



Community Risk Transfer Through Microinsurance:

An Opportunity for South Asia?

An Effort to Turn Local Tsunami Recovery into Regional Disaster Risk Reduction for the Poor



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In this issue

| | |
|---|-----------|
| 1. Recipes for Risk Reduction– the Emergence of Microinsurance | 2 |
| 2. Conceptualising Risk Transfer | 3 |
| 3. Role Models in Microinsurance: Who Contributes in the Provision? | 4 |
| 4. Insurance Models for Developing Countries from Developed Countries: A Case for Microinsurance | 6 |
| 5. Learning from the Positive Experiences in the Field of Microfinance | 7 |
| 6. A Life and Non-life Insurance Product for the Poor: the Afat Vimo Scheme | 8 |
| 7. Product Innovations: The Index Insurance | 10 |
| 8. Due Diligence Checklist for Identifying an Insurance Partner | 11 |
| 9. Commodity Risk Management for Developing Countries | 12 |
| 10. SWOT Analysis of Index Insurance Products | 16 |

Recipes for Risk Reduction– the Emergence of Microinsurance

Following the UN year of Microcredit in 2005, there is growing interest in microfinance solutions to help alleviate poverty in developing countries. In Asia, in particular, the demand for microfinance has encouraged an ever-increasing number of institutions to provide services, such as microcredit, savings and social funds for low-income households. Microfinance services are also now beginning to include the provision of microinsurance as financial protection for low-income households or businesses against specific losses, including death and funeral expenses, health expenses, loss of small-scale assets, damage to property or loss of livestock and crops. The emergence of microinsurance is an important development within the field of microfinance and challenges the previously wide-held belief of the "non-insurability" of the poor.

Microinsurance is also emerging as a potential instrument for transferring natural disaster risks by providing cover, or indemnification, against losses from a disaster event. Like other forms of microinsurance, the intent is to provide easily accessible insurance cover for small-scale assets at affordable premiums by keeping transaction and other costs low. By protecting the poor from disaster losses and providing incentives for risk reduction, microinsurance is increasingly recognised as an important part of disaster risk management.

However, questions remain over the affordability for the poor and the viability of such products from a commercial point of view. To address these key concerns there is need for more learning informed by practice and, thus, this latest *southasiadisasters.net* is an important contribution to the debate on microinsurance.

This issue of *southasiadisasters.net* examines the subject of microinsurance and discusses the opportunities and challenges that have been learned through recent experiences in implementing microinsurance schemes in Asia. The opening articles introduce the concept of risk transfer that underpins microinsurance and discuss its relevance to disaster mitigation. Case study examples illustrate different approaches to microinsurance, including a range of insurance services and products tailor-made for low-income communities, and highlight salient lessons learned for the evolving microinsurance agenda.

We sincerely hope that this issue of *southasiadisasters.net* will contribute towards further learning and practice in microinsurance and help promote the use of risk transfer as an important tool in the field of disaster risk reduction. Certainly, as disaster losses continue to grow and the poor are hit the hardest there is an urgent need for more innovative solutions–microinsurance could be one. ■

David Peppiatt
Head, ProVention Consortium Secretariat
May 2006

This issue has been prepared by AIDMI as a contribution to the Annual Meeting of the International Task Force on Commodity Risk Management in Pretoria, South Africa.

Conceptualising Risk Transfer

The provision of financial services like savings or credit for the poor is well recognised as an effective instrument to address poverty, especially the economic well being of the poor.

However, despite savings and credit services, the population of India and its neighbour countries face many risks or shocks in the form of natural disasters that make the poor **vulnerable**. Implicitly, attempts by poorer households to cope with severe hazards, often leads them into debt and ultimate impoverishment—a challenge that the World Bank refers to as the "poverty trap".

In order to address this issue, this newsletter will focus on the concept of risk transfer for achieving risk reduction. One microfinance tool which allows risk transfer is the relatively new instrument of microinsurance. Essentially, many individuals or groups are capable of sharing the cost of a risky event when applying microinsurance.

The rationale behind the concept of risk transfer lays in the fact that by



All photographs in this issue: AIDMI

Disasters destroy assets that have been accumulated by individuals and families. Without these assets, they are increasingly vulnerable to future disasters.

forging relationships with other community members, low income households can achieve a greater reduction in vulnerability than through individual strategies. Thus, the risk is

*"Of the four billion people on earth today who live on less than two dollars a day, fewer than ten million have access to insurance."
– Munich Re Foundation*

transferred from the individual level to the community or inter-community level with groups in different geographic locations which are not equally disaster-prone.

As we will learn, microinsurance products have the potential to offer more complete protection against many risks and therefore against significant loss. This service is provided at an affordable cost, the so called premium. ■

How can we Define Microinsurance?

The Consultative Group to Assist the Poor (CGAP) provides a helpful definition of this instrument of microfinance:

"Microinsurance is the protection of low-income people against specific perils in exchange for regular monetary payments (premiums) proportionate to the likelihood and cost of the risk involved. As with all insurance, risk pooling allows many individuals or groups to share the cost of a risky event. To serve poor people, microinsurance must respond to their priority needs for risk protection (depending on the market, they may

seek health, car, or life insurance), be easy to understand, and affordable" (CGAP 2003).

This definition refers to another important feature: the insurance has to be **understandable**. This is an issue we will devote more attention to in terms of the discussion of the *Afat Vimo* (AIDMI's disaster insurance) scheme since it implies that alongside the supply of products every interested institution, the training of potential "clients" becomes relevant.

After having provided a definition of microinsurance, it appears interesting

to learn more about the criteria of insurability from the perspective of a potential provider. According to Brown and Churchill, the features to be taken into account are the following (Brown and Churchill 2003):

- A large number of similar units exposed to the risk.
- Limited policyholder control over the insured event.
- Insurable interest.
- Losses are determinable and measurable.
- Losses should not be catastrophic.
- Chance of loss is calculable.
- Premiums are economically affordable. ■

Role Models in Microinsurance: Who Contributes in the Provision?

