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# Strategies for Improved Social Protection in Asia: Micro and Area-based Schemes (Project and Program Issues)

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## I. Introduction

It is now widely recognized that improvements in social protection are important elements in furthering social and economic development, aside from being a measure for poverty alleviation.

Speaking of social protection in the context of many DMCs in the Asian Region, and in particular the rural sector where the incidence of poverty is greater, there is a growing interest in the utility of micro and area based schemes vis-a-vis the traditional measures as effective instrument of social protection that help prevent, mitigate or cope with a variety of risks affecting rural communities.

The provision of appropriate social risk management instruments is important in order to reduce vulnerability of the poor and assist them to rise out of poverty. This requires governments and development organizations to strike the right balance among alternative social risk management arrangements (informal, market-based and public arrangements) and strategies (prevention, mitigation and coping strategies) and to ensure that the instruments match what is needed and what can be supplied.

This paper attempts to ventilate and discuss various issues and problems relating to these other schemes considered to be micro and/or area based as they are now being implemented in various countries and hopefully from these, provide the ADB a menu of options for its consideration as well as a to develop some workable and practical framework or models for its reference.

## **II. Key Issues And Options**

### **A. On Agricultural Insurance**

A number of key issues and problems are involved in the introduction and implementation of an agricultural/crop insurance program. These issues may be summarized as follows:

- (i) effectiveness of agricultural/crop insurance as a risk-transfer mechanism and as an instrument for rural development;
- (ii) viability and sustainability of public sector agricultural/crop insurance for small scale, traditional and subsistence farmers;
- (iii) coverage of crops and scope of cover;
- (iv) subsidized agricultural/crop insurance schemes for small scale, traditional and subsistence farmers;
- (v) use of the area approach in compensating losses vs. individual approach;
- (vi) voluntary or compulsory scheme;
- (vii) role of government; and
- (viii) reinsurance and the use of the global capital markets to address the issue of catastrophic risks in agriculture.

#### **1. How effective is agricultural insurance as a risk-transfer mechanism? As an instrument for rural development?**

It cannot be denied that the farming communities face a variety of risks. Although they have learned to live with these risks by employing various devices to prevent, avoid, mitigate or cope with these risks, still there is the problem of residual risks. These are the catastrophic type that no amount of human intervention can prevent their happening nor mitigate their disastrous effects. The damage they cause to lives and property cannot be underestimated. It is in this situation where agricultural insurance may prove useful.

It is claimed that agricultural insurance or crop insurance is an effective financial risk instrument that not only protects farmers from losses due to insured risks but also create the desirable environment of promoting higher yields in the farms. Many literatures have mentioned of many benefits that can be derived from agricultural insurance, viz.:

- (i) Agricultural insurance protects farmers from losses caused by insured natural perils and smoothens their income flow;
- (ii) It improves farmers' access to formal credit as the insurance policy can serve as collateral for a loan;
- (iii) With an added security for the loan, banks will be more inclined to lend to farmers;
- (iv) Agricultural insurance promotes the adoption of modern farming technology and appropriate risk management techniques as the insuring entity would require them as a precondition to insurance coverage, thus increasing yields and income for the insured;
- (v) Insurance does away with the risk averse nature of poor farmers, thus encouraging them to invest the appropriate levels of inputs (although higher cost) that result in increased yields and higher net income;
- (vi) With the increase in yield that agricultural insurance help to bring about, consumers and the general public also benefit in the form of steady supply and availability of agricultural commodities as well as stability of prices of these commodities;
- (vii) It relieves the government from administering expensive ad hoc disaster relief operations for the farming sector; and
- (viii) Unlike disaster relief assistance where the government is mainly the source of funding, in crop insurance several parties may contribute to the insurance fund in the form of capital of the insuring agency, subsidy from the state, premium contributions from farmers and other entities benefited by the program.

On the other side of the coin, while it is an accepted fact that insurance in general has facilitated the growth of industries and commerce, it has lagged behind when it comes to agriculture. Several explanations had been given. There is hesitancy on the part of the private sector insurance to cover climatic risks because of their co-variability; absence or lack of technical skills within the individual insurance companies to assess and evaluate agricultural risks; and there is a general perception that many of those in the agricultural community, especially the small scale, traditional and subsistence farmers are not within the *threshold of insurability*.

Perhaps these negative perceptions can be reversed somehow. There is a need to demonstrate more the manageability of many of these natural risks. In the meantime, it might be advisable to limit the operation of insurance to only a few named perils. The *hail insurance business* in the western world, which has withstood the test of time, is worthy of emulation for the other major climatic risks. There is also a need to upgrade some of the skills of the technical staff of many insurance companies and eliminate bias against agricultural risks. Closer collaboration between the public and the private sector in these areas of concern will provide the necessary impetus for the development of insurance in agriculture.

## **2. Viability and sustainability of public sector crop insurance for small scale, traditional and subsistence farmers.**

Literatures and country papers on agricultural or crop insurance are replete with examples of crop insurance schemes run by government or a parastatal entity that failed. Most of these schemes are targeted at small scale, traditional and subsistence farmers.

