PART III. MICRO-INSURANCE: A MECHANISM TO MANAGE RISKS

1- What is micro-insurance?

In this section we will try to give a definition of micro-insurance and describe two aspects of the diversity of existing micro-insurance schemes: diversity of micro-insurance products on the one hand, diversity of micro-insurance delivery models on the other hand. This description has some limitations since diversity can be captured through other lenses or dimensions: the size of the schemes, their geographic location and expansion, the level of empowerment of the target population and/or members, the type of management tools used, the degree of integration in national risk management or social protection strategies and policies, etc.

❖ Definition and characteristics of a micro-insurance scheme

A micro-insurance scheme is a scheme that uses (among others) the mechanism of insurance whose beneficiaries (at least part of) are people excluded from formal social protection schemes, in particular informal economy workers and their families. The scheme differs from schemes created to provide legal social protection to formal economy workers. Membership is not compulsory (but can be automatic), and members pay, at least partially, the necessary contributions in order to cover the benefits¹.

The use of the mechanism of insurance implies:

- Prepayment and resource-pooling: the regular prepayment of contributions (before the insured risks occur) that are pooled together.
- Risk-sharing: the pooled contributions are used to pay a financial compensation to those who are affected by predetermined risks, and those who are not exposed to these risks do not get their contributions back.
- Guarantee of coverage: a financial compensation for a number of risks, in line with a pre-defined benefits package.

The expression "micro-insurance scheme" designates either the organization (e.g., a mutual benefit organization) or the set of institutions that provide insurance (e.g., an NGO and an insurer linked in a partner-agent relationship) or the service itself provided by an organization that conducts other activities (e.g., a micro-finance institution that provides micro-insurance to its clients).

As insurance, micro-insurance works better when the adverse events and the population covered have certain characteristics listed in 1st box below. Beside, micro-insurance is also threatened by insurance's inherent risks (moral hazard, adverse selection, etc.) that may jeopardize the scheme's financial viability. These risks are described in 2nd box below.

¹ Since their capacity to contribute is most often low, the coverage provided by these schemes is - in the absence of subsidies – usually limited, with a small number of risks covered and low levels of benefits.

General principles of insurance that can be also applied in the case of micro-insurance²

Insurance (and micro-insurance) work provided that the adverse events show the following characteristics:

- (1) The adverse event should be random i.e. unpredictable in terms of whether the event will occur or not, and/or when it will occur, and/or how often it may occur. If the event is predictable, other risk management strategies (e.g. planned savings) may be more appropriate³.
- (2) The adverse event should cause a financial loss to the individual. If the individual does not suffer a financial loss, there is no insurable interest.
- (3) The adverse event should not have occurred at the time the member joins the scheme. It is therefore not possible to insure a house against fire when the fire has already occurred.
- (4) The occurrence of the adverse event should not be under the direct control of, or caused intentionally by, the insured member or any other related party.
- (5) The expected loss should be measurable. For the design of the benefit package and calculation of the premium, the expected loss for a particular population has to be determined and measured prior to the occurrence of the insured event.
- (6) The adverse event occurrence should be easy to prove and its consequences (financial losses) be easy to measure. Otherwise, insured individuals could make false claims.

Insurance (and micro-insurance) work better when the insured persons or units are numerous, homogeneous and when risks are independent from each other:

- (1) Large number of insured persons or units (houses, assets, cattle): premium calculation is based on an estimate of the future losses of the insured persons/units. With a large number of insured persons/units the average real losses have a greater chance of being close to the estimate.
- (2) Similarity of insured persons or units: a hut and a factory, for instance, are not sufficiently similar to be covered by the same insurance policy. In reality, insured persons or units are rarely similar: some insured persons have a greater probability of death or illness due to their age, sex, health status, occupational group, place of residence. When calculating the risk, the insurer may classify insured persons and units in homogeneous categories (same age, sex, occupation, etc.). In each category, the risks are regarded as similar⁴.
- (3) Independence or at least non dependence: the occurrence of the insurable event should be statistically independent from individual to individual or unit to unit. This means, the chance of the event happening to one individual is not affected by the fact that it has happened to another. For instance, the fact that one insured individual in a village breaks its leg does not mean that all other insured in the same location will break their legs as well.

❖ Diversity of micro-insurance products

Micro-insurance schemes may cover various risks (health, life, etc.); the most frequent micro-insurance products are described in following paragraphs.

Life micro-insurance (and retirement savings plans)

Life micro-insurance provides coverage against the financial consequences of the death of the breadwinner or of old age. Although life insurance is normally meant to be subscribed for a long period, the poor generally buy life micro-insurance products for a short period (1 year) with no guarantee of renewal. There are two categories of life micro-insurance products.

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² These are common principles; they do not include specificities of certain schemes, such as mutual benefit associations that may share other principles.

³ In many countries the costs for the daughters wedding or for other traditional ceremonies can cause high indebtedness for poor families. In these events micro-insurance is not suitable as the probability of occurrence is very high, the timing of the occurrence is predictable since it is a planned event and their impact, cost for the wedding/the ceremony, is controllable. Therefore, planned savings and/or mutual and self-help groups assisting each other at these occasions are more suitable.

⁴ Classifying the risks does not necessary lead to levels of premiums that are linked to the risks. A health microinsurer may for instance decide that all insured (either young or old, male or female, in good or bad health) pay the same level of premium.

Under the first category, the compensation is paid on the death of the insured person. The life micro-insurance pays the pre-defined benefit to the designated beneficiary of the deceased policy holder. A distinction can be made between term life and credit life products.