Following Cohen and McCord (2003), we can distinguish four institutional models for providing microinsurance which help us to understand how corporate insurers, government bodies as well as other institutions, such as microfinance institutions (MFIs) can play a role.

Organisations considering taking up microinsurance initiatives should take the positive and negative aspect of each into account in order to achieve the best fit with their circumstances.

- a. **Partner - agent model:** Commercial or public insurers together with MFIs or non-governmental organisations (NGOs) collaboratively develop the product. The insurer absorbs the risk, and the MFI/NGO markets the product through its established distribution network. This lowers the cost of distribution and thus promotes affordability.

This model of collaboration has become the dominant approach to microinsurance in India and has encouraged many microfinance institutions to switch from a full-service model to the partner-agent model. Examples of this scheme are AIDMI's *Afat Vimo* as well as SEWA, a microinsurance pioneer, who offers its life, health and asset coverage in partnership with various insurers.

- b. **Community-based model:** A group of people or local communities, MFIs, NGOs and/or cooperatives develop and distribute their own product, manage the risk pool and absorb the risk.

The Swayamkrushi Youth Charitable Organisation (YCO) in Andhra Pradesh

"We cannot stop natural calamities, but we can and must better equip individuals and communities to withstand them."
 – UN Secretary Kofi Annan

is an example of a community-based model. It is primarily a savings and credit association with added insurance features. The cooperative's 8,100 members pay a yearly premium of Rs. 100 (\$2.22) into a pool managed by the cooperative and receive cover for death and property loss. The life insurance benefit is Rs. 15,000 (\$333) for a natural death, and Rs. 30,000 in the event of an accidental death.

- c. **In the in-house or full-service model,** a MFI or NGO runs its own insurance scheme for its clients and any profit or loss is absorbed by the MFI. The system is not very common anymore but it still exists in some organisations such as SPANDANA, located in Guntur, Andhra Pradesh. This scheme started in urban areas and then moved to rural ones and has expanded enormously in recent years.
- d. **Provider model:** Banks and other providers of microfinance can directly offer or require insurance contracts. These are usually coupled with credit, for example, to insure against default risk.

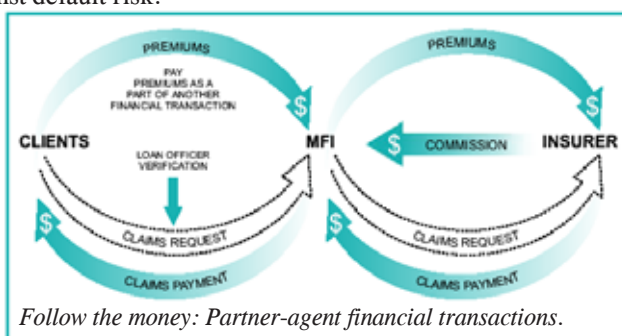
This model is used widely in the general insurance market but high transaction costs and low ability to pay premiums inhibit its extensive use in

the field of disaster insurance for the poor.

If microfinance tools are considered appropriate in order to help the poor—then why are microinsurance products relatively new and why do many corporate insurers lack interest in this market?

An answer to this question will include several factors. Economic reasons relate to the insurability of the poor in developing countries. Other reasons have to do with the specific terms of disaster insurances.

Concerning the first point, namely the economic reasons, one can state that the insurance sector has not shown much interest in the provision of insurance schemes for the poor since they are usually not expected to be able to pay high risk premiums. This is understandable given the irregular and small income these people earn—especially those in the informal sector. Furthermore, the transaction cost of these insurance products very high relative to the premiums because proper infrastructure is lacking and potential insurers would face a high illiteracy rate. This implies that policyholders need training before signing an insurance contract. These problems are often addressed to as the concern of "capability" and the "willingness to pay" of the poor.



A very central issue that deserves more explanation is the asymmetric distribution of information between insurer and insured which might lead to *adverse selection* as well as *moral hazard*. Adverse selection implies that since the insurer is not able to screen the beneficiaries of his product in terms of their related risks, he might set the premium which should reflect the risk of the insured too high which leads the "good risks" to drop out of the market- finally leading to market failure. Moral Hazard on the other hand, refers to the fact that an insured person might change his behaviour after having signed the contract (i.e. by investing less effort in the harvest). Moral hazard is therefore commonly known as the problem of incentives.

There are some other important features to be kept in mind, namely the specific difficulties related to disasters.

Contrary to risks such as the death of a breadwinner or livestock, health expenses, funeral expenses and property damage from theft/fire which are mostly independent (i.e. they do not affect whole communities or risk pools at a time), **disasters**, on the other hand, are covariant risks which imply that they not only take the lives of people and livestock but cause also damages to property and crops. Brown and Churchill (2000) refer to the following characteristics which make disaster insurance different from others:

- Disaster risks are difficult to estimate.
- They can affect large portions of the population or the risk pool at the same time.
- Informal safety nets (family and friends) tend to break down.
- They cause multiple losses simultaneously to health, life and property.

The characteristics of poor people, especially in disaster-prone areas,

Glossary of Important Terms Related to Insurance

Adverse Selection: Also called anti selection, the tendency of persons who present a worse than average risk to apply for, or continue, insurance. If not controlled by underwriting, results in higher-than-expected loss levels.

Covariant Risk: A peril that affects a large number of the policyholders at the same, e.g., an earthquake; or several risks that consistently occur together (at the same time or under the same circumstances).

Moral Hazard: A risk that occurs when insurance protection creates incentives for individuals to cause the insured event; or behaviour that increases the likelihood that the event will occur. Examples include bad habit such as smoking in the case of health insurance or life insurance.

Source: ILO

make it difficult to imagine that private insurers could ever show interest in these individuals. Recent experience, however, indicates that it is possible to provide microinsurance schemes and at the same time working cost-efficiently. Details on successful products and lessons learnt are found below.

Do people affected not face other, more important problems related to their very basic needs such as shelter or food and how does the provision of microinsurance products fit in the standards of the International Community in terms of disaster mitigation?

