intensity of extreme weather events. A considerable body of scientific evidence indicates that flooding and droughts will continue to increase. In many regions, low-lying coastal plains, river deltas and archipelagos will be swamped by the projected rises in sea levels. The IPCC also stated that developing countries, and poor sections of the population in general, will be hit particularly hard. In other words, as confirmed by a landscaping study by the Microinsurance Centre, USA, the countries affected will be those that have virtually no insurance systems. Statistics show that just 80 million people, fewer than 3% of the population, in the world's 100 poorest countries had microinsurance coverage in 2006.

## 2 GROWTH OF MICROINSURANCE

Microinsurance, which protects those on the lowest incomes against a wide variety of risks, is growing fast. Current ILO figures show that, in Africa alone, the number of microinsurance policies rose 80% between 2005 and 2009. In India, there are now individual portfolios insuring over a million people.

The object of microinsurance is to cover the main risks that impact the lives of individuals or families. The most widespread forms are health and whole life – often in combination with a microcredit. Microinsurance was originally designed to cater for the most pressing problems of people exposed to risk.

However, in countries such as Malawi which suffered severe droughts even in the 1970s and 1980s, food security is a major concern, for which people would greatly appreciate a microinsurance solution. Likewise, in parts of Vietnam that are hit by frequent floods, poor people consider the risk of natural catastrophe a microinsurance priority.

It is, of course, true that people with health or property microinsurance may be affected by weather events triggered by climate change, but strategic coverage of weather risks is a different proposition.

Weather risks occur on many different scales. For instance, flash flooding along a stretch of river may involve a few hundred people, a tropical cyclone hundreds of thousands and a severe drought several million. The individual problems call for different underwriting techniques, including microinsurance for individuals, insurance pools and nationwide catastrophe bonds (cf. Munich Re Foundation Report 2006, p. 12).

In the comparatively short history of microinsurance, experience has shown that natural catastrophes can pose a huge challenge to a portfolio. For instance, following floods in 2000 and an earthquake in 2001, the managers of a large portfolio in the Indian state of Gujarat were forced to acknowledge that natural hazards put a severe strain on their microinsurance programme. Tropical Cyclone Nisha, which struck southern India in 2008, caused flooding in over 200 villages and more than 15,000 losses. The resulting financial burdens were very heavy. Skilful loss management at the scene was able to demonstrate to a very new microinsurance market just how vital a part it can play in extreme situations.

### 3 WEATHER-RISK COVERS AND CLIMATE CHANGE

Covers have already been devised that deal with typical weather risks in these times of climate change. In 2006, for example, a rainfall index cover was introduced in the Ethiopian market to protect 17 million farmers against extreme drought (as opposed to normal dry conditions). But what happens if the temperature or precipitation levels do not trigger the cover even though the country is hit by severe drought? In other words, if no compensation is paid, even though the insured suffer heavy losses? It would take years to restore people's faith in insurance.

This simple example shows the huge challenges faced by the still new field of microinsurance and by mesoscale covers such as index insurance and weather derivatives.

The following aspects merit special attention:

- natural catastrophes are large-scale events. A flood can, as it were, inundate all policies simultaneously, producing extreme claims. In the absence of

reinsurance, a maximum loss may lead to insolvency. It is therefore vital for the liabilities assumed to be correctly managed and all the real risks factored in to ensure surprises and unforeseen loss accumulations are avoided;

- the greater the geographical scope and spread of the portfolio, the better. Successful international microfinance organisations like Opportunity International's MicroEnsure take this into account. If cover extends over a large area, the risk of maximum loss is reduced and the likelihood of manageable, partial losses increased. Geographical spread is one of the key conditions of insurance.

The same applies to spread over time. Natural hazard covers must be offered over several years to ensure a cushion is formed for dealing with the problem years. Phases of high and low losses will only balance out over longer periods of time. One-off and one-year covers are tantamount to gambling;

- insurance and loss management need to be carefully handled to ensure that the client always understands how a decision has been reached and that payments are processed without delay. Policies must be easy to understand, particularly in places where levels of insurance illiteracy, or indeed illiteracy in general, are high.

Unless traditional insurance and the new field of microinsurance can be seen to settle losses (the basic minimum requirement), customers will lose interest. Loss payments help insurance systems to become established. Microinsurance faces enough administrative and financial challenges as it is.

Microinsurance schemes in particular need to meet further conditions in addition to these basic criteria if they are to succeed.

- As a rule, programmes that come straight off the drawing board have little chance of succeeding. So, it is important to involve the people concerned in finding the right microinsurance solution. Cover has to be in line with the real needs and wishes of those exposed to the risks or people will not accept it and there will be no opportunity to develop it.
- If the relationship between the sum insured and the premium is not right, this reduces the product's acceptability. It is important for the insured to understand that insuring high-frequency events is not an economic proposition for either side. The system can only work if it covers lower-frequency extreme events. This aspect will assume even greater significance as global warming results in increased weather extremes.
- People on low incomes are perfectly willing to pay for a good product. However, if a programme is to succeed, it needs to satisfy three conditions: people must (1) be able to pay the premium, (2) be willing to purchase cover and (3) conclude a contract of insurance. Other factors to be borne in mind are not only the annual premium in absolute figures but also the fact that

poor people cannot necessarily make regular payments or may only be able to afford small instalments.

Microinsurance solutions that, by and large, meet the above criteria have now appeared on the market. Examples include cover against extreme flooding for people in one of Asia's major cities, against tropical cyclones in the Philippines and against extreme winters in Mongolia.

#### 4 MICROINSURANCE AND THE CLIMATE AGREEMENT

The agreement negotiated in Copenhagen will apply for many years and relate to a decisive phase in the development of microinsurance.

The UNFCCC has acknowledged the part played by microinsurance, as demonstrated by the Copenhagen negotiations in December 2009. Now, the different players will have to join forces and work on economically viable solutions. The path from pilot phase to widespread, multi-year covers will be long and difficult. Microfinance organisations, insurance industry, regulatory authorities, governments and donor organisations will all have to play their part.

However, microinsurance alone will not protect people from the risks inherent in climate change. Mesoscale and macroscale solutions will also be needed and require understanding on the part of all those responsible. Climate change and weather risks offer microinsurance a small but significant opportunity to successfully establish itself on a broad scale: an opportunity we need to seize.