• Term life micro-insurance: the nominee, in most of the cases a family member, receives a lump sum in the case of the death of the insured person during the term of the micro-insurance policy. The amount can be a fixed amount sometimes limited to the coverage of the costs of the funeral and other (immediate) expenses. The amount may also be variable.

It may be linked to the amount of savings of the deceased policy holder, such as in the case of the Jamaican credit unions where the designated beneficiaries receive 3 times the amount saved.

• Credit life micro-insurance is the name given to term life micro-insurance when it is required by micro-finance institutions in order to secure the reimbursement of their loans. If the insured person (the borrower) dies before the end of the given term, the benefit goes to the lender (the micro-finance institution) to cover the repayment of the outstanding balance of the loan. One of the main purposes of credit life micro-insurance is to secure the loan portfolio of the MFI and to provide a relief for the family of the deceased borrower, who are thus relieved from the burden of loan repayment.

Under the second category, the compensation is due after a predetermined period (usually after a minimum of 5 years) either on the death of the policy holder or while the insured person is *still alive*. These long term policies provide maturity benefits that could take the following two forms: endowments and annuities. They combine death protection benefits with savings accumulation.

- Endowments: If the policy holder survives the predefined term she/he receives a lump sum from the insurance. In the case of death during the contracted period a fixed capital may be paid to the nominee.
- Annuities: After the predefined term the insured person receives a pension until death.
 If the policyholder dies before reaching the term, the nominee may receive either a lump sum or a series of payments. Retirement savings plans are usually based on this mechanism.

The Annapurna Mahila Mandal based in Mumbai, India, provides for a pension scheme in collaboration with the Life Insurance Corporation (LIC). Members (women) mobilize their small savings and once the amount reaches Rs. 5,000, the amount is invested in LIC pension scheme. Savings amounts are invested in sound securities and after 20 years amounts to Rs. 50,000. On this principal amount a fixed amount of Rs. 500 per month is paid to the woman as old age pension. The principal can be paid to her nominee at the time of her death (only natural death) [ILO-STEP, 2005b].

Health micro-insurance (hospitalisation, primary health care, maternity, etc.)

Health micro-insurance provides coverage against the financial consequences of ill health and maternity. The financial consequences are of several natures: direct medical costs for prevention, care and cure (fees for consultations, laboratory tests, medicines, hospitalisation, delivery, etc.); direct non-medical costs such as costs for transportation, food in case of hospitalisation; and indirect costs (opportunity costs), as ill health and maternity usually cause a loss of productive time for both patients and caretakers. Health micro-insurance schemes most often cover direct medical costs with a predetermined list of risks (or health services) that are covered. Very few provide cash benefits (income replacement) in case of ill health and maternity.

AssEF in Benin is a micro-finance institution that developed a health micro-insurance scheme in 2002 [Louis dit Guérin, 2006]. This scheme offers its members a 70% coverage of health expenses in the main general practice,

maternity and hospitalisation services that meet the needs of women and their children. This coverage is valid within a network of contracted health care providers who, furthermore, participate actively in the smooth running of the system, particularly by intervening in the verification of entitlement to benefits

AssEF's members, only women, have had a leadership role in defining the health micro-insurance benefits. That is why the benefits largely focus on women's needs, with a special emphasis on reproductive health (gynaecology and obstetrics). As women are generally left with the sole responsibility of paying for their children's healthcare, the benefits were also designed to meet children's needs, particularly through coverage for consultations and outpatient care, since they are the primary consumers of those services.

In general, coverage is subject to a number of conditions, e.g. exclusion of chronic diseases, the limitation of medication to essential generic drugs and/or the restriction of services to a limited number of defined health care providers.

There may be a contractual arrangement concluded with a health provider detailing all services to be provided. There is also another version where there is no such agreement, services are reimbursed at a pre-set value to the policyholder who can go to the health provider of his own choosing.

SEWA's micro-insurance scheme in India covers hospitalisation for general diseases, gynaecological ailments and occupational health-related diseases [ILO-STEP, 2001a]. Hospitalisation refers to any in-patient admission to a hospital and can include any treatments the patient undergoes while actually admitted to the hospital. Members are free to choose the public or private hospital where they wish to receive treatment. Usually they base their choice on the hospital location, personal knowledge, and of course, cost. The scheme has no formal agreement of any sort with private or public health care providers or charitable organizations offering hospitalisation. Members have to pay the whole cost of hospitalisation and are then reimbursed by the scheme (no third party payer agreement). A new method of servicing members called "prospective reimbursement" helps reducing delays in claims settlement and reimbursement [Garand, 2005]. According to this method an insurance promoter (Vimo Aagewan) visits hospitalised members within 24 hours and collects information from the hospital to estimate the claim amount. Based on this cost estimate a partial reimbursement, up to 80% of the estimated claim amount, is provided on the spot, with the balance provided on discharge when all the required documentation is received.

The Yeshasvini plan (India) covers 1600 surgeries available only at approved hospitals on a cash less basis to beneficiaries. The Yeshasvini plan pays the participating hospital a fixed tariff for each of these defined benefits. It is believed that the tariff is 40-50% off the regular price of the private hospitals.

Disability micro-insurance

Disability micro-insurance provides coverage against the financial consequences of invalidity, whether temporary or permanent, depending on the contract. Disability is called temporary when the physical loss is reversible and lasts for a limited period of time (generally up to three years). Disability micro-insurance may cover a variety of disabling events that need to be precisely defined in advance. The pre-defined financial compensation can be proportional to the severity of the disability (also called disability rate). The disability rate needs to be assessed by a doctor.