Indeed, the above question is a very legitimate one and one may ask whether insurance products are of central importance or they rather represent secondary needs.

In providing an answer to this question, one has to consider that disaster mitigation is a long-term process and implicit in sustainable human development. The issue of risk reduction in the form of risk transfer becomes central as it helps to accelerate the recovery and secure the gains of disaster-affected people. In order to implement insurances as a useful tool in the field of disaster

mitigation, any institution working in this specialised field of development work has to be aware of the fact that complementary actions such as disaster awareness, capacity building, and effective product design are of central importance.

Quoting UN Secretary General Kofi Annan in this context sheds light on the fact that the international community shares this perception: "We cannot stop natural calamities, but we can and must better equip individuals and communities to withstand them". We find further evidence in favour of the importance of Disaster Risk Reduction as one of the so called "UN Priorities for Action" (point 5) as a part of the "Hyogo Framework for Action 2005-2015" by the UN ISDR (International Strategy for Disaster Reduction). This framework is dedicated to Disaster Risk Reduction and states that disaster preparedness for effective response should be strengthened at all levels.

Microinsurance contributes to breaking the cycle of poverty and mitigating disasters. This is possible because it helps transfer life as well as non-life risks and fits the states priorities of the international community. ■

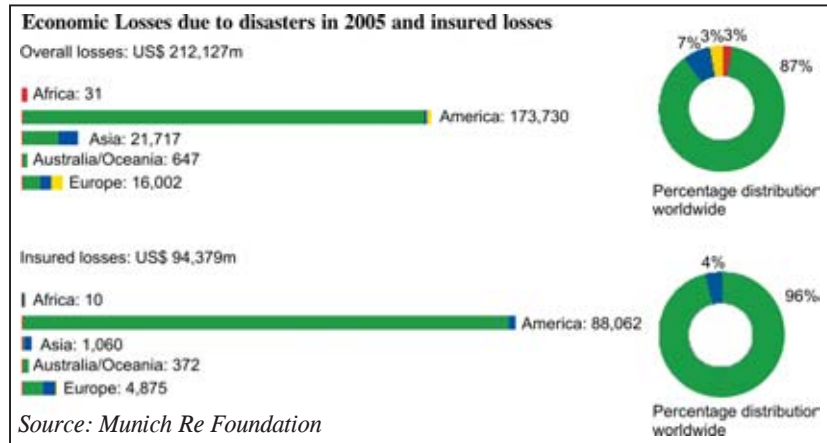
Insurance Models for Developing Countries from Developed Countries: A Case for Microinsurance

In rich countries, financial services on the whole work well. These services have evolved to fit the needs and circumstances of these environments. The vast majority of people have access to interest bearing savings accounts, mortgages at reasonable rates; they have a choice of consumer credits as well as insurances for almost every kind of risk at premiums that reflect the risk of losses.

A recent study of the World Bank (Hess et al., 2005) has addressed the question on whether agricultural insurances designed for developed countries can be applied in the same fashion in the context of developing countries. The results of this study are relevant since they hint at some environmental characteristics that must be taken into consideration whenever an institution is interested in providing insurance schemes.

The mentioned study presents the available insurance products covering agricultural risks in Canada, Spain and the United States of America. The products are covered either by the government (regional or national) alone or jointly alongside a corporate insurer and cover around 100 species of crops. These insurances work quite well at first sight and farmers in the mentioned developed countries are keen on signing the insurance contracts. When undertaking further analysis, however, the authors notice that the respective governments have to provide high monetary contributions to the various insurance schemes. The authors find that, considering these issues, agriculture insurance models for developed countries are not applicable for developing countries.

Each of the presented countries, the government plays either a minor or major role in providing the insurance products. This implies an income



transfer in terms of national budget, the very basic fact of the **amount of available resources** becomes very relevant.

Implicitly, developed countries can afford to allocate much higher amounts of money in this form of agricultural subsidies with respect to developing ones¹. A further consequence of the discrepancy in fiscal resources as well as the status of countries' development has been depicted in the opportunity costs of money spent in this particular field. Considering the scarce resources of developing countries, the opportunity costs of money allocated to agricultural subsidies are much higher since money could be spent in another manner that might result in higher growth rates and in better long-term welfare.

Another relevant point is the importance of the tertiary sector in the economies of developed and developing countries respectively is very different. In India, for instance, two thirds of the workforce has an occupation in agriculture compared to approximately 3% in the United States. Consequently, would the expenses of wide coverage be exuberant in a developing country with respect to a richer country that has successfully

transformed its economy into a more service oriented one?

Apart from aspects related to the economic power of developed and developing countries, the study finds out that in developing countries the farms are much smaller compared to "industrialised" farms in rich countries which implies relatively high administrative costs.

Another important aspect is that developing countries have much less access to global reinsurance markets. Reinsurance contracts usually face transaction costs as well as due diligence since they must understand every aspect of the insurance product they are reinsuring. This implies underwriting, contract design, ratemaking, and moral hazard and adverse selection control mechanisms.

Taking these points into consideration, one has to conclude that as far as agricultural insurances are concerned, the schemes working "quite" well in developed countries cannot be applied in the same fashion for developing countries. As a consequence, we have to rely on products that take the special features of clients in developing countries into account. ■

¹ For instance, agricultural insurances in the US: for every \$ of insurance provided, the US taxpayer has to subsidise with US \$5 (Yaron et al., 1997)

Learning from the Positive Experiences in the Field of Microfinance

International Workshop on Disaster Risk Mitigation: Potential of Microfinance for Tsunami Recovery, New Delhi, October 14th and 15th, 2005

2005 saw the launch of the United Nation's *Year of the Microcredit* as well as the creation of an International Day for Disaster Reduction that is celebrated annually on October, 12th. This day is designed to raise awareness of the need to put disaster risk reduction on policy agendas and encourage the development of innovative methods for reducing disaster vulnerability.

Taking this into account, the All India Disaster Mitigation Institute (AIDMI) seized the opportunity of these two coinciding events to instigate an international discussion on the potential use of microfinance for tsunami recovery.

