MICROINSURANCE

AN INNOVATIVE TOOL FOR RISK AND DISASTER MANAGEMENT

Edited by
Emanuela Morelli
Giorgio Amsicora Onnis
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Corina Sutter

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Disaster Insurance for the Poor: All India Disaster Mitigation Institute and *Afat Vimo*

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Abstract: In India, personal, household and small business assets are often unprotected against damage from natural hazards. The costs for relief and rehabilitation often rely on aid, but support from outside entities is often unpredictable – leaving the damaged assets of the poor by natural hazards difficult to replace – and making recovery difficult. Groups that fail to recover are more vulnerable to subsequent disasters. Insurance can cover some of the financial burden of many losses but is often unavailable to the poor due to the high transaction cost to affordable premium ratio.

Although data and analyses on effectiveness are still surfacing, microinsurance is one of a number of methods that has emerged to provide the safety and preparedness benefits of insurance to the poor. Microinsurance has emerged in a policy environment that has made recent progress towards disaster risk reduction and can put cash into the hands of affected households so they can begin rebuilding livelihoods. Recent insurance regulatory reforms by the Indian Government and the prioritisation of risk reduction by national and global practitioners have contributed to the viability and advancement of microinsurance for the poor.

Afat Vimo (Gujarati for 'Disaster Insurance') is an example of a microinsurance policy developed in this environment. This document discusses the role of this instrument in an attempt to transfer disaster risk from the poor to the commercial insurance market. The operating system is detailed as well as procedures of claims settlement. Successes have included the design of an affordable product, transparent payout, and linking microinsurance with disaster preparedness education. It is an important step towards reducing disaster risk (DRR). Current research on microinsurance is also discussed in relation to similar products in India. The Afat Vimo product currently covers over 3,700 pioneering policy holders.

Keywords: microinsurance, risk transfer, disaster risk management, India

1 Background

Due to the combination of high exposure to natural hazards and high susceptibility to damage, South Asia experiences significant losses to disasters perennially. Present studies estimate that more than 90% of the Indian population does not benefit from any kind of social protection (ILO, 2005: 1). Despite high and steady growth in the country, the cycle of disasters and vulnerability deprives many millions of poor of the improvements in living standards that might have accompanied such growth. Within Asia, 24% of deaths in India due to disasters occurred because of the country's size, population and vulnerability (GoI, 2002: 190). Since 2004 alone, India has faced several major disasters – the Indian Ocean tsunami, the South Asia earthquake, and the 2007 Bihar floods – which killed more than 12,000 (UN et al., 2006: 8), 1300 (UNISDR and CRED, 2006: 1), and 1000 (UNISDR and CRED, 2008: 1) people in India respectively.

Each year, India suffers disaster losses totalling just under a US$1 billion according to World Bank studies (Lester and Gurenko, 2003: 1). On average, direct natural disaster losses amount to 2% of India's gross domestic product and up to 12% of central government revenues (Lester and Gurenko, 2003: 1). These estimates do not fully include losses incurred by informal sector businesses and workers, which constitute a major proportion of the economy in India. The Calamity Relief Fund of the Government of India on average spends US$ 286 million annually towards providing relief to the victims of disasters. Over the past 35 years, India has suffered direct losses of US$30 billion; losses are also increasing: US$9 billion in direct losses were suffered between 1996 and 2000 alone (Lester and Gurenko, 2003: 5).

Assuming that the impact of natural disasters remains high, how will India be able to cope, not to mention use the benefits of economic development to uplift the millions of poor? Just as it is the poor countries that are most adversely affected by natural hazards, the poor within countries face the greatest difficulties (Lester and Gurenko, 2003: ii). Their small but important assets are often not secured, reinforced, and their financial risks are not spread across insurance markets. According to the Munich Re, the proportion of disaster losses in 2005 covered by insurance were 51% and 30% for the Americas and Europe, respectively (MunichRe, 2005: 9). Over the same period, only 5% of losses faced in Asian countries were covered by insurance. Moreover, even within Asia, it is mostly the wealthy that purchase and use insurance.

