



This study is based on the experience of the PROFIN Foundation in the field of financial innovation and development of agricultural microinsurance products. It forms part of a series of thematic case studies of SDC's Employment + Income Network.

PROFIN promoting Agricultural Microinsurance in Bolivia: enormous potential for rural poverty alleviation

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1. Transferring the risks of small-holders for alleviating poverty

Imagine you are a small winegrower from Tarija, a southern Department of Bolivia. Every year you invest the little capital you have into your vineyard, and because sometimes this is not enough, you need to take a loan as well. In spring time, when your vines begin to sprout, it is not all joy, because then one of your greatest worries starts: the hail season.

This is the reality of Tarija's grape producers. Hail is one of the biggest threats to their livelihood. Its devastating effects can hinder the small farmers from getting out of poverty, or even send them right into economic ruin. In order to offer Bolivia's smallholder families a valuable solution to break the vicious circle of high production risks, risk adversity, conservative investment decisions and overindebtedness, the PROFIN Foundation is developing and testing innovative microinsurance solutions. In 2008, PROFIN has emerged from of a SDC programme (1998-2008) into a foundation, currently receiving project funding from SDC, the Danish International Development Agency and the International Labour Organization (ILO). PROFIN's core business is research and development of financial innovations targeted at a better financial inclusion of Bolivia's productive sector.

In 2009, PROFIN has launched Bolivia's first agricultural microinsurance pilot scheme in the Municipality of Uriondo, designed for winegrowers to protect them against hail damage. Together with the local

Municipality, PROFIN has created an innovative Public Private Development Partnership (PPDP). In its first year of implementation in 2009/10, 187 producers were insured for a total value of more than USD 600'000.



In 2012, the insurance product has been transferred to Alianza Insurance and Reinsurance SA. During the 4 initial years, 700 small holder families purchased the insurance to insure a total of 670 ha with an insured value of more than USD 1.7 Mio. The potential for agricultural insurance in Bolivia is big. Combined with intelligent financial and non financial services and products, agricultural insurance can make a difference in the lives of rural families and be an effective instrument in their struggle out of poverty.

Table 1: Market volume projections (based on information from the National Institute for Statistics of Bolivia, INE)

	Tarija	Bolivia
Cultivated ha	87'000	2'700'000
Projected premium volume	17.4 Mio USD	540 Mio USD

2. The pilot: A PPDP for agricultural microinsurance

The Risk Transfer Fund FTR in Uriondo has been designed and implemented by PROFIN on demand of the Municipality of Uriondo, in the department of Tarija. It was PROFIN's second pilot model and Bolivia's first PPDP insurance model for small producers. Since 2009, the FTR has been insuring Uriondo's wine-growers, covering 100% of their production costs against hail. For inspection and damage evaluation, the FTR has trained local winegrowing technicians as evaluation experts. Together with PROFIN, they have developed a complete inspection and damage evaluation methodology, adjusted to the characteristics of FTR's insurance product.

If a family wishes to insure its vineyard, they call the insurance office which makes the appointment with the evaluation expert who in a first step conducts the inspection to decide whether the general condition of the plants is good enough to qualify for insurance. In this case, the client can directly pay the corresponding premium at a branch of the Microfinance Cooperative El Churqui.