The workshop was hosted by AIDMI with the United Nations International Strategy for Disaster Reduction (UNISDR) and the Indian National Institute of Disaster Management (NIDM) and was held at the India Habitat Centre in New Delhi.

It was well attended by an array of experts in microfinance provision and disaster risk reduction from across the world, as well as representatives of the Government of India including the Honourable Home Minister, Shivraj Patil, D.K. Shankaran and M.P. Sajjnani from the Ministry of Home Affairs. Representatives from tsunami-affected states in South India were also in attendance.

The central outcomes of the workshops were the following:

- Due to the fact that experiences with microfinance tools have been very positive in terms of poverty and vulnerability reduction, there has been a clear **Recommendation for**



The workshop was lead by practitioners and policymakers, including (left to right): D.K. Shankaran, Ministry of Home Affairs; P.G. Dhar Chakrabarti, Executive Director, NDMA; Shivraj Patil, Honorable Union Home Minister; N.C. Vij, Vice Chair, NDMA; Praveen Pardeshi, Senior Advisor, UNISDR; and Mihir R. Bhatt, Honorary Director, All India Disaster Mitigation Institute.

developing a strategy for applying microfinance for disaster recovery.

- The participants have agreed that before microfinance can be successfully and broadly applied, **fundamental paradigm shifts** in outlook and approach are required. Policy and institutional level commitment is necessary in order to build disaster mitigation in the development process.

As Mr Sajjnani, Advisor at the Ministry of Home Affairs put it: *"Where previously government authorities concentrated on disaster relief, a shift in orientation is taking place, from a relief-centric approach to a holistic multi-disciplinary approach. This new approach encompasses prevention, mitigation, preparedness, response, relief and rehabilitation."*

Development of a microfinance recovery model:

- The international experiences shared in the workshop have

shed light on the fact that there is **not a single model** for microfinance and its application. Credit-based models are considered most effective, and should be combined with complementary risk transfer such as savings and insurance.

- In expanding the use of microfinance for disaster recovery in all areas, it was concluded that **more work is required to reach the poorest of the poor.**
- At the same time as recognising the disaster-stricken as clients, it was agreed that indigenous coping strategies should be built into programme design through community consultation following a community-based, participatory approach. This will help increase the **community's capacity** to address risk in the future. ■

To learn more about the workshop, please consult: www.unisdr.org

A Life and Non-life Insurance Product for the Poor: the *Afat Vimo* Scheme

In August 2004, the All India Disaster Mitigation Institute (AIDMI) launched the Regional Risk Transfer Initiative (RRTI) in association with the Provention Consortium. Other key partners are the Chamber of Commerce and Industry of Small Businesses, the International Federation for Red Cross and Red Crescent Societies, the World Bank, the Asian Development Bank and the Department for International Development.

The main objective of the RRTI is in the convergence of micromitigation, microcredit and microinsurance as a precondition for effective local, low-cost risk transfer. It therefore strives to promote more effective risk management for the poor. The RRTI has been central in terms of establishing the *Afat Vimo* scheme as disaster insurance for the poor.

Background of *Afat Vimo*

Following the 1998 Kandla cyclone, AIDMI established the Livelihood Relief Fund (LRF) with the main objective of building livelihood security and reducing economic risks through sustainable long-term recovery. Following the January 2001 earthquake in Gujarat, LRF expanded and played a major role during recovery from the February 2002 riots

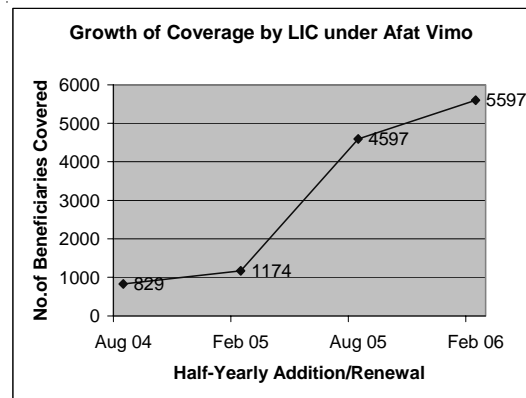
in Gujarat. In the wake of the 2004 tsunami, AIDMI responded again providing much needed livelihood relief.

To coincide with the launch of the RRTI in September 2003, AIDMI held a focus group session on microinsurance for the poor which brought to life the idea of a "Demand for Insurance Survey". The survey was conducted in September 2003 within 14 earthquake-affected slum communities in Bhuj, Gujarat. This provided information on what percentage of the population already had insurance (only 2%) and how many respondents were interested in taking out a policy in the future (73%). The survey also revealed that capacity building was required since awareness and understanding of insurance and risk transfer was low.

Afat Vimo

Since the survey revealed need by beneficiaries for mechanisms to safeguard their newly replaced or created assets in the aftermath of disaster, the *Afat Vimo* scheme was born.

After negotiations with companies interested in supplying low-premium insurance policies to poor clients, good partnerships were forged with the Life Insurance Corporation of India (LIC) and the Oriental Insurance Company Ltd. (OIC). LIC committed to providing a life insurance policy under *Afat Vimo* and OIC agreed to establish non-life insurance policy coverage



for *Afat Vimo* beneficiaries. The scheme was launched in August 2004, with the coverage of 829 LRF beneficiaries in Bhuj. It has extended its coverage to 5597 in February 2006. LRF beneficiaries are now covered in several districts in Gujarat, as well as in Tamil Nadu and Pondicherry in South India.

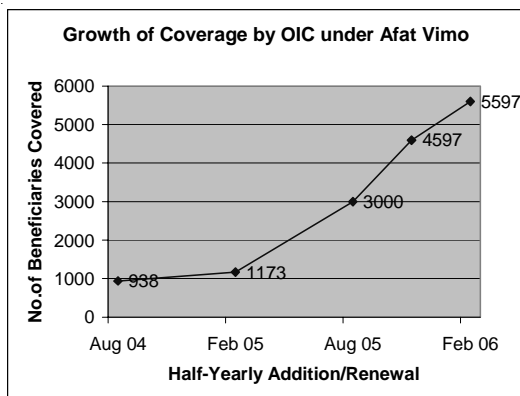
Description of the *Afat Vimo* Product

Afat Vimo provides life and non-life disaster insurance to low-income clients who are beneficiaries of AIDMI's livelihood relief through the LRF. It covers policyholders for losses incurred in the case of 19 eventualities, among them earthquake, cyclone, lightning, and landslide.