A couple of DMCs in the region (Thailand and Vietnam) tried to run pilot programs several years back but had to discontinue after experiencing losses. In Thailand, which operated a pilot scheme for cotton and maize in the 80's, the program had been terminated because of high administration costs being incurred by the Department of Agricultural Extension, which was then running the program to the extent that it had to withdraw from it. In addition, income from insurance premium was not sufficient to cover payment of claims; low participation of farmers in the pilot areas; farmers had a negative picture of the insurance business because they lack understanding of insurance principles; and inadequate statistical data as basis for an actuarially calculated premium rates.

The recent pilot crop insurance scheme for rice crop in Vietnam which was implemented in 5 provinces by BaoViet (the state-run insurance company), has to be discontinued after only 3 years due to high loss ratios ranging from 110% to more than 300% in certain provinces. The pilot program also suffered from adverse selection inasmuch as the 5 provinces (out of 61 provinces), which volunteered to do the pilot scheme, are all situated in high-risk areas.

Despite these setbacks, however, both countries are thinking again of introducing crop insurance in their respective agricultural sectors, perhaps learning from the mistakes in the past. In

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Thailand, the Bank for Agriculture and Agricultural Cooperatives (BAAC) had engaged the services of private international consultants to conduct new feasibility studies and to draw up the operating guidelines and procedures for a new crop insurance scheme. The enabling law for this has been passed by the Thai Parliament and the program is slated to commence in January 2001. In like manner, the Peoples Republic of Vietnam had asked the assistance of FAO to assist them in the technical and feasibility studies for a new crop insurance scheme for their rice farms and at the moment the result of these studies is being mulled over by government.

Based on the study of FAO, other Asian countries that are now implementing this type of scheme such as Sri Lanka, Bangladesh, the Philippines, and India are also encountering high loss ratios. Many of these countries are likewise experiencing high operational costs with the exception maybe of India which uses the area approach in indemnifying losses. In Japan where the crop insurance is being implemented by the farmers' mutual, the program is costing the government a lot of money for subsidizing between 50% to 80% of the premium being paid by farmers plus providing subsidy for administrative costs and reinsurance support in case of catastrophic losses. This is in spite of favorable loss ratios being experienced by the program for several years now.

Two main causes of failures stand out: a) high loss ratios which means that insurance claims far exceed revenues from premiums, and b) high operational costs.

Obviously, this situation is to be expected if we consider the situation of small scale, traditional or subsistence farming. The sizes of the farms are small and therefore the amount of insurance business per individual unit is minuscule. Many of these small farms are widely dispersed and the insuring entity has to spend a lot to reach and service each and every one of them. The scale of operation is also small; hence the farmer's margin of profit is very narrow which makes his affordability level also very low. If one is to introduce an entirely new product such as crop insurance for which this group of society is not very familiar of, perhaps one can easily deduce that such product will not rank very high in their list of priorities. This is precisely the reason why private sector insurance is hesitant to venture into this area. They feel that this group is below the threshold of insurability.

In many DMCs, this group of farmers represents a significant number of people in the rural communities and government simply cannot just disregard them. It has an inescapable responsibility

to also look after the welfare of these people. So what happens is that the government-run insurance programmes will at times be pressured to keep the premium low, oftentimes without regard to the requirements of an actuarially calculated premium rate. At other times, the premiums will have to be subsidized by government itself in order to keep them at the levels for which farmers can afford.

Despite the low premium and/or the subsidy being provided, still farmers have been found not to be forming long lines at the door of the insuring agency. In the case of voluntary schemes, only those who think they are in great risk of losing their crop will buy insurance. There is now an element of anti-selection or adverse selection, which defeats the viability and sustainability of an insurance business.

When crop losses occurs due to insured risks, claims will have to be attended to by loss adjusters and because of the dispersed nature of farms, heavy operating costs will again be incurred. At times in view of the numerous small claims, the quality of loss assessment may suffer due to pressures to finish the job at the earliest time possible. There is also the issue of integrity of the loss assessment, which is difficult to detect when dealing with many small and widely scattered claims. Sometimes a government-run scheme may be induced (again for political reasons) to jack up compensation of losses to make certain politician looking good to the farming community. In insurance parlance, these are called moral hazards. There is a conglomeration of situations that impact on the viability of a crop insurance scheme:

- (i) low premium income brought about by low farmer participation,
- (ii) smallness of the insurance business per unit,
- (iii) low affordability levels of farmer,
- (iv) high operating costs for delivering insurance product,
- (v) political influence that affects premium rating and loss calculations,
- (vi) high operating costs for loss adjustments,
- (vii) incidence of anti-selection, and
- (viii) incidence of moral hazards.

In spite of the seemingly insurmountable odds against government-run multi-peril crop insurance programmes for the small scale, traditional or subsistence farmers, there are still a growing number of specialists in this business who think that a modified crop insurance scheme for

small farmers can be worked out and be implemented in a viable and sustainable manner. They are looking at a host of options, which will address the various problems presented above. For instance, to achieve a wider base for insurance they suggest that it be implemented on a compulsory basis or if it is not possible, make it a pre-condition for eligibility to other programs like credit, membership in marketing services, and for other farm benefits. As regards the issue of operating costs, linking the program to the operation of banks catering to farmers or marketing boards, and adoption of an area approach in compensating losses will save on costs. The latter will also help minimize moral hazards and to a certain degree anti-selection. If despite all these, the private sector is still unwilling to play a role, some are suggesting that the course of action for government to take is to create a parastatal entity to run the scheme, provide it with adequate capital *ex-ante*, make it autonomous and free from political interference, subject it to regular monitoring and review with regard to compliance of its objectives, and make it accountable for the funds entrusted to it.