NIDAN (based in Bihar State in India) offers a life and disability insurance product to the members of the self-help groups that it is working with. The package includes an amount of Rs. 50.000 for permanent disability due to accident, Rs. 50.000 for loss of two eyes or two limbs or one eye and one limb due to accident, and Rs. 25.000 for one eye or one limb due to accident (between ages 18 and 60 years). This product is insured by the Life Insurance Corporation of India [ILO-STEP, 2005b].

Disability micro-insurance is often appreciated by micro-finance institutions in order to secure the reimbursement of the loans. It is then called "Credit disability micro-insurance" and covers the repayment of the outstanding balance of the loan in case of disability of the borrower.

Property micro-insurance – assets, livestock, housing

Property (or asset) micro-insurance provides coverage against the financial consequences of the damage or loss of personal assets, work premises and tools (e.g. hut micro-insurance against fire, theft of items, or death of livestock). The insured person is usually the owner of the assets and/or tools. The financial compensation is assessed once the adverse event has occurred.

Proshika in Bangladesh provides Livestock insurance to 91,000 members. If animal dies due to disease, etc. policy holder is paid Tk 0 if death occurs within 90 days policy, 5% of cost of animal if death occurs within 91-180 days, 10% of cost of animal if death occurs within 181-270 days and 15% of cost of animal if death occurs within 271-365 days [ILO-WEEH, 2003].

Crop micro-insurance

Crop micro-insurance provides a financial compensation in the case of crop failure generated by uncontrollable adverse events (e.g., drought, crop pest). The financial compensation is assessed once the adverse event has occurred. Assessment of the value of the loss is, however, difficult. In developing countries there have been little examples of successful crop micro-insurance without substantial reliance on government subsidies, for several reasons (e.g. frauds, moral hazard).

In India, the inventory conducted in 2004 (updated in 2005) identified only 1 crop micro-insurance scheme, organized by BASIX, a community based micro-finance institution settled in Andhra Pradesh. BASIX has initiated a micro insurance scheme for its members since 2000. Affiliation is compulsory for all BASIX's members. Among other risks, the scheme covers crops in case of rainfall deficit. The contribution for the crop insurance product is Rs. 30 per thousand sum insured (expected yield); the contribution may vary according to the type of crop insured (Groundnut, Jowar, Paddy, Sunflower, etc.). The crop micro-insurance scheme receives no subsidies.

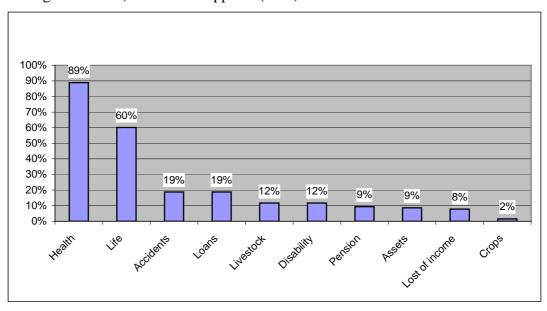
Although it cannot be considered as a micro-insurance scheme, the National Agricultural Insurance Scheme in India is an interesting example of crop insurance. The scheme is being implemented by Agricultural Insurance Company Limited (AIC), a government of India initiative. It is presently covering 20 million farmers out of a target population of 170-180 millions (target population by 2010). The scheme covers loss of yield in case of natural fire and lightening, storm, cyclones, flood, inundation, landslide, drought, pests / diseases, etc. The premium varies from 17 Rs. per 1000 Rs. insured to 40 Rs. per 1000 Rs. insured depending on the season (there are two crop seasons in India) and the type of crop. A subsidy of 10% of the premium is being financed by central and state governments and is available only for small and marginal farmers. The crop insurance is made compulsory for loanee farmers (those availing crop loans from any of the notified financial institutions). All normal claims are being settled by Implementing agency (AIC) and any claim exceeding beyond 100 to 150% of premium (depending upon the crop type) will be borne by a corpus fund which is being created to meet catastrophe losses with equal contribution from state and central government of India.

Relative frequency of the different types of risks covered

According to the results of the inventories of micro-insurance schemes conducted in 2003/2004 in Africa (11 countries), India, Bangladesh, Nepal and the Philippines:

- ✓ Health micro-insurance is predominant in Africa (100% of investigated mutuals) and the Philippines (70% of investigated schemes provide among others health insurance benefits); it ranks second in India (56% of schemes), Nepal (52%) and is less important in Bangladesh (39%).
- ✓ Life micro-insurance is most important in Bangladesh (72% of investigated schemes provide among others life insurance), the Philippines (66%) and India (60%). It seems less important in Nepal (38%). Although this inventory did not capture information on life micro-insurance in African countries, we know that in some of them (e.g., Cape Verde) there exist burial societies whose concept is close to that of life micro-insurance.

✓ Examples of crops micro-insurance merely exist in India (two schemes in 2004, only one left in 2005). Pension schemes are to be found merely in India (4% of investigated schemes provide old age insurance) and the Philippines (24%).



1. Distribution of micro-insurance schemes in 15 countries by risks covered 89% of schemes cover health, 60% cover life, etc.

Source: ILO/STEP: 2003/2004. Consolidated database of the inventories of micro-insurance schemes. Health figure includes data from Africa (11 countries), India, Bangladesh, Philippines, Nepal Other figures (life, accidents, etc.) merely include data from India, Bangladesh, Philippines, Nepal

❖ Diversity of micro-insurance delivery models

Running micro-insurance is a complex business involving the following main functions:

- Product design and pricing
- Product sales and distribution, including marketing and monitoring clients' satisfaction
- Technical management (membership, premiums, claims) including monitoring
- Financial management
- Management of agreements with health care providers (accreditation, contracting, follow-up)
- Risk bearing (insurance, financial consolidation)

In some cases all the functions are managed by one organization; in other cases, they are shared by two or more organizations (example: partner-agent agreements).