Like all AIDMI initiatives, *Afat Vimo* focuses on the poor among disaster victims. Thus, the typical profile of *Afat Vimo* policyholders is as follows:

- Disaster affected.
- LRF beneficiary.
- Low-income household—average annual income Rs. 12000-Rs. 18000.
- Engaged in microenterprises in the unorganised sector.
- Average assets worth Rs. 9000.
- Average savings Rs. 200-Rs. 400.

The insurance scheme of *Afat Vimo* is unique since it combines life and non-



life coverage in one policy. The coverage is provided by different insurance companies but is brought together by AIDMI under *Afat Vimo*.

The total payable premium in Gujarat for instance, is Rs. 146 (tax incl.) per household per annum. The life insurance component in this example includes an assured sum of Rs. 20,000 at a premium of Rs. 86, whereas the non-life insurance costs Rs. 60 per annum and covers house and contents (Rs. 40,000), stock-in-trade (Rs. 10,000) and personal accident (Rs. 25,000).

Complementary Services Provided by AIDMI

As stated above, the role of AIDMI in the *Afat Vimo* scheme is of both facilitator and intermediary. Unlike other organisations, however, their activity is not limited to the initial stages of insurance coverage, but AIDMI's community-based approach ensures that they are actively involved with the beneficiaries at every stage. They are committed to supporting communities in the long-run when relief institutions leave to provide assistance elsewhere. AIDMI has no exit strategy because they continue providing relief, rehabilitation and development assistance to vulnerable communities. This implies also the **capacity building** provided by AIDMI's Learning Resources team in cooperation with the LRF team in the form of training sessions with the community. These involve comprehensive explanations of how insurance works, why it is beneficial,



A typical Livelihood Relief Fund beneficiary is able to return to work based on compensation from Afat Vimo scheme.

how to be a good policyholder, the differences between microcredit and microinsurance, and the importance of the Indian Insurance Regulatory Development Authority. Training courses are essential for the effective operation of *Afat Vimo*; through these, beneficiaries come to understand what to do in the event of a disaster in terms of how to make claims as per the legal and procedural requirements of the insurers and AIDMI.

Apart from providing educational services, AIDMI also collects the premiums and helps the disaster-affected to start the claim process.

Lessons to be Learnt

As described above, the number of households covered by *Afat Vimo* has increased from an original membership of 829 in August 2004 to 5597 in February 2006. This has been a very successful development.

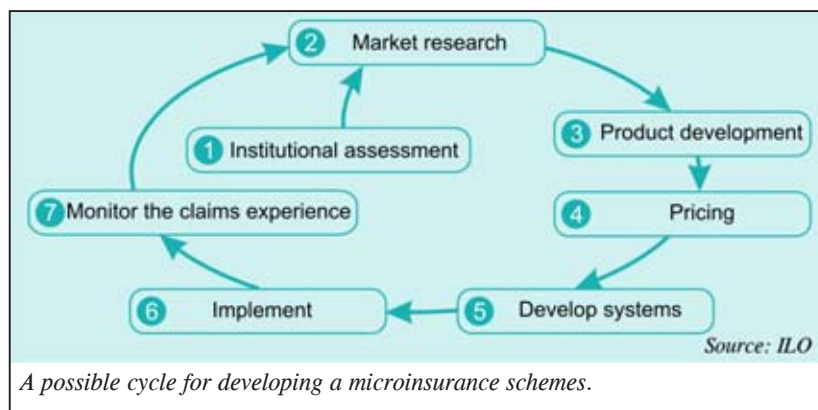
Furthermore, the renewal rates for *Afat Vimo* have been encouraging with an average of 88% which is very positive for a scheme in its relative infancy. However, there are also a number of reasons why beneficiaries do not renew their policies.

The LRF team has observed that the following reasons are the most common explanations for non-renewal of policies:

- migration,
- inability to pay,
- no desire to renew because people do not see the benefit in insurance.

Regarding the scheme as a whole, one can state that it has proven to be possible to achieve relatively low insurance premiums as well as expanding the programme by spreading risks to other communities since not everyone will be affected by disaster. Apart from the success of the scheme, however, there are some challenges to cope with such as the limitations in the expansion of coverage since an augmentation of membership would invariably mean a substantial increase in operating costs—particularly if geographical coverage was to increase. ■

To learn more about the *Afat Vimo* insurance scheme, view www.southasiadisasters.net and www.proventionconsortium.org



Product Innovations: The Index Insurance

Recently, the World Bank has provided the impetus and technical assistance for the implementation of innovative index-based crop insurance schemes in developing countries based on the experience of developed countries. The index-based crop insurance contracts are sold in standard units by rural development banks, farm cooperatives or microfinance organisations, and the "premium" varies from crop to crop. Payments to policyholders are based on a weather index that is highly correlated to farm yield or revenue outcomes.

Since payouts are not coupled with individual loss experience, farmers have an incentive to engage in loss-reduction measures, for example, switching to a more robust crop variant. A physical trigger also means that claims are not always fully correlated with actual losses, but this "basis risk" may be offset by the reduction of moral hazard and elimination of long and expensive claims settlement. Since the claim is a fixed amount of money per unit of protection, transactions are greatly simplified. The major advantages of index-based insurance are the reduction of moral hazard and transaction costs. Index-based mechanisms are also more transparent since they are based on a physical trigger, and the payout is fixed in advance. The major downside of index insurance is the basis risk: if the trigger is insufficiently correlated with the losses experienced then no payout may occur despite substantial losses.