### **3. Coverage of crops and scope of cover**

Agricultural insurance should be able to cover crops that are important to the country's economy and are vital to its food security. To be meaningful as an instrument for social protection, it should be covering crop or crops that are farmed by a greater number of farmers in the rural sector.

Limiting the number of crops to be covered also limits the amount of capital to be provided. But limiting it too much may lose the social aspect of protecting a large number of the rural population. A proper balance should be continually sought.

What risk or risks to cover is another vital issue to be addressed with extreme care as it would mean success or failure to the program. Multi-peril or all-risks schemes are very popular to small-scale farmers and many would probably insist on it if a crop insurance product were offered to them. In view of the numerous risks, the cost for such a cover is usually high. In contrast, commercial and industrial farms, which practice strict risk management regimen, would usually go for limited peril cover to address only the risk that they cannot control. This way, they are able to bring premium cost down.

Several experts on the subject are with the opinion that multi-peril agricultural or crop insurance schemes do not work and do not serve the purpose of the small-scale farmers. Therefore, most of the present crop insurance schemes may have to be modified or redesigned to avoid the

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pitfalls that had caused them to be unsustainable. ADB can play a catalytic role in this to bring the insurance product to the most needy. The modification will have to be done in a manner that will keep the premium low and within reach of ordinary farmers but still protect them from disastrous losses.

#### **4. Subsidized agricultural insurance schemes for small scale, traditional and subsistence farmers.**

The advocates for free market frown on the use of subsidies in any form because they create some form of artificiality in the market. But when the most vulnerable segment of the farming community is being reduced to abject poverty due to repeated occurrence of natural calamities, then a social welfare is involved and the subsidy issue may be justified. If agricultural insurance is the best option after thoroughly examining all other alternatives, perhaps the operation of such a measure can be supported by subsidy from the public sector or the farmers assisted financially by subsidizing part of the premium. It might be worth remembering that before a decision to subsidize is taken, an exhaustive study should be made to bring down the cost of premium to the barest minimum without unnecessarily reducing insurance benefits to the insured to a point that it becomes meaningless. The subsidy may also extend to shouldering portions of the operating costs of the insuring agency, putting up reinsurance facility or reserves for catastrophic losses.

It is not uncommon to see agricultural insurance schemes for farmers in both developed and developing economies being heavily subsidized by the state. The crop insurance programmes in the USA, Mexico, Costa Rica, Japan, India, Sri Lanka, Bangladesh, the Philippines, Iran, and Nigeria are all subsidized by their respective governments at varying levels of subsidy.

#### **5. Use of area approach in compensating losses versus the individual approach**

In small farmer crop insurance scheme, assessing losses by individual farm units has contributed to high operating cost. Cognizant of this problem, some countries like India and Sweden have adopted the area approach in the assessment of loss. Thailand, which is contemplating to reopen its crop insurance program, intends to adopt the same approach. This approach to loss assessment has elicited certain criticisms as not being reflective of individual loss experiences inasmuch as it is based purely on averaging. But this can be overcome once people get used to it.

The overriding consideration is the cost saving feature making it a practical method for designing a viable crop insurance program for small farmers.

In this connection, it may be worth considering by other countries now in the process of modifying their respective crop insurance programmes for small farmers.

## **6. Voluntary or compulsory scheme**

Discussion of this issue is related directly to the insurance principle of spreading the risk or achieving a wider base with which to spread risk.

The compulsory scheme will ensure a wide participation and effect a better spread of risks. Since everybody is compelled to take insurance, the element of adverse selection is minimized, if not eliminated. This is in stark contrast to the voluntary scheme where there is always that danger of the higher risk farms being applied for insurance coverage.

Compulsory schemes may however be placed in the same category as monopolies. There is a tendency on the part of management to be complacent and less effective in view of the *captive* nature of its clientele. In contrast, management of voluntary schemes would always be on alert to customers' complaints and customer satisfaction to preserve its market.

From the standpoint of the insured, making coverage compulsory may meet with strong resistance among societies where the democratic spirit is strong. Thus, it may be advisable to explore other areas where some form of automatic coverage for crop insurance can be achieved as in establishing linkage with banks lending to farmers, marketing boards or other forms of farmers' organizations rendering some form of service to their members.

Countries like India, Sri Lanka, the Philippines, the Dominican Republic, and Venezuela have linked their respective schemes to credit. Israel and Mauritius have theirs linked with the marketing boards which make insurance mandatory for their members.

## **7. Role of government**

The role of government in agricultural insurance should be clear and unequivocal. Where private business is not able to play a role, the government should step in if the provision of such a service (in this case, agricultural insurance) is necessary for the larger interest of society. In such a case, government's role will simply be as a trailblazer and to showcase its operation for scrutiny by prospective investors from the private sector. At the slightest indication of interest by the private sector, government should be ready to step aside and privatize its holdings. Even while doing this, it

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may still continue providing subsidy support to the program if continuance of such subsidies is justifiable.

In another vein, the government may be relegated to the background with its role being limited only as a reinsurer of last resort as in the case of the USA program.