In recent years, however, there are signs of change. Penetration grew from 1.93% in 1998-1999 to 3.5% in 2006[1] and life microinsurance is estimated to reach nearly 14 million individuals (Sinha and Sagar, 2009: 16 & 71). A

[1] Insurance penetration is expressed as premiums paid as a percent of Gross National Income (Micro Insurance Academy, 2009). Moreover, accelerated regulatory changes are taking place and more are to come to invite greater role of private and foreign investments in insurance sector.

study by UNDP on the demand for microinsurance in India projects that the market size could include up to 70% of those earning between US$1-2 a day (UNDP, 2007: 2). Social programmes that extend microinsurance access to poor households are emerging as potentially viable mechanisms to minimise the financial exposure of the poor to disasters. But high risk households are often not aware of the benefits that simple insurance can provide. Viable microinsurance products must be affordable and available to informed customers.

India recently became one of the first countries to introduce microinsurance regulations, creating incentives for regulated insurance companies to service traditionally under-serviced segments of the population (rural and poor households). Although exact numbers are not known, it is expected that these regulations have encouraged further investment and penetration, especially around indexed insurance products which sold over 650,000 policies in 2008 in Rajasthan state alone (Barrett et al., 2007: 6). Risk transfer has also been gaining international attention, which can assist domestic insurers with reinsurance and in refining global best practices in the emerging field of microinsurance. The 2009 Global Assessment Report on Disaster Risk Reduction, listed the development of local insurance markets as a key issue in the Report's "20-point Plan to Reduce Risk" (UNISDR, 2009a: 6).

2 The Development of Afat Vimo

It has been the experience of the All India Disaster Mitigation Institute (AIDMI) that the poor, especially the poor amongst disaster victims, are repeatedly exposed to and affected by disaster. Studies have shown that disasters can significantly increase poverty. For example, a study conducted on the influence of drought spells on income poverty indicated that the proportion of households in India that are in poverty for 3-5 years jumps from 5.5% to 14.8% when the households face frequent small-scale losses to disasters (UNISDR, 2009b: 8). The poor also lack access to many formal financial services including loans at competitive rates and insurance.

Over 18 months after the 2001 Gujarat earthquake, a majority of relief beneficiaries were still exposed to significant disaster-induced financial losses. Studies including a 2002 survey in Gujarat revealed that access to risk transfer is correlated with sustainable economic recovery among victims (AIDMI, 2002). Yet the survey found that only 2% of those they surveyed had insurance of any kind.

Based on this finding, AIDMI designed a microinsurance scheme to augment their ongoing Livelihood Relief Fund activities. The resultant scheme was the product of discussions and negotiations with insurance providers who were interested in supplying low-premium insurance policies to poor clients. Two regulated Indian insurers currently underwrite *Afat Vimo*: the Life Insurance

Corporation of India covers life aspects and the United India Insurance Company provides general coverage.

3 Afat Vimo: A Product for the Poor

Microinsurance products are becoming increasingly important for disaster risk reduction. If designed and administered properly, it is believed they can transfer financial risk from vulnerable individuals to the insurance market. While rigorous scientific assessments of the impact of microinsurance are not yet available[2] (Radermacher et al., 2009: 2; Micro Insurance Network; 2009), current experience suggests that microinsurance may promote increased levels of resilience by (ProVention Consortium et al., 2009: 11):

- increasing access to finances after shocks, thus strengthening coping and reducing the likelihood of disastrous impacts,
- providing greater discretion to households and small businesses in pursuing coping and recovery strategies, and
- serving as an incentive for DRR.

By bundling several hazards in one contract, premiums paid for better-understood hazards reduce the rates of less predictable ones such as earthquakes, as otherwise, people would not be so sure to pay for the less understood hazards. *Afat Vimo* is a version of microinsurance designed for poor households in disaster-prone areas; it protects people from the impacts of hazards on their assets by providing pre-determined cash payouts in the aftermath of a disaster. This is done in return for monthly premiums, which are paid to the insurance companies through AIDMI.