In order to provide an analysis of these new products, we will apply a SWOT analysis to the Index Insurance that will tell us more about the "Strengths, Weaknesses, Opportunities and Threats" of the products. In this context, Strengths and Weaknesses

refer to the internal perspective whereas Opportunity and Threat set up the external one. Strengths and

Opportunities refer to the positive perspective while Weaknesses and Threats refer to the negative. ■

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www.southasiadisasters.net

www.unisdr.org/hfa

www.worldbank.org ■

Due Diligence Checklist for Identifying an Insurance Partner

| Questions | What an MFI Should Look For |
|--|--|
| What is the reputation of the insurance provider? | It should be a strong institution that pays claims on time. Check with policyholders to see if they have had a positive experience. |
| How is the insurer currently financed? | The insurer should be financed from its earnings, and it should have a stable, conservative asset portfolio. |
| What is the claims experience of the insurer and its history of claims payouts? | They should pay most claims within a month and be willing to guarantee a fast turnaround (within two weeks guaranteed with an effort to pay within one week) on claims from MFI clients. The MFI should track this once a relationship is finalised. |
| How interested is the insurer in serving the low-income market? | They should not only express interest but also have examples of current work with this market or at least examples of efforts to work with this market. |
| Will the insurer adjust its products to suit the preferences of the poor? | They will likely need to reduce the coverage, reduce the price proportionately, and even adjust some procedures to facilitate the transactions between the MFI and the insurer. |
| Is the insurer willing to make a medium- or long-term commitment to the MFI? | This type of relationship will take time to mature. If the insurer is not willing to make a commitment for at least three years, it is not worth the MFI entering the arrangement. Note: the insurer is not tied to the original terms of the insurance for that period, just to continue to work with the MFI and its clients. |
| Is the insurer willing to pay a commission to the MFI for performing the agent role? | On short-term group life business, insurers typically pay an agent five to twenty percent of the premium. The MFI should get a substantial portion of that amount. |
| Are there issues related to regulatory compliance by the insurer? | An MFI should review the insurer's annual report and discuss its regulatory compliance with the insurance commission. Some insurance companies employ an ombudsman to interact with the public. If one is available, the MFI should discuss with her issues related to regulatory compliance and common customer complaints. |
| Will the insurer give the MFI responsibility for verifying claims? | It is not recommended for the insurer to verify claims. The two partners should have a written understanding regarding what proof the insurer requires. The agreed documentation should be accessible to the poor, yet conclusive. |
| Can the insurer minimise the number of exclusions without jeopardising the sustainability of the plan? | Generally, MFIs have difficulty informing clients about complex products. Insurance will be the same. Not only will MFIs have to explain the concept of insurance (risk pooling), but they will also have to help clients understand the product. The simpler the product, the easier it will be to sell and administer the product. ■ |

Dealing with Restrictive Legal Environments

From a legal point of view, insurance products cannot be offered in India by organisations that are not licensed by the Insurance Regulatory and Development Authority. The laws for registration as an insurance company are such that it is highly unlikely that any MFI could ever comply. One strategy for dealing with this is through terminology. By referring to

an "insurance scheme" as a "welfare measure" in its annual reports, an MFI may fall under the radar of the law. In India, as long as the scheme is available only to members and complies with the legislation regulating NGOs, the state at present is not concerned with restricting their activities. ■

Source: ILO



Commodity Risk Management for Developing Countries

Introduction

Farmers face a spectrum of risks, and each of these risks-along with how farmers manage them-impact farm income, productivity and access to credit.

Among the risks farmers in developing countries have to deal with is the weather risk as well as the risk related to the price of commodities. A recent study of AIDMI conducted with farmers in the Indian state of Gujarat has shown that 40% of the interviewees do not know about the existence of crop insurances.

Furthermore, AIDMI gained evidence among those who know about the existence of these schemes, only 34% have signed in a contract. The conclusion for AIDMI in terms of the mentioned survey implies to increase the awareness of agriculture insurance is an effective method to reduce several risks and reduce their vulnerability and give them a more stable livelihood.

Whereas our article on index insurance schemes has provided an analysis of an appropriate method to mitigate weather risks, this contribution sheds light on the tools that can help farmers manage risks in the context of commodity prices better.

Impact of Price Volatility on Farmers

Price volatility significantly impacts the incomes of farmers as well as the macroeconomic health of their countries. According to the World Bank, from 1983-1998, the price of many commodities fluctuated from below 50 percent to above 150 percent of their average prices. Attempts by many countries to guarantee farmers



Farmers discuss possible hazards in a workshop in Delhi.

minimum prices by separating domestic commodity prices from international prices have proven financially unsustainable. Instead, these countries have started to pursue the path of liberalisation which exposes farmers to price fluctuations over the course of a season creating uncertainty about the price they will receive for their product to be sold.

At the farm level, this uncertainty in commodity prices makes it difficult for producers to allocate resources efficiently, limits their access to credit for productivity enhancing inputs and leads them to adopt low-yield, low-risk production technologies, thereby lowering average incomes. At the macro level commodity price volatility affects government's fiscal revenues, trade balance, exchange rate, and creditworthiness.