All the functions are managed by one organization

Under this category, one may find in particular:

(1) Pre-existing civil society organizations (MFIs, NGOs, Health care providers, trade union, etc.) that add to their activities the provision of micro-insurance. Most often, the civil society organization provides insurance services together with other products and services (e.g. emergency loans, health funds, savings products, linkages to government programs, health cooperatives). They implement all insurance tasks and assume the (financial) risks. Although the design and operations of the insurance scheme is usually done in participation with the potential policyholders, the micro-insurance remains in the ownership of the implementing

organization. When health care providers offer health insurance to their patients (integrated system / sub-model), it is with two objectives: (1) increase patients' access to health care services; (2) secure the health care provider's revenues and return on investments (new equipments). Health care providers hold all the statistics on episodes of illness (frequencies, costs) among the target population, which is useful in order to calculate the premiums.

- (2) Community based organizations that are settled for the sole purpose of providing a micro-insurance coverage, such as mutual benefit associations. The system is owned and managed by the insured groups themselves, and relies on active solidarity mechanisms. The insurance coverage provided usually responds to (at least some of) the members' needs and to their capacity of contribution. Many of these schemes offer also supplementary activities such as prevention of risks.
- (3) Commercial insurers that sell insurance products to excluded groups.

Several organizations involved in the operation of the scheme

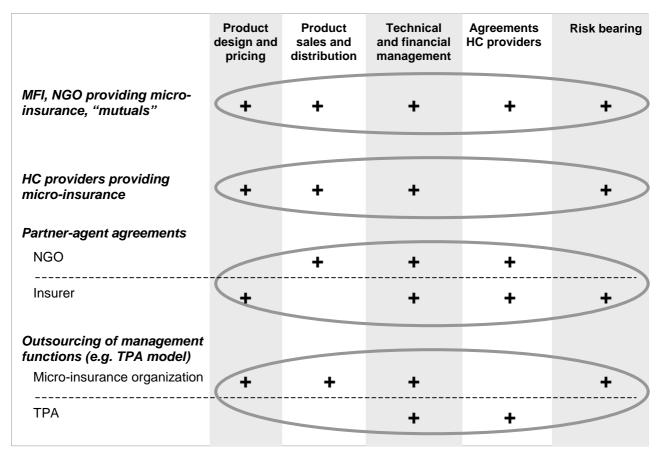
This second category includes partnerships between organizations aiming at providing insurance services to excluded groups. Under these partnerships one finds among others Partner-Agent agreements and outsourcing of management functions (such as in arrangements with TPAs).

In partner-agent agreements the partner is an insurance provider (usually a regulated insurer, occasionally a Government institution or a national agency such as Phil Health in the Philippines), and the agent is a civil society organization (e.g., NGO, MFI). In exchange for a commission, the agent sells the insurance products of the partner to its target population (members and/or non-members) and offers its infrastructure for product servicing such as marketing of the product, premium collection, and assisting in claims management. The insurance provider is usually responsible for the designing and pricing of the product, the final claims management, investment of reserves, and absorbs all the insurance risks.

Vimo SEWA (India) has a long history of partnering with a variety of different insurance companies. After having changed several times partner insurers, Aviva became the life insurer starting in 2005 as it permitted Vimo SEWA to pay the life claims, reducing reimbursement time to 1 week. For health and asset insurance, the private, non-life insurer ICICI Lombard became the partner in 2003, providing improved conditions, such as a fund to reimburse claims. This partnership has continued to date. Vimo SEWA has MoUs (Memorandum of understanding) with Aviva and ICICI Lombard outlining the duties of each party and the term of the agreement. These agreements delegate distribution, premium collection, record-keeping and claims payment to Vimo SEWA, with the insurer bearing the risk [Garand, 2005].

"Third party administrators" (TPAs) are service providers that may take over several functions: the accreditation of health care providers and the monitoring of these agreements, claims management, etc.

In the Yeshasvini rural micro insurance scheme in India, a TPA called Family Health Plan Limited (FHPL) is responsible for most of the day-to-day administration functions of the scheme, among others: it has the task of maintaining the membership and claims data bases, of accrediting hospitals, training hospital staff on the Yeshasvini plan, auditing service agreements with network hospitals, approving treatment of beneficiaries, monitoring claims to prevent over-utilisation, process reimbursement to network hospitals and collect feedback from members. The FHPL is paid a fee for its services at the rate of 5,5% of the contributions received from the members.



2. Diversity of micro-insurance delivery models : sharing functions

Some of the advantages and challenges of the various delivery models

When all the functions are managed by a civil society organization already active in the informal economy or a community based organization, the main advantage is a relative vicinity between the organization and the members which enables to better take into account the needs and demands of the potential insured persons in the product design (which is in some cases participatory) and the operating rules and procedures; to reduce the administrative and transaction costs (no intermediate structure, volunteer work); to reduce some risks like frauds; and to reduce delays (e.g. in claims settlement). Share of resources (equipment, staff) that contribute to limit the overhead costs may also be possible. The main challenge relies in the difficulty to manage all by oneself a whole business whose complexity is intensified by the fact that needed resources are scarce or even non existent in many developing countries, that access to financial markets and to consolidation mechanisms such as reinsurance or guarantee funds is limited, that membership is relatively small and geographically concentrated, that it is difficult to collect premiums and build up reserves when members have a low ability to pay.