4 Afat Vimo: The Product, Operations, Opportunities and Challenges

The scheme covers damages or losses on a very wide range of disasters including earthquakes, floods, fire, cyclones, being struck by lightning, landslides, et al. (19 types). The product was first sold in April 2004 and now covers over 3,700 pioneering policyholders. Though the number is small for India, it is sufficient to start finding out how such ideas can and will operate on the ground in reality. *Afat Vimo* is offered as a single package with an annual premium of around \$4.50 (including administrative charges) and a total potential benefit of \$1,560 across the various components of the coverage. All clients receive the same level of coverage. Table 1 provides an overview of the the *Afat Vimo* Scheme.

[2] A current impact assessment with the ProVention Consortium, the International Institute for Applied Systems Analysis, AIDMI, and microinsurance partners in South Asia is currently being conducted. Additionally, The Micro Insurance Network has

Table 1: Afat Vimo Overview

Aspect	Characteristic
A. Coverage	
Maximum liability for accidental loss of life	Rs. 20,000 (~$416)
Maximum liability for damage to house	Rs 10,000 (~$208)
Maximum liability for damage to house contents	Rs 10,000 (~$208)
Maximum liability for stock-in-trade	Rs. 10,000 (~$208)
Maximum liability for personal accident	Rs. 25,000 (~$520)
Total Coverage (A1+A2+A3+A4+A5)	Rs. 75,000 (~$1560)
B. Administration	
Annual premium per policy holder	Rs. 172 (~$3.50)
Annual membership/renewal fees (5.81% of the premium amount)	Rs. 10 (~$0.20)
Service Charge (22.09% of the premium amount)	Rs. 38 (~$0.79)
Total cost of Afat Vimo for Policyholder (B1+B2+B3)	Rs. 220 (~$4.50)
Total Annual Administrative Charges (B2+B3) are 27.90% of the premium amount	Rs. 48 (~$1.00)

Afat Vimo has been developed and remains a product for the working poor. Actuarial calculations are assessed by the underwriting insurance company for the policyholder group, instead of individuals or households, based on the client profile. Typical policyholders have the following characteristics:

1. low-income – average annual income between US$370 to US$410;
2. average assets worth US$450;
3. average monthly savings balance between US$5 to US$10; and
4. engaged in microenterprises in the unorganised sector or as labourers:
   - small business owners (e.g. those with small grocery, confectionaries or snack stalls, etc.);
   - small vendors (e.g. those with hand carts selling vegetables, fruits, plastic utensils etc.);
   - home-based workers (e.g. those operating sewing machines, preparing ready-made clothes, *bandhani* or weaving products);
   - landless labourers (e.g. construction workers and small-scale plumbers, carpenters or barbers).

The poor families targeted are under-reached by mainstream insurance, especially labourers and microenterprise owners. *Afat Vimo* makes progress in bringing together insurance providers and livelihood recovery support in times of disaster. *Afat Vimo* is a product that transfers disaster risk from the

compiled several others under way in a Stocktaking Initiative that can be tracked at: http://www.microinsurancenetwork.org/workinggroup/impact/stocktaking.php.

poor and promotes effective recovery from economic shocks or disasters, as seen in the case studies below.

4.1 Operating System

Afat Vimo is a partner-agent microinsurance model, where poor communities and commercial and public insurance companies have cooperated to develop a policy to cover 19 types of disasters.