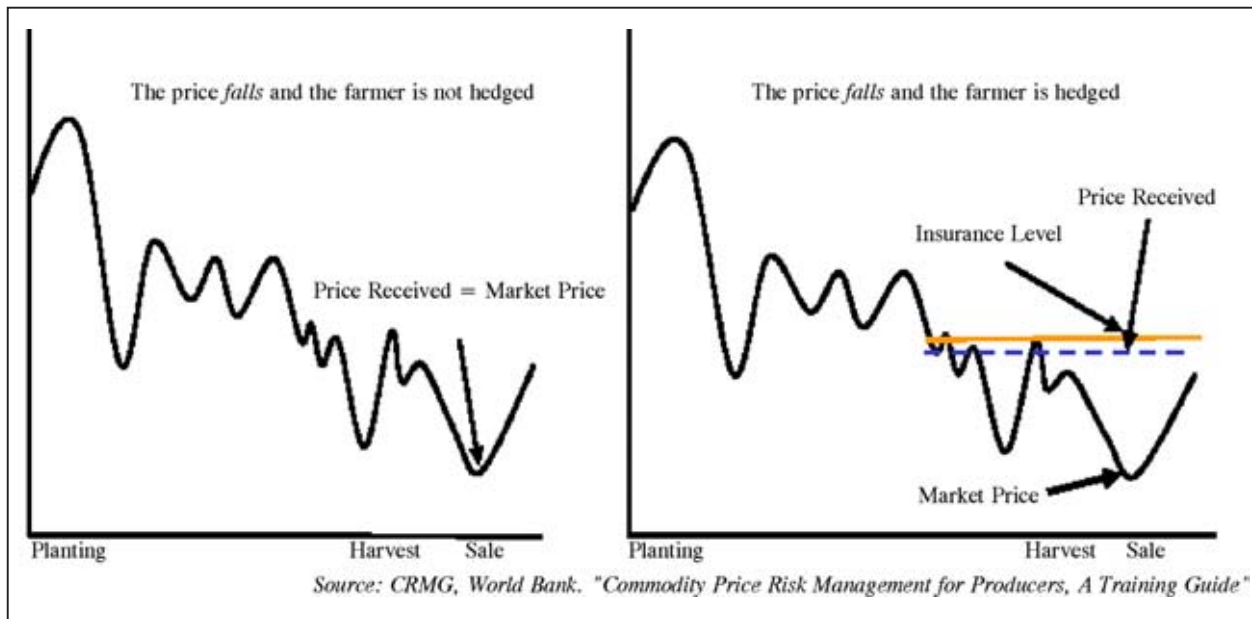
While market based tools (futures and options) that insulate producers from the negative effects of short-term price volatility are widely used in high-income countries, the vast majority of agricultural producers in developing

countries are, in general, unable to access these markets. In the absence of markets for price hedging instruments, farmers try to cope with price risks by:

- a. self-insuring by asset accumulation
- b. income diversification
- c. informal insurance arrangements.

Diversification to other activities is difficult due to the lack of necessary skills of most farmers, information and capital to do something else. Many farmers adopt low-risk and low-yield crop to ensure a minimum income. However, these inefficient production patterns inhibit the creation of income growth and the accumulation of capital. Finally, informal insurance arrangements at the local community level often break down in the face of large systemic risks such as the collapse in commodity prices.

The use of market oriented price risk management strategies to mitigate this price risk would provide farmers with new alternatives and allow them greater certainty in planning their on-farm activities.



Why are farmers unable to access these financial instruments?

Some barriers have prevented smallholders from assessing these tools:

- the minimum contract size traded on organised exchanges far exceeds their annual production quantity
- lack of knowledge of such market-based price insurance instruments
- lack of understanding of how to use the tools available
- sellers of such instruments—generally international banks and

brokerage houses—are often unwilling to engage with a new and unfamiliar customer base of small-scale producers, characterised by high transaction costs, diminished access to credit, and performance risk.

The World Bank as a facilitator

As learned above, market based tools are difficult or almost impossible for poor people to assess. The World Bank— with support from several donor governments, and in collaboration with international organisations and private

sector representatives— has been working as a facilitator, providing technical assistance and capacity building to allow producers in developing countries and local intermediary institutions with links to producers to access these instruments. To date seven transactions have been completed between developing country clients (in Uganda, Tanzania, and Nicaragua) and international providers (mainly major international banks in Europe and the US).



An AIDMI team member finds that falling commodity prices represent big risk to farmers.

These transactions provided price protection for tonnages ranging from as low as 50 tons to as much as 700 tons. Transactions provided price protection for sales that were made as short period as one month in advance up to seven months in advance. The range of premiums paid for price protection varied from around 3% of the value of the commodity to as much as 8% with most transactions involving premium payment of around 4-6%.

How do Price Risk Management Instruments Work?

A parallel can be drawn between hedging instruments for price risk and typical insurance products. Producers' organisations, local banks, or exporters can purchase derivatives that

Can South Asia Learn from other Developing Countries? The Example of Tanzania

Background

In 2001 and 2002 coffee price fell to forty-year lows. Tanzania liberalised the coffee sector in 1993 and as a result both private traders and cooperatives buy it at competitive prices at the community level. Coffee makes 20% of Tanzania's export earnings and the drop in price has affected 400,000 people. Indeed, liberalisation and implicitly the volatility in prices have made it difficult for farmers to optimise production technology, timing of sales, and use of assets that could eventually result in higher household incomes. Overall, the welfare of coffee farmers in Tanzania has diminished.

The Product

Being aware of the impossibility of stopping the long-term trend of declining prices cannot be stopped without significant structural changes in the world coffee market, one of the largest coffee cooperatives in the country has begun working with the World Bank in order to confront the negative effects of short-term price volatility. In doing so, they utilise price risk management instruments to hedge their price risk. This cooperative union has a large number of smallholder producer members whose average production is between 20-100 kg per farmer.

Like many other cooperatives in Tanzania, the cooperative union utilises a pricing system that consists of multiple payments to farmers throughout the year. Cooperative members receive a uniform minimum price for their coffee when they deliver it to the union, and then later in the season, depending on sales and market performance overall, farmers may receive subsequent payments for their product. The uniform minimum price, which is called the 1st payment, is established months in advance of the actual selling season

and agreed at the annual general meeting of the producers. The guaranteed 1st payment is viewed as a service to the farmers and provides them with some form of price stability, but it can have disastrous financial impacts on the cooperative overall. If cooperatives guarantee a low 1st payment at the beginning of the season, they run the risk that market prices will rise and farmers will sell to traders instead of to the cooperative (local traders compete with the cooperatives by paying full market price for coffee, in cash, at the time of delivery of the product). If cooperatives guarantee a high 1st payment at the beginning of the season, they run the risk that market prices will fall, and they will make losses on the negative margin between purchase price to farmers and actual sales prices on the market. Since the 1st payment price is established well ahead of the selling season at a time when sales prices are not yet known, the cooperative union is essentially taking a long position on coffee, which is in effect from the time they set the 1st payment until the time they conclude all sales of coffee at the end of the season, a period which can stretch up to ten months.