When several organizations are involved simultaneously in the operation of the scheme, the main advantage is that all partner organizations may focus on their core business and expertise. One of the challenges is that there may be a gap between the supply of insurance (products marketed by commercial insurers for instance) and the demand (needs of the target population). Another limitation is that such a model is not replicable anywhere; in some Western African countries where commercial insurers are not (until now) interested in the micro-insurance "market", partner-agent arrangements are not feasible; the outsourcing of management functions to third party administrators (or external management cells) are only feasible if such structures do exist, which is the case in very few countries today.

* The need for reinsurance, coinsurance (syndicate insurance) and other financial mechanisms

Reinsurance and coinsurance (syndicate insurance)

These arrangements enable micro-insurance schemes to share the risks with insurers or reinsurers. Reinsurance allows for diversifying risks and redistributing them over a broader base. It contributes to reduce the micro-insurer's risk of loss when the risks are not sufficiently independent and broken up. It is a mechanism through which an insurer (or a micro-insurer) secures insurance from a third party (the re-insurer) for part of the risks it has undertaken to cover, in exchange for the payment of a premium. The reinsurance contract may be thought of as the micro-insurer's insurance coverage, or second-degree insurance. There are two types of reinsurance: (1) Proportional reinsurance where the micro-insurer cedes a predetermined share of each premium to the re-insurer which promises to pay the same share of claims. (2) Non proportional reinsurance where the micro-insurer cedes a predetermined share of each premium to the re-insurer which promises to pay claims exceeding a certain amount. Reinsurance arrangements are particularly important to prevent the risk of catastrophic events.

Coinsurance (syndicate insurance) allows for dividing risks and redistributing them among several micro-insurers with an aim to reduce individual micro-insurer's risk of loss. Each micro-insurer bears a share of the risk, receives the same share of premium and will pay the same share of claims were the risk to occur. There is no solidarity between co-insurers; each of them remains responsible for the share of risks it bears.

Although the need for these mechanisms is important, micro-insurance schemes have still little access to them.

The insurance scheme 'Yasiru' in Sri Lanka may be seen as an exception. It signed a reinsurance agreement with a Dutch Insurance Company, known as Interpolis Re. The Interpolis Re - working together with Rabobank foundation - developed a combined financing and reinsurance model along the following lines. All benefits paid out by 'Yasiru' for death and disability risks are fully compensated by reinsurance up to a set maximum per event (SLRs 120 000 per risk) and per annum (the annual limit is of five times the reinsurance premium). 'Yasiru' pays 20% of the total annual gross premium per year to Interpolis Re under this reinsurance agreement. Interpolis Re deducts only 5% of the reinsurance premium for their administrative costs and 95% of the reinsurance premiums is paid back to 'Yasiru' as a commission. This special facility is offered by Interpolis Re to build up adequate reserves for the 'Yasiru' scheme.

Guarantee funds and investment funds

A guarantee fund is a fund that a health micro-insurance scheme can call upon in the event of financial difficulties. Generally speaking, the assistance provided by the guarantee fund takes the form of a loan. The circumstances in which the guarantee fund may be used are usually specified in detail. The fund's assistance may be made conditional upon changes in the operation of the health micro-insurance scheme. Guarantee funds may be financed by member schemes, the State, financing institutions or support organizations.

Some micro-insurance schemes (PREM, Vimo SEWA [ILO-STEP, 2001a]) are granted an initial seed fund from partner organizations of the scheme (Plan-International in the case of PREM, GTZ in case of Vimo SEWA). Investment earnings help to support and stabilize the scheme (in case of Vimo SEWA, investment earnings are covering administrative expenses).

2- Some factors for success and challenges

Prior to establishing a micro-insurance scheme the following factors for success and challenges shall be taken into consideration.

Setting up and operating a micro-insurance scheme is a long process

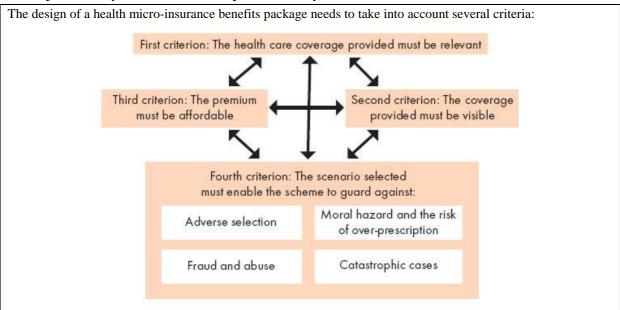
Setting up micro-insurance is time consuming and requires high investment in terms of human and financial capital. The length of the setting up process depends on the risks covered, on the model chosen and other factors (e.g., experience of the implementing organization, familiarity with insurance in the country, financial and technical resources, either internal or external).

Yielding the benefits of being insured is a long time process, except for health micro-insurance. This is even more relevant for certain life micro-insurance products (long term life, endowments, annuities) that can be materialized after 15 years or even later. This implies a stable and professional structure of the implementing organisation with a long term vision and ability to survive internal and external challenges in order to fulfil its commitments towards its insured members (and the insurance provider in case of a partner-agent model).

Setting up a micro-insurance scheme requires specialized skills

At the product design stage

Product design is a real challenge since it is difficult to design a customized benefits package that both responds to the numerous coverage needs of the target population and is affordable to them. Problems of design of the benefit package may result in low population penetration rates, particularly when membership is voluntary.