#### **8. Reinsurance and the use of the global capital markets to address the issue of catastrophe risks in agriculture.**

The co-variability of most catastrophic risks poses a big problem for a specific country program on agricultural insurance. The way to address it is to be able to spread the risk beyond national boundaries. Reinsurance is an instrument to realize it. A World Bank report entitled “*Managing Catastrophic Risks using Alternative Risk Financing and Insurance Pooling Mechanisms*” concludes that with key institutional changes, catastrophe losses can be better absorbed by markets, with resulting financial benefits to local industries, domestic insurance companies, households, international reinsurers and governments, through the use of more optimally structured risk sharing arrangements.” It further states that market arrangements (both domestic and international) can better channel and fund these risks, with government and multi-lateral institutions supporting the development of viable and sustainable structures. The development of self-sustaining financial structure may, however, need some initial funding leverage to build up the necessary reserve base for ensuring self-sufficiency. Governments and multi-lateral institutions can play a role as funding agencies or facilitating necessary credit arrangements to serve as back-ups.

Accessing reinsurance facilities requires some form of discipline. Reinsurers tend to be very selective especially when it involves agricultural insurance. Only the well-developed and technically viable ones are able to do so. It might be necessary to re-structure existing country programmes to gain confidence and trust of international reinsurers. Governments and multi-lateral agencies can play a pivotal role in this area.

Alternatively, the global capital markets, which have an estimated capital 50 times that of the international reinsurance market, may also be able to absorb some of the risks and financial payouts generated by catastrophes. Various financial market instruments have evolved in this regard. One example is the catastrophe bond for securitizing insurance risks. The cat bonds are issued publicly to worldwide investors at attractive interest rates much higher than the usual market rates. Proceeds

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of the bonds are placed with a trustee to be used only when catastrophe losses occur. Meantime, the proceeds are invested in risk free securities and the earnings thereof plus the premiums paid for the insurance cover are used to service the amortizations on the bonds. Under this arrangement, some primary risk carriers (borrowers) are finding out that the net cost to them is reduced substantially and approaches that of traditional reinsurance. At the other end, recent innovations such as basing disaster payouts on objective hazard intensity measurements (such as wind velocity or earthquake intensity with the use of satellites and other sensing devices) gives investors more confidence to the fact that underlying damage assessments can not be manipulated by the borrower and/or the insured. Such bonds that are linked to events that are unrelated to the usual risks being faced by traditional financial markets, provide investors some form of a portfolio diversification hedge. Also, the actuarial probability of default in such bonds is found to be generally lower than similarly rated investment securities being actively traded in the capital markets.

It is also reported that some governments in the developed economies of Europe and the U. S. A. have already observed the “exit” of some insurers from private markets prone to natural catastrophes. Thus, prompting them to established public and private collaborative schemes to insure catastrophic cover through risk pooling, coupled with group reinsurance arrangements and last-resort credit back-up. Capital markets have been willing to provide stand-by credit support for insurance purposes because they are finding out that projections of future premiums and other charges can suffice to secure servicing such debt, if utilized. In this way, the capital market is able to increase insurance capacities without straining the balance sheets of insurers and reinsurers alike. A similar support may possibly be catalyzed by multi-lateral institutions for developing economies facing high vulnerability.

### **9. Suggested Model of Agricultural Insurance Scheme for the Poor**

Taking off from the above discussion of the issues in agricultural insurance and the available options to address certain problems, it is obvious that one cannot design a single crop insurance model to apply to all farmers. It would be best to design a model suitable to small farmers and another to conform to the needs of commercial and specialized farms. In the first group, an element of welfare may be necessary to be put into the model, while in the second group, the model can operate on its own based on market.

**Box. 1. A Model for Small Farmer Crop Insurance Scheme**

**Implementing Unit:** Any private insurance company; or farmers' organizations such as cooperatives, marketing boards. If the private sector is unwilling to do so, then government should handle the implementation, preferably by creating a parastatal entity to do this but given certain autonomy to operate the program without political interventions.

**Crop covered:** Crops that are vital to the economy of the country or those that are farmed by a greater number of farmers targeted by the program will have priority depending on how many crops can be carried given the capital of the program

**Sum insured:** The amount of insurance is pegged to cost of production. The insured farmer should be compensated only up to the level of his investment and exclude the unrealized profit.

**Scope of cover:** A limited peril or named-peril scheme should be applied, limiting the risk to only one or two which cause disastrous loss to crops. Possibly limited only to climate-related risks and excluding other risks that can be managed or avoided via other means. A deductible or franchise of not less than 30% of sum insured is suggested to keep premium low. The important thing is that the insured farmers are protected from really big losses that can upset their finances.

**Premium rate:** Should be based on market rate, that is, it should be calculated actuarially based on past statistics and trends in yields and losses and loaded to cover cost of administration, impurities in statistical data, and reserve for catastrophic losses. If the resulting figure is way beyond the reach of the poor farmers, it is important that the actuarially computed rate must be maintained if only to have a basis for a future evaluation of the program. To give the poor access to the program, the government should be ready to subsidize the premium cost. The subsidy may possibly be shared between government and private interest groups (banks, marketing boards, consumers groups, etc.) and possibly kept to the barest minimum. The grant of premium subsidies may be targeted to the poorer group of farmers identified through the means test or by the size of their farms (say, one hectare or less). Premium rates should vary by area (district, municipalities, or province) depending upon the variation in risks in these areas.