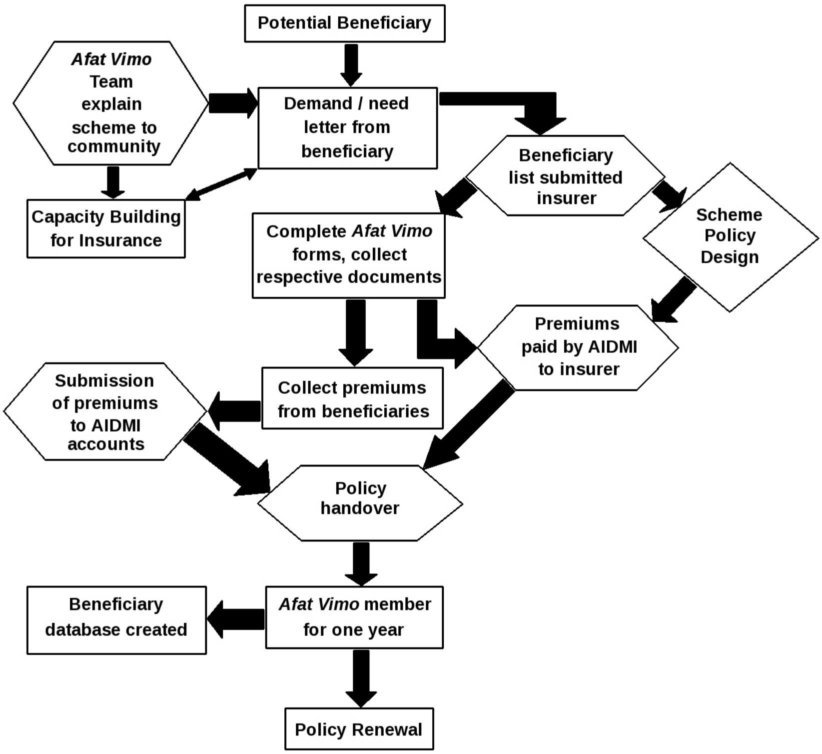

Figure 1: The Afat Vimo Process

The role of AIDMI in the *Afat Vimo* scheme is that of both facilitator and intermediary. At present, AIDMI does not serve as an agent or collect a commission. The scheme is promoted in areas where AIDMI has ongoing community development work and field teams discuss insurance concepts with local households. The *Afat Vimo* team compiles a list of potential candidates for the scheme based on their registered demands. Once the insurance companies have designed operational policies and premiums have been set, AIDMI reconfirms the beneficiaries on the list and ensures that all of the requisite information has been collated and passed to the insurance companies. Policyholders are stored in a database kept by AIDMI. Once this is complete, AIDMI pays the premiums to the insurance companies on behalf of the beneficiaries, ensuring immediate coverage. Subsequently, the *Afat Vimo* team begins to collect the premiums from the beneficiaries. The process is effective but time consuming and costly, especially when renewal is optional.

When disaster strikes, the beneficiary first, immediately informs the *Afat Vimo* team of the occurrence who then respond quickly to process claim. AIDMI assists beneficiaries in filing claims properly. Since many of the *Afat Vimo* beneficiaries are illiterate or have poor literacy skills, they require such assistance. The need to build this general capability among policyholders is recognized. Therefore training is provided to help policyholders understand exactly how they can best use the policy. The *Afat Vimo* product is currently promoted by a local membership-based organisation called the Chamber of Commerce and Industry for Small Businesses (CCISB) that is a network of small-scale entrepreneurs. CCISB leverages interest in *Afat Vimo* through its close relations across many poor households.

Amadbhai Kartiyar, Kajlinagar Slum Area, Bhuj

Amadbhai was 22 years old. After the 2001 earthquake in Bhuj destroyed Amadbhai's confectionary cabin and its contents, he sought financial assistance. He received a new cabin and stock worth Rs. 8721 to restart his business. He was informed about Afat Vimo by the AIDMI team, but he was unaware of the benefits. He did not see how he could benefit from an insurance policy, which would cost him Rs. 135 per annum* when he only earned Rs. 50-60 per day. The team explained that it was a one time payment for coverage that lasted one year. He saw that if he paid a premium of Rs. 135, it would give him life and non-life coverage of Rs 95000 – he agreed that it was advantageous and took a contract.

Unfortunately, he fell seriously ill with jaundice. With this, he was unable to continue working and so could not afford the necessary medication. He later died from jaundice. He was the only earning family member, and his sudden death was a disaster for his elderly parents. However, his parents were aware that he was insured, and immediately informed AIDMI, the intermediary, of Amadbhai's death. AIDMI initiated the claim process with the insurance company and a payment was made to his parents for Rs. 20000. On receipt of the cheque, his parents explained that although nothing could replace their son or compensate for the personal loss that they had suffered, the cheque was vital for their economic survival. His younger brother said that they deposited Rs. 15000 in the bank for future medical needs, and used the rest for purchasing stock for the confectionary. He has now taken over the business and is supporting the family.

