Agricultural and climate risk insurance for smallholder value chains: Identifying common challenges and solutions

Successful and sustainable roll-out of agricultural and climate risk insurance schemes for smallholder farmers and their value chains is a complex task involving many stakeholders. Many of the challenges or roadblocks that hinder insurance workstreams are common across different countries and contexts. This brief identifies and describes the principal challenges, and outlines possible solutions that development programmes can support. It is aimed at rural and agricultural development projects in the process of identifying potential insurance activities that will strengthen poor rural people’s resilience and their capacity to adapt to climate change.

Challenges are identified at three levels: demand for insurance, supply of insurance, and the enabling environment, which includes the policy, legal and regulatory frameworks. The corresponding proposed solutions can be supported by development projects, government, donors, and the financial and agricultural sectors.

DEMAND

1. Challenge 1
Smallholder and agricultural value chain risks and risk management strategies or patterns are not clearly identified and understood. The risks and constraints faced by target groups and stakeholders, and the risk management strategies that are available or needed, are often not well analysed before deciding whether or not to embark on rolling out or improving an insurance scheme.

Solution
Conduct agricultural value chain risk assessments. Analysis and recommendations to choose insurance as a risk management strategy should be based on a clear understanding of the target group’s situation and on a screening of the current options. Assess the risk management needs, constraints and patterns of farmers and other relevant stakeholders in value chains. Assessments should clarify whether insurance of any type is the right tool. If there is a need for insurance, consider whether formal insurance is suitable or whether informal or semi-formal risk-pooling options, or a combination of other risk management measures, may be more appropriate for the target group.1

2. Challenge 2
Lack of awareness and understanding; the target group has limited understanding and trust of insurance. Lack of awareness and understanding of insurance as a risk management tool persists among smallholder farmers. It is often a reason behind weak uptake of insurance and also creates difficulties with the effective use of insurance policies when they have been purchased. As a result, farmers may not benefit effectively when a loss or damage occurs or they may misunderstand what they are and are not covered for. Furthermore, they may exclude themselves from benefiting by not taking appropriate risk management measures (for example, vaccinating livestock). There may also be low renewal rates after first purchase, with farmers unwilling to pay regular premiums to continue insurance coverage if there are no payouts in the first season or period of coverage.

1/ For more information, see: Assessing value chain risks to design agricultural risk management strategies: A practitioner’s toolkit (PARM, 2021).
Solution
Develop education in risk management and insurance; assess the value of insurance options to clients and integrate measures that foster trust.

Develop and implement education in risk management and insurance. Education should aim to ensure that clients understand: which risks are insurable; how insurance works; what is covered and what is not; what other complementary risk management tools are available; what they can expect when they purchase insurance; what to do when there is a claim; and how to renew the contract or stop out.

- Education measures can be part of the insurance scheme, or separate and implemented in another agricultural or financial development context.
- They should be adapted to the needs and constraints of the target group, delivered through accessible channels and formats, and take account of gender considerations.
- Education can be developed to use public channels such as extension workers. Other solutions are increasingly popular, including village-based approaches, or technology such as gaming, mobile apps or USSD menus.

Assess the value insurance brings to clients. If governments or other stakeholders want to improve existing insurance schemes, projects can support client value assessments in order to identify issues and propose solutions. Note that client value is not just about affordability, it is also about the benefits insurance should bring. Agricultural insurance should mitigate a priority risk or risks, and compensate just about affordability, it is also about the benefits insurance should bring. Agricultural insurance should bring. Agricultural insurance should mitigate a priority risk or risks, and compensate

Integrate measures that foster trust in insurance and in the insurer. A key aspect early on in establishing trust in insurance is building farmers’ understanding of what is covered by the insurance and what is not. Smallholders may have greater confidence when their association is involved, or testimonials from their village are available. Experience shows that communicating payouts publicly is an effective way to build trust. Another option is bringing insurers or regulators to rural areas to speak directly to farmers and address their concerns. Finally, trust can be strengthened by setting up or expanding insurance schemes using trusted delivery channels that are in close proximity to clients, and are already providing other services to which insurance can be linked, such as credit or inputs.

Challenge 3
Affordability issues; lack of ability and willingness to pay. The target group may simply not be able to afford insurance. Farmers may also not be motivated to purchase insurance when, at the time of starting production, funds are scarce and cash flows will be constrained until harvest. They may also have difficulties in making and/or receiving payments. This challenge is exacerbated if there is a lack of transparency regarding the price and benefits of the insurance.

Solution
Assess and set up alternative schemes and payment arrangements; test prices and adjust contract options.