- 1- The health care coverage provided must be relevant: the health services to be covered must effectively correspond to situations that members perceive to be a risk.
- 2- The coverage provided must be visible: a health micro-insurance scheme that chooses to cover only health services that are used rarely, such as emergency hospitalizations or surgery, runs the risk of not being very lively and attractive. A scheme that covers minor risks, on the other hand, will be very active, and therefore very visible, but will require members to pay a high premium, no doubt rendering the scheme less accessible.
- 3- The premium must be affordable. A premium that is too high will be prohibitive for the vast majority of the scheme's members.

4- The scenario selected must enable the scheme to guard against insurance-related risks: adverse selection, opportunistic behaviours, moral hazard, risk of over-prescription, catastrophic cases.

Source: ILO/STEP. 2005. Health Micro-Insurance Schemes: Feasibility Study Guide.

In terms of technical management

Technical management is highly complex and includes: management of membership, premium collection, claims management, assessment of customer satisfaction for better renewal rates, monitoring and evaluation, prevention and fight against risks inherent to insurance (moral hazard, adverse selection, etc.).

"Inherent risks" to insurance may jeopardize the scheme's financial viability

Moral hazard is a phenomenon according to which insured persons change their behaviours because they know they are insured. For instance, their utilization of health care exceeds the standard used as an input for determining premiums. Crop and health micro-insurance are particularly prone to moral hazard: a farmer may reduce its efforts of prevention (e.g., fail to use pesticides) as he/she knows that its crop is insured. A patient may use more expensive health services as his/her health care expenses are covered by insurance.

Over-prescription is a form of moral hazard but specific to health (micro-)insurance. It occurs when health providers raise their prescriptions to exploit the maximum level of patients insurance benefits while patients do not oppose to the practice.

Adverse selection is a phenomenon according to which persons with a greater-than-average risk enrol in a micro-insurance scheme in a higher proportion than that of their share of the target population and/or choose the highest levels of coverage. Disability micro-insurance covering blindness caused by cataracts could face an adverse selection problem. Because blindness from cataracts is progressive, somebody who was recently diagnosed could join the scheme and later get the benefit of the payout (in case of blindness) or even obtain a loan with the knowledge that they will become blind and have their debt written off.

Catastrophic risks are contingencies that affect a large segment of the covered population, such as epidemics, major floods, earthquakes, climatic risks and/or those for which the unit costs are high, such as very costly hospitalisations.

The complexity increases when periodic claims reimbursements are necessary such as for health insurance or when the payment of the premium is based on monthly instalments. The acceptance of micro-insurance depends to a significant extend on rapid claims settlement. This calls for experience in verifying claims and assisting policyholders in completing the necessary documentation. The lack of adequate and computerized management information system (MIS) may also prevent many schemes from monitoring properly their operations, particularly memberships, premium collection and claims.

ILO/STEP has developed two management and monitoring software in French. MAS Gestion is a management software aimed at micro-insurance schemes managers. It provides day-to-day management devises (membership, premiums and claims), a simplified accountancy module and a set of indicators that are useful to monitor the development of the scheme. MAS Pilote is a monitoring software aimed at supporting structures of micro-insurance schemes. It can be used to monitor the development of one or more schemes. These software are distributed free of charge. For further information, please contact ILO/STEP office in Senegal: step_afr@sentoo.sn

Among micro-insurance schemes, health micro-insurance schemes face an additional challenge, that of the relationship with health-care providers: implementation and follow-up of agreements on quality of care, on the tariffs, on the payment procedures.

In terms of communication and awareness building

Since micro-insurance is a relatively new concept, the target population lacks the comprehension of this risk management instrument. It is often misinterpreted with micro-finance causing difficulties in selling insurance policies and low renewal rates, particularly from insured persons that have not had a claim ("intangibility" of insurance). Often, policy documents (contracts, statutes, internal regulation) are too complicated for the members, most of whom are illiterate. In a partner-agent model, the partner (a commercial insurer) may have

a poor image among low-income communities, being seen as quick to sell and slow to pay. It is therefore necessary to invest into IEC (Information – Education – Communication) and training of field staff.

Dealing with this complexity requires specialized skills and knowledge

Operating a micro-insurance scheme therefore requires specialized skills and knowledge in various fields (accountancy, management, marketing, underwriting⁵, communication, etc.) and sufficient staff members. However it is in some contexts more cost-effective to outsource selected management functions to specialized agencies than keeping these functions in house. This presupposes that such agencies do exist.

In India some schemes outsource the relationships with health care providers and the management of some technical functions (e.g., claims settlement) to the so-called Third Party Administrators (TPAs).

This complexity differs from one field of micro-insurance to the other

On the whole, the complexity of the setting up process and operation of micro-insurance varies from one field of (micro-)insurance to the other.

Field / product	Protection provided	Complexity	
Crop	Financial compensation in case of crop failure generated by uncontrollable adverse events	HIGHLY COMPLEX	
Health care	Compensation of the health care expenses in case of illness, childbirth and/or physical injuries	COMPLEX	
Life/old age: Annuities, Endowment	Financial compensation in case of the death of the breadwinner and / or survival (old age)		
Property and asset	Financial compensation of the damage or loss (destruction, theft) of assets, work premises and tools	MODERATE	
Disability	Financial compensation in case of disability of the breadwinner		
Term Life	Financial compensation in case of the death of the breadwinner + compensation of the burial costs	SIMPLE	
Credit Disability	On-going loan payments if borrower becomes disabled		
Credit Life	Loan principal and interest paid on death of borrower		

3. Relative complexity of the different fields of (micro-)insurance

Amended from: "Preliminary Donor Guidelines for Supporting Microinsurance", CGAP Working Group on Microinsurance, October 2003

May 2006

⁵ Underwriting is the entire process of designing and pricing of the product including terms and conditions such as waiting periods, avoiding adverse selection, etc.