**Voluntary or compulsory:** If there is no heavy objection, it is preferable to make the program compulsory to all farmers to achieve a wide base with which to spread risks. Local political officials and community leaders can be harnessed to explain and convince farmers of the benefits to be derived with the attainment of such a wide base in agricultural insurance. Otherwise, linkage with the banks providing credit to farmers or with the marketing boards is necessary for voluntary schemes. Nationwide schemes operated by the farmers' cooperatives are also ideal as insurance can be provided simultaneously with other services offered by the cooperatives to their members.

**Assessment of loss:** The use of the area approach in loss assessment is preferred meaning that the compensation for claims within a defined area will be based on the average, say per hectare loss, in that area. The amount of compensation per hectare or a fraction thereof would be the same for everybody regardless of the degree or absence of the loss in each individual farm unit. Some innovations to this scheme can be introduced such as the area index approach coupled with a trigger system to refine it some more.

**Role of government:** Where the private sector is unwilling to take an active role, government should serve as a trailblazer by implementing the program through a parastatal entity vested with responsibility and accountability and operating with a certain degree of autonomy. When circumstances warrant, government should be prepared to provide subsidy for the operating costs in case the private sector is operating the program in a situation where the premiums are kept low for the benefits of clients. Lastly, it should operate the reserve fund or provide reinsurance support in the event of catastrophic losses.

The above model will avoid most of the causes of failures observed in many small farmer agricultural insurance schemes. The emphasis for a private-led implementing agency, more especially, by the farmers' organization, will somehow develop a feeling from members that it is their own and therefore will influence them to do whatever is necessary to preserve and maintain it. The suggestion for a compulsory scheme or linkage with banks and other institutions are geared towards the same direction of achieving a wider base plus significant savings in underwriting costs. The use of the area approach in compensating losses attains the same cost saving feature. These savings in costs will have significant impact on the premium since the loadings to cover these costs can be substantially minimized. Moreover, anti-selection and moral hazards will be reduced to a great extent.

Limiting the perils covered to those that are really beyond the control of the farmers or those that cannot be managed by any other means will result in the further lowering of the premium. The same effect can be attained through the introduction of a sizable deductible or franchise.

All these approaches which result in the lowering of the premium may end up with a rate well within the level that many small farmers can afford, thereby minimizing, if not eliminating outright, the need for subsidy.

Suggestions on the role of government and how it should conduct itself may minimize political interference in setting premium rates and adjusting losses.

The combined effects of all the suggested approaches in the model will ensure viability and sustainability of an agricultural insurance scheme for small-scale farmers.

## **B. On Micro Insurance**

### **1. Practical advantages of micro insurance**

Micro insurance in rural communities can be, as earlier mentioned, a practical alternative to other established forms of insurance like agricultural insurance, social insurance, health insurance and many others. It is perhaps one of the few alternatives by which the excluded population consisting mainly of the rural communities and the poor can have access to an insurance mechanism as a means of social protection. It has the advantage of being operated cheaply and its operation is anchored on simplicity because of the nature and requirement of its membership.

Moreover, its activities are conducted in a more transparent manner because it operates in a small circle of membership; and it fosters the spirit of self-reliance, cooperation and solidarity among the members of the community.

One major advantage of micro insurance is that it is less vulnerable to the classical insurance problems of moral hazards, adverse selection, free-riding or under-insurance. The closely-knit relationship of members in a micro insurance scheme inhibits the occurrence of moral hazards. Moreover, the fear of being expelled from the group as penalty and the shame or stigma that it carries shield the system from over-utilization or abuse of benefits. Adverse selection which can occur only when those whose preponderance to risk is greater will participate, is somewhat minimized in micro insurance units. This is because it has a qualitative advantage in the form of being intimately acquainted with its members who compose the client base, something that is not readily available to other types of insurers. Adverse selection arises from incomplete or inaccurate disclosure of information by the applicant, thereby misleading the insurer in assessing the insured risk. Free-riding can exist only for so long as the free-rider can hide his advantage from others, and particularly from the insurer. This is difficult to do in a community-based micro insurance scheme. The same holds true for under-insurance. Moreover, micro insurance tend to practice and offer its client an “all-or-nothing” package, which is simpler to administer and more consistent with its collective nature.

## **2. Some operational problems of micro insurance schemes**

There is however not much empirical basis to look into the aspect of its operational viability and sustainability. Most of the discussions related to the subject had been mainly theoretical. There is also the concern in regard to the safe handling of the funds due to the informality of its structure. However, this is not seen as a problem because of the familiarity of accountable officials with the rest of the membership and the fear of expulsion from a group of self-interested individuals shield the system from such kind of hazard. The uniqueness of the decision-making process in micro-insurance schemes reinforces self-discipline and self-management. Qualities that make its operation fairly cheap. The process also allows for quick adjustments of the scheme and therefore more flexibility in addressing the needs of the members matched against availability of resources.