Assess and set up alternative schemes and payment arrangements. Sometimes all or part of farmers’ insurance premiums can be paid for by private value chain actors or financial institutions, or publicly funded by governments or development projects. However, publicly-funded subsidies require careful targeting and an exit strategy to ensure sustainability. Alternative or complementary solutions can include:

- Developing pre-financing or instalment payment options to make it easier for farmers to pay for the insurance premium. For example, by linking the insurance premium to an input loan from a financial or non-financial institution; or deducting full or partial premium at point of payment for produce, for example by milk collection centres, or off-takers. Deadlines for paying premiums can also be linked to farmers’ earning cycles so they do not fall when income is most constrained.
- Linking farmers to a payment facility that is easily accessible and trusted. This can include microfinance institutions (MFIs), mobile money payments, or a combination of an MFI and an informal savings and credit group (for example, a village savings and loans association).
- Bundling insurance with other products and services, financial and/or non-financial, that farmers otherwise would have difficulty accessing. These may be products and services that they need to meet other constraints or manage other risks, such as better seeds, high-value inputs, agronomic advice, a leasing contract, or credit. It can make sense to bundle insurance with other services on offer that help farmers and other stakeholders to invest in equipment, new crops or breeds, and high-value inputs. These farmers are taking on more risk and improving their incomes, both of which need protecting.

Transparent insurance pricing must be included in marketing materials and education.

Test prices and adjust contract options. The sensitivity of farmers around price points should be tested before an insurance scheme is rolled out, as part of assessment and subsequent development. This can be part of a rapid prototyping approach.2 It may involve adjustment of contract parameters and coverage options to deliver something that is enough to cover key risks and bring value to the insured, but is also affordable for farmers, while at the same time ensuring supply costs are sustainably covered within the premium.

2/ For more information, see: Rapid prototyping for inclusive insurance in the Insurance Toolkit (IFAD, 2021).
**Challenge 4**  
No adequate insurance products are available. Suitable products for the livelihoods, assets or investments of the target group are not readily available for the specific value chains and the particular risks faced in the region.

**Solution**  
Assess, develop and test: finance feasibility assessment studies for specific, targeted insurance schemes; support design, testing and roll-out of an insurance product.

**Finance feasibility studies.** Feasibility studies for insurance schemes are a crucial first step before deciding whether or not to proceed with product design, and defining what kind of products or alternative or complementary support measures are advisable. They should be carried out by expert consultants or providers.3

**Support design or adjustments, testing and roll-out of an insurance product.** An insurance pilot with a clear exit strategy, which supports the design, testing and roll-out of an insurance product, can make sense for a certain period until sufficient experience is gained in-country. A good period of testing, monitoring, validating and evaluating product performance and accuracy is required, over several seasons. After roll-out, product adjustments should be made in a continuous way, based on findings.

**Challenge 5**  
The capacity of insurers is constrained. Private and public insurers generally face similar constraints regarding the development and distribution of products to benefit those in the low-income agricultural sector, who often represent new clientele in remote, rural areas. Capacity gaps are common at various points of the process, from product development through to roll-out.

**Solution**  
Deliver focused training and coaching to insurers.

Any training for insurers should consider the entire process and involve staff at different levels. Aim to get a critical mass within an institution or country to avoid the risk of frequent staff turnover. Insurers are likely to need capacity-building in the areas of scheme or business model development, product development and process coaching.

**– Scheme or business model development.** This is particularly important in order to overcome the challenges of operating with smallholders and other actors in the value chain. State-owned insurers may struggle to increase penetration, even with subsidies. Commercial insurers may not understand that viable business opportunities exist in working with aggregators and delivery channels close to smallholder farmers. Insurers should be supported with assessments in order to understand the needs, opportunities and experiences of the target group (if there is an existing scheme) and possible linkages with appropriate aggregators. Technical support should be made available on related business model development and scheme options.

**– Product development.** Many insurers choose not to develop products in-house; their main role will be in understanding the product and underwriting the risk. In this case, they need to be linked with a suitable service provider or reinsurer who then develops the product. Nevertheless, it is important for these insurers to understand how a product works in the rural and smallholder environment, and they must also be able to monitor it and understand how to implement adjustments if necessary. On the other hand, some insurers will want to develop products in-house, in which case they will need more hands-on training. In some cases, it might be appropriate to develop the capacity of other institutions beyond insurers, including those already involved, or with potential to be involved, in product development. This may include regional insurance technical service providers, agricultural statistics/remote-sensing bodies, and/or in-country technical working groups or technical support units.