** The premium and liabilities noted in examples provided are based on rates from prior years and may not match rates provided in Table 1.*

4.2 Claims Settlement

Feedback from beneficiaries who have made claims under the *Afat Vimo* policy has been very positive and encouraging. To date, more than 300 claims have been made to insurance companies. Since the scheme began in 2004, 260 of these claims have been successfully settled, giving a combined payout of US$ 31,839. Of the claims that have been made, 48 have been made for life loss, 52 have been for personal accidents (some resulting in fatalities, others causing loss of earnings), six for house fires, and 154 for damage to property and contents as a result of monsoon flooding and other mishaps.

4.3 Opportunities

Like many forms of microinsurance, *Afat Vimo* offers several advantages: it can be a transparent means of providing compensation against damage; it decreases the need for humanitarian aid. Additionally, microinsurance offers the disaster affected a more dignified means to cope with disasters than relying on the generosity of donors after disaster strikes (Mechler et al., 2006). *Afat Vimo* may also make tracking trends in vulnerability and hazards easier when claims are charted with geographic information systems.

The expansion of *Afat Vimo* can be attributed to the affordable premium at which the product is offered. This puts insurance within the reach of those who otherwise would not be able to access conventional insurance services. Similarly, the policy has had a great deal of success in the prompt settlement of claims, which has translated into client satisfaction and a good relationship with the insurance companies. It has also contributed to the good policy renewal rate which currently stands at 76%. *Afat Vimo* policyholders are now spread across several districts in Gujarat, as well as in Tamil Nadu and Pondicherry in South India.

A particular strength of the *Afat Vimo* scheme is the unified policy design. Under *Afat Vimo*, life and non-life coverage is brought together under one client product[3]. According to a recent study by the International Labour Office (2005: 7), 45% of the microinsurance schemes researched cover only a single risk. Only 16% of schemes cover three risks, making *Afat Vimo* one of the most simple and comprehensive products in India. This not only makes the policy more attractive to clients, but also makes investment in the policy more efficient in economic terms. Another aspect of *Afat Vimo* that sets it apart from other microinsurance policies is the extensive range of eventualities covered under the policy. To combine micro-mitigation with microinsurance, community capacity building and involvement in *Afat Vimo* – including training on insurance concepts and claim administration (below) – has provided more stability and viability.

[3]The produce consists of a life and a non-life component, which are underwritten by separate insurers.

Reducing an entity's disaster risk is possible through increasing that entities physical/material, social/organisational, and behavioural/motivational capacities (Anderson and Woodrow, 1989). Using this framework, *Afat Vimo* is successful in reducing community risks to disasters. Physical/material goods are insured and can be replaced after loss and damage; social/organisational capacity is supported as informal businesses are brought together (for example, through CCISB) and receive a product that is typically not affordable if the same households were to individually approach the insurer; motivational/behavioural capacity is built as understanding the issues of risk and disasters are increased.

Dhanjibhai Bababhai Dantani, Ramol Slum, Gaffurbasti, Ahmedabad

Dhanjibhai is a vegetable vendor who lost his handcart, weighing scales, and stock during communal riots that broke out in Ahmedabad in 2002. As part of a livelihood recovery programme, AIDMI supported him in replacing the handcart, weighing scales, and vegetables worth Rs. 3200. One day while he was at home, he slipped on the tiles at night and fractured his right wrist. He did not remember that he had insurance, so attended a local unregistered, traditional doctor for treatment. After ten days, he was reminded of his policy by a neighbour, and he informed AIDMI of the accident. He was visited by the AIDMI team, and was advised that he should take treatment from a registered orthopaedic doctor and obtain an official report and medical certificate. He was seen by a doctor approved by the insurance company, and he was awarded one week's compensation of Rs. 250 for loss of work. He challenged the decision, since he had not been able to work for seven weeks. He presented his case along with all of the supporting documents (reports, x-rays etc.) to the insurance company. The case was reviewed, and subsequently Dhanjibhai was awarded compensation of Rs. 1500 for seven weeks of lost work.

For policyholders, the services of intermediaries are helpful, since they may not always know how to make claims and challenge decisions. In this case, the intermediary explained the processes to Dhanjibhai, accompanied him to the doctor, helped him to prepare his claim and assisted him with challenging the original settlement.