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Micro insurance is very vulnerable to co-variant risks in view of its limited area coverage. Empirical evidence indicates that micro insurance schemes do subsist for longer periods if they confine their coverage to idiosyncratic risks only as in the case of illnesses, accidents or deaths. Catastrophic and co-variant risks like climatic risks can only be covered if there are already a number of community-based micro insurance units similarly covering the same risks, provided they have formed a higher organizational structure with which these risks can be co-shared by all units or a reinsurance arrangement can be arranged at the national level by both the public and private sector.

### **3. External support from government and development institutions.**

The role of government and multi-lateral bodies is important in promoting the growth of micro insurance units and up-scaling their operations so that eventual linkage and partnership with established providers of services and formal social insurance agencies may be forged. By means of regulation, government can clarify the relationship between the role of micro insurance and that of the compulsory social insurance system, in order to prevent contribution evasion and in order to promote, in the longer term, closer links between the two. In the case for instance of health insurance, governments can fulfill the following functions<sup>1</sup>:

- (i) Promoting health insurance through recommendations on design and setting up of a management information system;
- (ii) Monitoring and regulating micro insurance, possibly within the context of legislation on the efficient and transparent administration of the scheme;
- (iii) Improving and decentralizing the public provision of health care, which is essential pre-requisite for the development of micro insurance in many countries;
- (iv) Undertaking and organizing training programmes focused on the above; and
- (v) Co-financing the access of low-income groups to health insurance, possibly through subsidies or matching contributions.

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1. Wouter van Ginneken, ILO (November 2000).

## **C. On Sustainable Livelihood Programs**

### **1. Developing sustainable livelihood programs.**

There is some sense to adopt the DFID approach in developing sustainable livelihoods (SL) based, first of all, on having a new understanding of poverty. An SL approach draws on this new outlook on poverty, alongside with other traditional streams of analysis, relating to households, gender, governance and farming systems, bringing together relevant concepts to make poverty be more understood holistically.

The new SL framework that was developed looks at people's livelihoods as the central goal of development efforts in order to eradicate poverty. It recognizes that livelihood is a mixture of capabilities, assets and activities employed by people to make a living. It is sustainable if it can withstand the shocks and stresses without diminishing capabilities and assets and without undermining the natural resource base. The application of SL concepts is usually based on certain core principles.

Focus on people – The approach to sustainable livelihood should be people-oriented. This means that practical application of SL concepts would need to:

- (i) Analyze people's livelihoods and how these had been changing over time;
- (ii) Involve people and assist them in realizing or achieving their own livelihood goals;
- (iii) Focus on the impact of varying policies and institutional arrangements on people's livelihoods; and
- (iv) Influence these arrangements so that they promote the concerns of the poorer members of society.

Holistic approach – The SL concepts should be able to identify livelihood-related opportunities and constraints regardless of where they may be. It is non-sectoral and applies to all social groups. It should recognize the multifaceted influences on people and seek to understand better the relationship between these influences. It should be able to recognize also the various strategies that people adopt to secure their livelihoods. The approach should be able to identify outside interventions and support that can be initiated in response to opportunities or needs, even within sub-sectors or small areas and then gradually expanded.

Macro-micro links – Gathering information on people's assets and aspirations in relation to identifying sustainable livelihoods, for instance by means of participatory rural assessments, are micro in orientation. On the other hand, many factors that affect livelihoods of people have very distinct macro characteristics. Capitals can be affected or influenced by policies on environment concerns, policies on rural credit and rural finance, and policies on rural health care and sanitation. A thorough SL analysis seeks to understand what these policies are and why they operate well or poorly in practice, and then to identify how best the structures and processes through which they function can be improved. The holistic nature of SL analysis lends itself to identifying priority areas for policy interventions and improvement. In actual situations, opportunities for influencing policies may be transient and vary substantially from one setting to another. Some kind of location-specific strategies may be developed to exploit opportunities for policy leverages.

## **2. Sustainability and trade-offs**

As earlier mentioned, sustainability should be viewed on a wider spectrum to include natural resource management, physical stocks of assets, and sustainability of institutions underpinning sustainable livelihoods. As people develop their capacity to switch from one activity to another, they may substitute one type of capital for another. In so doing, they may be confronted with choices with regard to maximizing short-term income versus responding to concerns about longer-term environmental sustainability. Or, in achieving individual livelihood objectives vis-à-vis desirability of not compromising livelihood opportunities for others.

The SL approach recognizes these trade-offs but thus far cannot offer any suggestion how they may be resolved. In any event, it sees that the solution will be context-specific and much more practical experience is required to come up with some sort of general guideline.

## **3. Measuring results**

Experience suggests that some kind of Participatory Rural Assessment type and conventional tools are needed for assessing changes in livelihoods. The new approach to sustainable livelihood, although more realistic in the complexity it depicts, is more difficult to quantify compared to money-based approaches to poverty.

#### **4. External support**

Support and catalytic influence of multi-lateral institutions and donor agencies in the adoption of this new framework of SL development could go a long way in fighting poverty in the rural areas and empowering the poor to have equal access to capital assets.