❖ Operating a micro-insurance scheme requires stable sources of funding

During the first years of operation, micro-insurance may incur losses due to the limited number of insured and fixed overhead costs. Unless the scheme is highly subsidized or benefits from infrastructure and staff of the implementing organization, it may face a dilemma between the intention of fostering its own expansion and at the same time the need to limit overheads. In any cases, long-term revenues will have to be funded through premiums, commissions of insurance providers (in the case of the partner-agent model), government budget allocations and external funding, if any. Funding assistance provided either by government or external donors may be aimed at covering the administrative expenses of the scheme (e.g., staff's salaries); it may also be aimed at subsidizing the premiums of some specific categories of members (e.g., subsidy of the premiums for the poorest households). The first type of funding should not last longer than the necessary start-up period aiming at sustainability of the micro-insurance product. On the opposite redistribution mechanisms should be encouraged as long as they are financed through sustainable arrangements (*See part IV for further details*).

* Conducive social and economic environment

Confidence in the implementing organization

Micro-insurance presupposes the regular payment and pooling of premiums. The target population cannot easily be persuaded to pool its premiums when it lacks full confidence in the promoters and the other persons/institutions involved in the project, nor when its experience with "collective" projects (service cooperatives, savings and loan associations, etc.) consists of projects that ended in failure.

Existence of interest for insurable risks

Setting up a micro-insurance scheme is worthwhile only if the insured risk is perceived as important by the target population. Some workers in the informal economy may for instance be more concerned by the risks of illness or death of the breadwinner than by the financial risk linked with old age.

Existence of mutual assistance

Since insurance is based on the concept of mutualisation (resource pooling and risk sharing) the understanding and acceptance of the insurance mechanism is enhanced when traditions of mutual aid exist within the target population. This spirit of mutual aid may arise from a number of situations such as being members of a saving & credit group, a cooperative or workers of an enterprise, residents of the same neighbourhood, or members of a social movement.

A dynamic of socio-economic development has been initiated

It is difficult for households to make regular premium payments when they have other priority needs that strain their budgets, such as food and housing. It is also difficult in a context of sluggish monetary circulation and seasonal cash-flow. Conversely it is easier to agree to regular premium payments when a dynamic of economic development has been initiated. However, in order to facilitate access to micro-insurance it is important to design and implement an appropriate payment method. Examples include: instalments designed to suit the disrupted cash-flow; interests earned on the savings which may be used for the premium payment; deduction of the premium from the amount of a loan taken by the member, which is

not causing the burden of additional premium payment but taking the money when the member has money at hand. Furthermore, by reducing vulnerability and insecurity, microinsurance may contribute to developing increased economic activity, which in turn facilitates the payment of premiums.

***** Conducive political environment

Regulatory requirements

Insurance regulations are meant for protecting insured persons against misleading selling practices as well as the financial viability of the micro-insurance schemes. If organizations intend to establish an independent insurance business high capital requirements can obstruct the provision of insurance products to low-income groups. Small premiums cause obstacles to accumulate the required capital for receiving a licence as a formal insurer.

However, in an increasing number of countries, specific regulations which are adapted to micro-insurance organizations are being designed and implemented.

In India the Insurance Regulatory and Development Authority (Micro-Insurance) Regulations, 2005 [Official Gazette, 2005] officially recognizes and regulates the agreements between micro-insurance agents (NGOs, Self Help Groups, MFIs) and formal insurance companies (partner-agent model). For instance it specifies the list of functions that the micro-insurance agent could be authorized to perform through the agreement. It indicates also that "a micro-insurance agent shall not work for more than one insurer carrying on life insurance business and one insurer carrying on general insurance business". It also stipulates the maximum amount (expressed in percentage of premium) of remuneration paid by the insurer to the agent for all the functions rendered including commission.

Commitment towards social protection

Micro-insurance cannot be in a position to reduce all major risks of low-income groups and poor sections of the society. The effectiveness of micro-insurance schemes is strengthened when it is integrated in national strategies of extension of social protection and risk management (see part IV).

3- Mechanisms that may supplement micro-insurance

❖ The need for a multilevel and integrated strategy of social protection

Taking the potential of micro-insurance into account and realizing the advantages and gaps of other existing risk management mechanisms (see part II) the need for a multilevel strategy is obvious. Such an approach combines mechanisms complementing each other at various levels. Ideally an integrated strategy of social protection should be implemented in collaboration with the government, public institutions (such as statutory social security schemes), the private sector, organizations of civil society, and self-help groups or other community-based networks (see part IV).

* The linkages between micro-insurance and other risk management instruments

Beside micro-insurance, civil society organizations support a large range of risk management instruments in order to protect their members or target groups against adverse events. These instruments include: prevention and precautionary measures, savings & emergency credit programs, and emergency & solidarity funds. These instruments are essential in order to supplement micro-insurance risk coverage, increase its impact, and reduce the future expenses (claim reimbursements) of the micro-insurance scheme.

Linkages between micro-insurance and preventive & precautionary measures

As elaborated in part II, preventive actions and precautionary measures are all the more important as low-income groups have a limited access to risks related information and are more exposed to risks than others. Although most of the preventive actions and precautionary measures cannot eliminate the risks, they can reduce their chances of occurrence or their severity. These measures are useful to micro-insurance schemes by reducing future claims and thereby the scheme's expenses.