Increasingly, partnerships with private commercial sector actors are being forged for the application of microinsurance and risk reduction. There is much that can be learnt in terms of risk management from private sector and public enterprise insurance providers; they have a wealth of experience that can be shared, and, in this, can facilitate the provision of microinsurance policies for the poor. AIDMI has engaged in a partnership with the Life Insurance Company of India to provide life insurance, and the United Insurance Company Ltd. to provide non-life insurance cover under the *Afat Vimo* scheme. They also continue to raise awareness of the opportunities and benefits of insurance provision to the low-income strata of communities. There is additional scope within microinsurance to motivate private sector insurance companies to develop and provide products for low-income individuals as initiatives for their own corporate social responsibility.

4.4 Challenges

Though defrauding is one of the most common challenges for the microinsurance sector, *Afat Vimo* has experienced very few incidents of false claims. Similarly, premium defaulting is another such challenge. The retrospective collection of premium payments from clients can be seen as a threat to the long-term sustainability of the *Afat Vimo* scheme. In terms of long-term sustainability, this means that unless the clients meet the full operating costs, perhaps covered by a commission, estimated to add 50% more burden on client, the scheme is not financially self-sustaining. In addition, there are a number of reasons why beneficiaries do not renew their policies. Migration, the inability to pay, and low desire to renew are believed to be factors.

While exploring the impact of the *Afat Vimo* scheme in disaster affected areas, Ms. Claudia Wipf (2008: 22), a student from the University of Basel, Switzerland, concluded:

> "*Afat Vimo* has a lot of potential. [I]t helped to empower poor people who are left out of other social security systems. The success of *Afat Vimo* can also be seen by the high renewal rate of 88%.[4] Additionally, *Afat Vimo* serves as a model for other microinsurance schemes. It has inspired other NGOs in Sri Lanka and Iran which intend to initiate similar schemes. Besides the potentials, *Afat Vimo* also has a lot of challenges. As AIDMI is a relatively small NGO, with 30 to 40 employees, and *Afat Vimo* is only one of several programs, its capacities are limited. An expansion by the membership of *Afat Vimo* would also mean a sustainable increase in operating costs, at least in the beginning. Because *Afat Vimo* is a pilot project, a lot of resources are demanded and it is more difficult to gain the support of the government or of international institutions."

5 Lessons Learned

The process of developing and administering *Afat Vimo* offers many lessons for up-scaling the product and for sharing with other risk transfer stakeholders:

1. demand exists for disaster microinsurance but it is not yet clear if potential clients are willing to pay a premium that covers all administrative costs without direct or indirect subsidies;

[4] Currently 76%.

2. pro-poor financial risk transfer initiatives combined with risk reduction measures such as *Afat Vimo* remain rare in the South Asian region. There appears to be a significant potential for disaster risk management at community level through insurance. The 2007/08 floods in Bihar provided an opportunity for local institutions to extend access to community risk transfer services by discussing insurance concepts with disaster-affected households. It is possible that other disaster recoveries will result in new attention paid to insurance;

3. convergence of interest and attention of academicians, researchers, policy makers, donors and risk management practitioners along with victim communities is necessary. Generating the awareness – and building the commitment – to initiate microinsurance costs money, time and effort. These must be found to make *Afat Vimo* suitably resourced;

4. to be viable, risk transfer products need to be appropriately designed and piloting and upscaling is a long process that requires dedicated local institutions. This needs planning, awareness building and long-term commitment. Pilot initiatives in microinsurance should be based on medium and long-term financial plans that emphasise financial viability. A minimum of a three or five year horizon for such a plan may help ensure that actions are taken to cover administrative costs in the product model. Options for collecting a commission to offset administration costs should be investigated;

5. the *Afat Vimo* scheme has tremendous potential for expansion. Currently, microinsurance coverage under the *Afat Vimo* scheme is only available to communities where AIDMI has presence. Offering a similar policy in other disaster hit areas is under review by the AIDMI team;

6. microfinance organisations and civil society partners may consider bundling existing credit or other financial services with microinsurance to hedge default risk and extend risk transfer to wider groups of the poor;

7. in order to expand awareness of the positive and negative aspects of insurance, agencies working with large groups of children in developing countries should explore options for commercial microinsurance coverage for partner children and their schools.

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