### **D. On the Operations of Social Funds**

#### **1. Some practical advantages in the operations of social funds**

The concept of social fund agencies within the public sector structure is relatively new but the projects they tend to support via the infusion of financial support are nothing new at all. As mentioned in Part A of this paper, social funds have been conceived in the first instance to finance small-scale infrastructure and economic infrastructure projects and public works programs with the primary objective of providing temporary low-wage employment opportunities to the less endowed members of the community. Nowadays, they cover a wide host of projects not only involving infrastructures but preventive health programs, education, micro finance, and many others perceived to address the needs of the poor. The novelty for such a program is that the “community” is able to choose which project or public works program they would do on the basis of local priorities. Moreover, the social fund agency is typically outside the established administrative structure of line ministries and is given freedom from normal governmental regulations and bureaucracies and therefore they are able to attract resourceful individuals from the private sector and to disburse funds more rapidly.

The program is best suited for abetting community level development efforts, especially those centered on small-scale interventions rather than long-range program support. Appropriate to be considered when existing supply-driven programs do not reach many poor communities and vulnerable groups when a social protection strategy includes building longer-term capacity at the community level in crisis situation (e.g. emergency and post-conflict reconstruction efforts), or as a means of testing innovations in program designs and operating procedures.

#### **2. Decentralized implementation**

Implementations of projects and programs funded by social fund agencies are usually done in a decentralized manner and partly privatized. The design of the project and actual implementation

are usually delegated to local actors (community associations, private firms, NGO's and local government units, or combinations of these various groupings). The process is seen to foment greater transparency in the implementation of the program and foster good partnership between the public sector and the community.

### **3. Sustainability issue.**

In a sense, the issue of sustainability may also relate to the flow of financial support to projects and programs funded by social funds. In this context, social funds have had the ability to attract incremental external resources from established donor agencies and other foreign governments for projects that are targeted to poor and vulnerable groups and communities. Also, since projects and programs supported by social funds are really community-initiated ones, they are generally seen as projects "owned" and operated by the community. The theory is that ownership carries with it a commitment to meet recurrent costs of maintaining them over time.

### **4. Targeting issue**

To ensure that poor communities and the poor within better-off areas have access to social fund programs, social funds have invented a broad range of solutions for reaching remote areas and marginal/excluded groups, including information and education campaigns (often in indigenous languages), setting up regional offices to reduce transaction costs of applying for funding, limiting the menu of interventions to public goods more likely to be used by the poor (e.g. primary health care and education), financing communities' access to technical assistance to be able to prepare project proposals, etc. As a result, social funds' geographic targeting has consistently improved over time.

Employment benefits tend to be less well targeted compared to employment schemes which use below-market wages being followed by social fund-supported projects. Evidence from Peru shows that 57% of FONCODES workers were poor and 36% extremely poor. In Bolivia, about 70% of workers were in the lowest half of welfare distribution. In terms of household incidence of investment benefits, 40% of FHIC resources in Honduras went to the lowest two deciles of household income distribution. In Peru, 52% of FONCODES education investments benefit households in the lowest 40% of the income distribution; 40% of non-education related resources reach the lowest quintile. In

Argentina, over 80% of beneficiary households rated “poor” using basic needs indexes. Leakage generally occurs in cases of:

- (i) Income heterogeneity within the community (when better-off households can not be excluded from community-wide benefits);
- (ii) Certain types of investment (sewerage and small enterprise investments are often less able to reach the poorest); and
- (iii) In the ability of the more capable communities (usually not the poorest and most remote) to successfully organize and submit proposals as well as lobbying for its acceptance.

## **E. On Agricultural Input Programs**

### **1. Objective of the program**

The program may entail subsidizing the cost of agricultural inputs via the issuance of input coupons or direct distribution of agricultural inputs to targeted farmers. The objective is usually to increase agricultural production and farm incomes rather than to provide assistance.

### **2. Institutional structure**

The program can be operated by the Ministry of Agriculture in collaboration local governments (for the identification of beneficiaries), the private sector (suppliers, banks and transport) and other agencies (for the distribution and redemption of coupons).

### **3. Typical benefit level**

Subsidy provided to farmers whenever they buy agricultural inputs needed for their production activity. Starter packs containing fertilizer and seeds are sometimes distributed for free or at significantly reduced costs.

### **4. Typical coverage**

Coverage may vary depending on the design of the program. Typically, all households with landholdings of a certain size are qualified for coverage.

### **5. Range of administrative costs**

In terms of logistical aspects, input coupons could be likened to food stamp programs. Administrative costs for input distribution programs are more costly to implement compared to coupons programs. Transporting, storing and distributing food in bulk is much more expensive than moving coupons around, even taking into account the need to set up administrative machinery for retailers to reclaim cash from the government in exchange for food stamps they accept.

### **6. Targeting issue**

This program is not usually targeted. However, it can be regionally targeted as in the case where seeds and fertilizers are distributed to rural households in regions hit by droughts or severe floods. There is also an element of self-targeting when the transfer of benefit is small.

### **7. Disadvantages of agricultural input programs**

Transfers in the form of fertilizer or seeds might promote reliance on a limited number of crops (often different from the traditional local crops) and limit the diversification of production which is an important poverty alleviation strategy. They also create dependence on fertilizer, which makes their withdrawal harder and might harm the environment. Uniform distribution of inputs could prove to be wasteful if farmers have different agricultural needs, depending on their landholdings, soil quality or agro-ecological areas (distribution of coupons can increase the flexibility of input choice). The distribution of animals and improved agricultural technologies does not always lead to improvement since many animals are actually sold or killed to face immediate need for food and since some of the technologies are not compatible with local conditions (e.g. some crossbred cows can have higher yield of milk but be more susceptible to disease or require more feed). Programs concerning subsidies for critical farm inputs, although also useful to the beneficiaries usually require huge outlays which many governments in the region can ill afford. With limited funds, its impact on price may just be minimal. The usual complaint is that not many farmers are benefiting from such programs. Besides, subsidizing prices of commodities distorts the market and in the long run may prove costly.