**– Process coaching.** Process coaching can help insurers understand how to map and assess their processes, identify where bottlenecks occur in scheme delivery and clarify how to make improvements.4 This can be particularly important to improve the speed of processes that benefit clients, such as claims processing and payouts. Insurers may need process coaching over an extended period, rather than training, and may also require technical advice, training and other support to improve their systems – for example by using digital platforms to increase efficiencies.

**Challenge 6**  
There is no suitable distribution structure or delivery channel in place. Distribution can be the most cost-intensive step when bringing insurance to smallholder farmers in remote rural areas. Delivery channels need to be in close proximity to farmers and accepted and trusted by them.

**Solution**  
Set up or expand schemes using trusted delivery channels.

Generally, it is not the insurer that is the “face” of the product, but the institution that enrolls clients and deals with the different delivery processes, such as marketing and payouts. This is the case if insurance regulations allow the use of the specific delivery channel, such as a credit union, agribusiness (offtaker), MFI or farmers’ association. Ideally, delivery channels should be entities that aggregate farmers, are located in close proximity to the target group and are already providing other products or services to them. Outreach in relation to existing products can also be expanded to the target group by on-boarding such delivery channels. These aggregators can also be motivated to help select, train and institutionalize insurance agents in remoter areas.

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3/ For more information, see: Model terms of reference for the selection of a service provider for: Agricultural and climate risk insurance feasibility studies in the Insurance Toolkit (IFAD, 2021).

4/ For more information, see: Process mapping for microinsurance operations (IFAD, 2012).
**Challenge 7**

Adequate risk data are not available, not of the required quantity or quality, or are expensive to get for index insurance purposes. Weather stations and other data systems are ill-equipped or non-existent. Good index insurance product design depends on data that are accurate, timely and sufficiently granular to capture homogeneous risks at the local level. Adequate historical and contemporary risk data on crops, yield and/or livestock are required – depending on the insurance product. Even with new products based on remotely sensed/satellite data, some level of ground data is still necessary. 

**Solution**

Fund public data collection, management and provision (including weather, yield, livestock and remotely sensed data).

Consider linking different data institutions (i.e. meteorology; agricultural statistics; remote sensing) or creating one data centre. This should benefit risk management beyond agricultural insurance; but make sure that any improvements meet the requirements of agricultural insurance and will make data available for these purposes. Possible approaches include:

- Supporting additional research and development activities to improve the potential of remote sensing for index insurance.
- Making further investment in ground data collection protocols, capacity and systems for both crops and livestock (e.g. for forage or electronic tagging).
- Combining different remote sensing approaches, dedicated mapping tools, and ground-level sources of data and information to improve the quality of index insurance structures.
- Supporting future initiatives to focus on developing proper segmentation of the size of the insured area, based on agroecological zoning.
- Planning measures aimed at mitigating the occurrence of basis risk events.
- Building the capacity of private and public institutions in order to fill current gaps in expertise and ensure future sustainability.

**Challenge 8**

The enabling environment is not conducive to the development of agricultural and climate risk insurance options for smallholder farmers.

Government policies and legislation can suffer from limitations regarding policy planning and budget allocation, and the capacity and adequacy of state insurers or national agricultural insurance schemes. Other significant challenges include regulatory or supervisory provisions that do not accommodate innovative insurance solutions. There can also be capacity gaps in the various institutions involved.

**Solution**

Provide support to government for the setting up or implementation of agricultural insurance products and schemes.

At the policy level, the improvement or design of an agricultural insurance scheme is a major task and may be supported in partnership with multiple donors. This could include interventions that finance:

- Collection, management and availability of quality weather and satellite data.
- Development of a strategy for subsidization of insurance in line with good practices, for example by advising on targeting for subsidies and on how to create a level playing field for commercial insurers (such as through setting up an insurance pool – a consortium of insurers eligible to offer subsidized products).
- Capacity development for key government decision-makers and the technical staff who are responsible for policy and scheme oversight.
- Coordination between relevant ministries and departments.
- A monitoring and evaluation strategy, systems and management capacity.

At the regulatory and supervisory level, the government should be supported to:

- Ensure that adequate safeguards are in place for contract enforcement and transparency.
- Enforcing contracts that both buyer and seller can trust is a fundamental prerequisite for any type of insurance, but particularly for index insurance. Laws and regulations need to be consistent with international standards.
- Foster regulatory flexibility to allow innovative products and to enable non-insurance delivery channels. Insurance regulations and supervisory practices should accommodate different types of agricultural and climate risk insurance products, including index-based insurance, and allow delivery channels such as agribusinesses or cooperatives to distribute insurance to their members and clients.