When individuals get immunized and apply basic hygiene principles the risk of falling ill is reduced. If they undergo regular check-ups the chances of diagnosing a disease in a early stage are increased thereby reducing the cost of the necessary treatment. With lower risks and lower costs of treatment, the insurance scheme's expenses (claims) will be reduced.

Linkages between preventive and precautionary measures and micro-insurance schemes are of various natures:

Information dissemination

In-service trainings like watershed management can improve the quality and quantity of crops. This does not only increase the income but also reduces the chances of crop failure, thus leading to lower premium as the number of claims can be reduced.

Advocacy and networking

Improving the working conditions of the target population has a positive effect on safety at work and reduces the number and severity of accidents. Establishing cooperative networks with the aim of selling generic drugs at low price to the members may contribute to better health status and reduce the scheme's expenses.

• Conditioning the insurance coverage to the respect of preventive and precautionary measures

In an insurance contract against theft, the micro-insurer may require that the insured accommodations be secure enough (e.g., presence of security locks). In a disability insurance group contract, the micro-insurer may require that the director of the client factory fit the machineries with safety devices.

Linkages between micro-insurance and savings & emergency credit programs

Savings and emergency credit programs may be provided to members of the micro-insurance scheme in order to supplement the protection offered by micro-insurance, that is:

 To provide a protection against risks which are not covered by micro-insurance. Savings and emergency credit programs are particularly appropriate for minor risks that entail moderate expense and have a high probability of occurrence. These risks could consequently be taken out from the insurance plan thereby contributing to reduce the insurance premium.

The protection against health risks would include health savings for minor risks (e.g., consultation with a general practitioner, the purchase of generic drugs) and health insurance for major risks (e.g., hospitalization and complicated delivery).

• To provide a supplementary protection when adverse events financial consequences are only partially covered by micro-insurance.

In most asset micro-insurance products, the loss or damage of e.g. huts due to fire or natural disasters is not fully covered. Savings and/or emergency loans may provide the additional funds for rebuilding the hut.

Although medical savings accounts may raise problems of equity (since they limit risk sharing between the healthy and the sick, and do not provide for redistribution between the rich and the poor) and may not be an appropriate protection device for major risks (that have a low occurrence and entail high expenses), this mechanism may be a useful supplementary mechanism to insurance, particularly in case

of benefits with high co-payments (deductibles for instance). In fact, co-payments are an effective means of combating moral hazard, but, when too high, they may have the effect of limiting the accessibility of health care. Moreover, MSAs promote individual responsibility in health spending [Hanvoravongchai, 2002].

- To pre-finance expenses covered by micro-insurance in the absence of a third-party payer mechanism. After the occurrence of the adverse event the policyholder may need money for paying his/her loss immediately. If claims settlement takes too long, the insured person may need to avail a loan for bridging the time until he/she received the reimbursement from the micro-insurance. If it can benefit from a loan at a low interest rate, it brings more financial protection than going to money lenders or selling assets [Chatterjee & Ranson, 2006].
- To finance premiums payments on a regular basis. For instance, the annual interest generated on savings may be used to pay the premium.

Vimo SEWA, India has implemented two ways of paying the premium. The original method is by annual payment. Since 1993, members have had the option of payment through the fixed deposit arrangement. The deposit, which can be paid at any time of the year, must be paid in cash into the member's account in SEWA Bank, where it remains. The annual interest is used to pay the annual premium. The deposit is paid back to the woman when she reaches the age of 58. The fixed deposit arrangement brought greater security in the scheme's management since it was assured of a known size of membership and avoided problems of collecting premiums.

Linkages between micro-insurance and emergency & solidarity funds

Emergency & solidarity funds may supplement micro-insurance products notably by providing a financial compensation for benefits not provided by the schemes. They may also be useful to meet the specific protection needs of potential members with high risks such as the Elderly, the disabled, chronic ill persons or to provide coverage to the extreme poor that do not have the financial means to pay the premiums for micro-insurance.

* The linkages to other social protection components: social security schemes, social assistance schemes and special health programs

Civil society organizations involved in micro-insurance may assist their members to access social protection programs supported by the government or welfare funds operated by employers and employee organizations (even in the informal economy). They may for instance facilitate the access of their members to public schemes and programmes through information on these programs and the procedures of enrolment, or through the provision of assistance in registration of entitled individuals and households. They may also channel social assistance to those members that are eligible and play the role of an intermediary between the State and the recipients; they may receive public subsidies aiming at covering full or part of the contributions of the poorest members. Civil society organizations may also lobby for improved public social programs and services. They may finally participate in the design of new programs and services, in the improvement of the delivery channels of existing public funds and schemes (e.g., emergency assistance after natural disasters), in the monitoring of existing public schemes & programs with an aim to improve the quality and efficiency of the services provided (e.g., health care centres, food assistance programs, disability programs, residential dwellings and/or minimum income programs for the poor).

Synthesis table of examples of measures and programs that may supplement microinsurance coverage or increase its impact

		Risk management measures and programs that may supplement micro-insurance coverage or increase its impact				
	4	Prevention & precaution	Savings & emergency credit	Solidarity funds	Access to public programs	
Risks	Life risks	Awareness raising for oldage pension	Savings Asset building Premiums payments	Burial association	Social assistance minimum pension schemes	
	Disability risks	Advocacy for safety at work	Savings Emergency loans	Solidarity fund for the disabled	Public assistance for disabled	
	Lifestock risks	Training Cattle rearing Fencing cattle	Savings Productive loans		Participation in public works programs	
	Health risks	IEC* Immunization	Health savings Emergency loans Prepayment	Solidarity fund for HIV/AIDS	Social health insurance Public health programs	

^{4.} Examples of supplementary measures and programmes