Complications of the Programme

However, in order to assure long-term sustainability of the cooperative, it has been necessary to develop a number of strategies as for instance finding a way to protect overall profitability from the often disastrous affects of setting 1st payment price high at the beginning of the season and having to sell low when prices fell later in the season.

For the cooperative, although conclusive impacts of the risk management strategy are not yet entirely known since the season is just now ending, there were a number of positive affects:

1. The union improved its relationship with its local bank, which included a loan for premiums to cover the cost of hedging instruments in the total loan package given at the beginning of the year.
2. *The union improved its overall financial state, including its debt position, and management of the union had a clear view of overall financial status throughout the season, without having to worry about the impact of prices falling below a certain level on the global market. They were able to communicate results with confidence to the local bank and government ministers who were monitoring progress.*
3. Improved financial transparency helped the union make better and more strategic selling decisions.
4. The union was able to pay farmers a 2nd and 3rd payment since there were periods of relatively higher market prices during some months of the selling season. In the past, any positive returns from high priced sales would have been held by the union until the end of the season to protect against future losses. With hedging, the price floor created by the option allowed the union to disperse revenue at the time it was earned.

Concluding Remarks

Each of the impacts listed above bodes well for the union's ability to continue to strengthen its relationship with its lenders and improve its access to credit. In a very short period of time, the union has moved from being a very high-risk enterprise to a much more stable operation. Price risk management has contributed to that growing stability and the union's managers have indicated that they are very pleased to have knowledge and access to such tools.

are traded on international exchange (or based off these exchanges); in most cases a simple put option, on behalf of their producers. When combined with physical sales these financial instruments, it will guarantee a minimum price level based on an international price (not a local price) for a given commodity for a number of months. In order to purchase this financial product producers must pay a market related fee or a premium. In the case of put options, when price rises during the option contract period, the producer receives no payout from the contract but can still sell his physical product for the market price in order to benefit from the rising prices. However, when price falls during this period, the producer receives a payout equal to the difference between the price the producer chose to insure with the price risk management contract and the international market price on the last date of the option coverage.

Because of the size of these contracts it is necessary to aggregate producer demand for these products. A diversity of different types of organisations could serve this role as an



Mutual learning between farmers and insurance companies about the risks and commodity prices at a workshop conducted by AIDMI.

intermediary. A domestic bank or other financial institution could integrate these products into its services.

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The ProVention Consortium

The ProVention Consortium is a global coalition of governments, international organisations, academic institutions, the private sector, and civil society organisations. The Consortium is based on the premise that we all must take responsibility for making the new millennium a safer one and that it is the inter-sectoral links-among the scientific community, policymakers, and the private and public sectors-that will facilitate the promotion of risk assessment, risk reduction, and risk education activities in developing countries. The Consortium's objectives are straightforward and attainable:

- To promote a culture of safety through education and training

among leaders and citizens of developing countries.

- To support public policy that can reduce the risk of natural and technological disasters in developing countries.
- To support pilot projects and to disseminate information about "best practices" proven to mitigate the scope and frequency of disasters.
- To develop governments' ability to minimise disasters and to respond effectively when they occur.
- To forge links between public and private sectors, between the scientific community and policymakers, between donors and victims, so that all stakeholders work together to strengthen the

economy, reduce pain and suffering, and promote the common good.

The ProVention Consortium functions as a network to share knowledge and to connect and leverage resources to reduce disaster risk. It focuses on synergy and coordination so that efforts, and benefits, are shared. Partners include the Governments of Japan and Norway, Organisation of American States, International Federation of the Red Cross, UN Development-, Environmental-, Food Programmes, World Meteorological Organisation, African Development Bank, Asian Development Bank, Wharton School of the University of Pennsylvania or private groups such as Munich Reinsurance. ■

SWOT Analysis of Index Insurance Products

Strengths

- **Lower moral hazard** since the indemnity does not depend on the individual producer's realised yield,
- **Less adverse selection** since the indemnity is based on widely available information, so there are few informational asymmetries to be exploited,
- **Lower administrative costs** as underwriting and inspections of individual farms is not required,
- **Standardised and transparent structure** due to uniform structure of contracts.

Weaknesses

- **Without sufficient correlation between the index and actual losses, index insurance is not an effective risk management tool.** This is mitigated by self-insurance of smaller basis risk by farmer; supplemental products underwritten by private insurers; blending index insurance and rural finance; and offering coverage only for extreme events.
- **Precise actuarial modelling is required;** Insurers must understand the statistical properties of the underlying index.

- **Education;** Required by users to assess whether index insurance will provide effective risk management.
- **Market size;** the market is still in its infancy in developing countries and has some start-up costs.
- **Microclimates;** Make rainfall or area-yield index based contracts difficult for more frequent and localised events.
- **Forecasts;** Asymmetric information about the likelihood of an event in the near future will create the potential for intertemporal adverse selection.
- Not appropriate in highly spatially heterogeneous production areas or with commodities grown in microclimates. In this case, index insurances will only work if it is highly localised, and/or if it can be written so that it protects only against the most extreme loss events.

Opportunities

- **New innovations in technology,** including the low-cost weather stations that can be placed in many locations where weather variables can be measured, and also the types of measurable

variables. Measurement redundancy and automated instrument calibration further increase of the credibility of an index.

- **Availability and negotiability;** Standardised and transparent, could be traded in secondary markets.
- **Reinsurance function;** Index insurance can be used to more easily transfer the risk of widespread correlated agricultural production losses.
- **Versatility;** Can be easily bundled with other financial services, facilitating basis risk management.

Threats

- **Weather cycles;** Actuarial soundness of the premium could be undermined by weather cycles that change the probability of the insured events, for example, El Niño events.
- When designing a contract, significant care must be taken to assure that the insured has no better information about the likelihood and magnitude of loss than does the insurer. ■

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