## **F. General Food Price Subsidies**

### **1. International experience**

General food price subsidies were once quite rampant throughout the world and very well studied. Many such programs have been discontinued as part of liberalization and structural adjustment reforms. They often cover fewer commodities or at lower levels than in past decades. Food subsidies have also been used in the aftermath of financial crises to prevent declines in living standards which has been the case of Indonesia.

## **2. Typical benefits**

Price subsidies usually range from 1% to 20% of the cost of the basic staple.

## **3. Typical coverage**

All purchases of the covered food items. Depending on the commodity, this can be nearly universal, e.g. for cooking oil or sugar. For commodities that can be produced at home (e.g. tortillas or corn), the poorest and the most remotely located may not take advantage of the subsidies. Some countries limit the quantity of subsidized food for each household (with ration cards).

## **4. Range of administrative costs**

The cost of administering the program is quite low in the case of universal subsidies, though not thoroughly quantified

## **5. Targeting issue**

The commodities chosen to be subsidized should be a larger share of the food basket of the poor than of the rich. Geographic targeting of the poor areas is possible when the subsidized food is distributed through state outlets when the placement of such outlets is denser in poorer neighborhoods. However, this is limited to commodities which are sold through that channel and not applicable to those sold through the private commercial distribution chain. Alternatively, self-targeting can be achieved by applying differential subsidies to different qualities of the goods (concentrating on the type of goods the poor are more likely to consume) and/or by differentiating products – for example through special packaging. Food price subsidies are best suited for the urban and working poor.

In many countries and for most commodities, the rich buy more than the poor, so that even with well chosen commodities, the absolute benefit for the rich is greater than for the poor. An example is cited in the case of India where less than 20% of the transfers reached the poor in the centrally administered public distribution system. In a few cases, commodities that are consumed more by the poor in absolute terms can be used for targeting. In general, price subsidies are fairly expensive and fiscally difficult to sustain, and have been replaced or are being replaced by targeted programs in a number of countries like Bangladesh, Honduras, Jamaica, Mexico and India.

#### **6. Disadvantages of the scheme**

Price subsidies are often financed indirectly through multiple exchange rates, or through restrictions on imports, or through regulation of local prices all of which can have significant impacts on incentives, trade and production. Price subsidies tend to favor urban population since rural households typically produce a higher share of their food consumption. As observed in some countries, overly generous subsidies have also been found to provide disincentive to work. Similarly, they can have adverse effects on agricultural production. Once in place, food price subsidies are quite difficult to reduce or eliminate, as each change in prices or elimination of subsidy can be a flashpoint around which protest actions can be mounted. Therefore, they do not only distort the market but tend to be very expensive to sustain. While they may be useful as a social protection measure if undertaken on short duration and strictly as an adjunct to a disaster relief operation, such type of program should be discontinued as soon as the emergency has passed and situations have returned to normal.

#### **G. On Disaster Prevention/Preparedness**

##### **1. Typical organization**

Almost all countries of Asia have some form of organization that has the responsibility of implementing some kind of disaster prevention or disaster preparedness program. Usually an inter-ministerial or inter-departmental committee under the office of the President or the Prime Minister, is formed for this purpose. Such committee can have access to military and police assistance, linkage with the weather forecasting bureau, with the print and broadcast media, and with various local donor and relief agencies like the Red Cross. They also maintain a presence at the Provincial and

district levels with the involvement of local officials. Normally, this committee also issues clear guidelines and procedures to be followed in times of natural disasters

## **2. Benefits derived from the program**

Early warning signals provided by the program may spell the difference of saving or losing lives and property for many in the disaster prone areas. For many in the rural and agricultural areas, early warning signals on the paths of typhoons or storms and when landfall will happen can provide farmers an alternative to harvesting their crops earlier or alter the planting and harvesting calendar of their crops to avoid losses. Similarly, flood prone area residents can make an informed decision as to whether to evacuate or not their assets and other possession to safer grounds long before the actual flooding occurs. The existence of clear guidelines and procedures for the distribution of relief services and goods somewhat secure the delivery of benefits to the disaster victims. Emergency programs to help disaster victims often attract extensive donations from foreign donors. The existence of a structure that takes charge of delivering reliefs to victims would go a long way to providing assurance to foreign donors that their relief goods will be put to good use instead of falling into the wrong hands.

## **3. Targeting issue**

Generally, targeting could be a problem as the focus of the program is usually region-wide where the national catastrophe occurs. However, some geographical targeting can be achieved in particularly identified disaster prone and isolated areas where most of the poorer members of the community are found.

## **4. Ad Hoc Structure**

Due to the difficulty of really forecasting the occurrence of natural disasters and the irregularity of their happenings, organizations charge with the responsibility of implementing relief operations are often organized in an informal and *ad hoc* manner. This fact usually accounts for a lot of leakage in the provision of relief goods to victims of natural disasters.

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