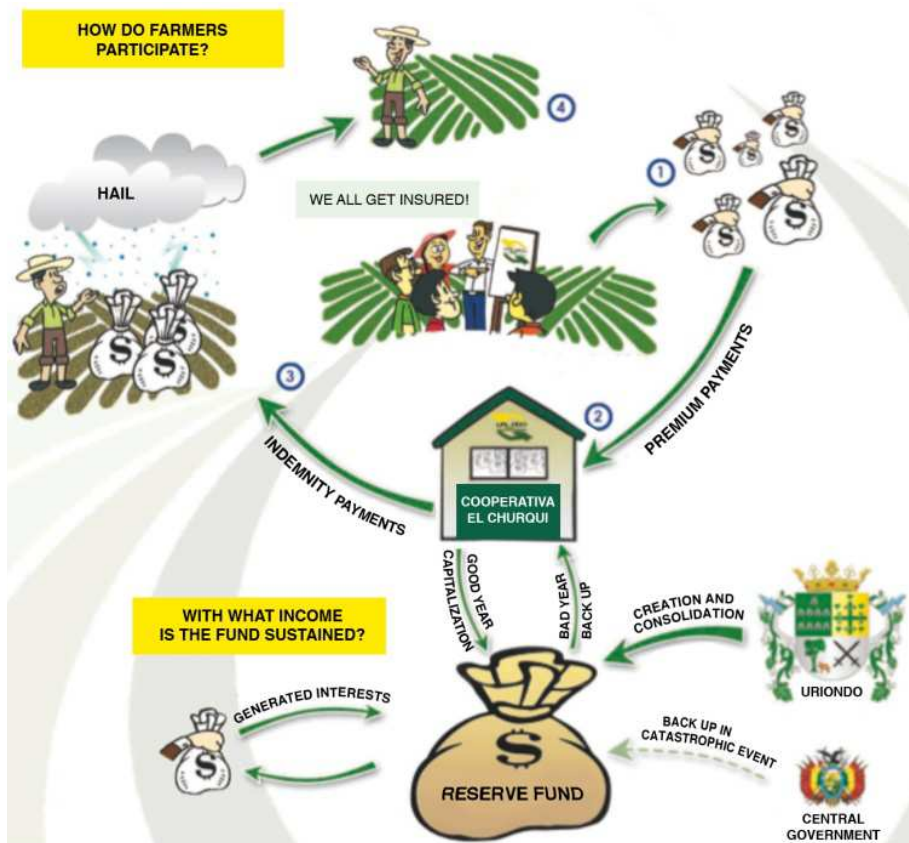
Table 2: Insurance options of the FTR

Per ha	Option A	Option B
Total insured value	USD 2'000.-	USD 3'200.-
Total premium	USD 191.- (9% of sum insured)	USD 263.- (8% of sum insured)
Subsidies by local Government	USD 114.- (60% of total premium)	USD 146.- (55% of total premium)
Premium paid by the client	USD 77.- (3.8% of insured sum)	USD 117.- (3.6% of insured sum)
<i>Assumption: 300ha insured</i>		

In order to improve production techniques as well as risk prevention and mitigation practices, the evaluation experts offer technical assistance to clients every time they are in contact with them by sharing their technical knowledge.

In case of a hail event, the client calls the insurance hotline which sends its evaluation expert to measure the damage directly on-site. The indemnity amount is then calculated as a percentage of damage applied to the insured sum. With the intention of encouraging microsavings, the indemnity payment is transferred to a client savings account especially opened to this end.

The insurance mechanism was initially backed up by a reserve fund constituted by the Municipality of Uriondo. In 2010, however, the newly elected Community Council decided to no longer subsidize and back up the FTR with its financial reserve. The insurance product therefore suffered some adjustments: the premium to be paid by the smallholders increased from 3.6% to 5.9% of the value insured and a deductible of 10% was introduced. PROFIN supported the insurance scheme by partly subsidising the premium and providing the financial reserve.



3. Product and knowledge transfer to the private sector

In 2011, Alianza Insurance and Reinsurance SA showed interest in including the insurance product in their portfolio. PROFIN took up negotiations and Alianza eventually agreed to sell the product as initially developed. PROFIN supported Alianza in the elaboration and presentation of the technical note to the Bolivian Insurance and Pensions Authority (APS). Due to a delay in the registration process of the product at the APS, Alianza first entered the scheme as an observer. During the 2011/2012 season, PROFIN introduced Alianza to the methodology of hail damage evaluation as well as to the FTR office management. In order to improve the outreach to the clients, PROFIN negotiated terms with a second microfinance institution, IDEPRO. To prepare the market, PROFIN launched the insurance without any subsidies. Hence, the premium increased to its actual value of 8.2% of the sum insured.

Table 3: Alianza's Viticultural Insurance product 2012/2013

Per ha	Viticulture Insurance
Total insured value	USD 2'430.-
Total Premium	USD 200. – (8.2% of sum insured)
Deductible	10%
Subsidies	no

In 2012, PROFIN transferred the viticultural insurance product to Alianza and Alianza launched it for the first time. In terms of value insured, premium and deductible, it has the same characteristics as the one piloted by PROFIN. The subscription process as well as the indemnity process remain similar. Alianza took over the insurance office in Uriondo, therefore the clients still approach the same place in order to fix an appointment with an evaluation expert for the inspection. In case of hail damage, the clients call the insurance office in Uriondo and can then collect the indemnity payment from their savings account at El Churqui or at IDEPRO within the 5 days as during the previous years. In order to maintain the quality of damage evaluation and extension service, Alianza has engaged the evaluation experts trained by PROFIN.

The institutional changes at the level of the risk retainer did not affect the quality of the product and services, nor the processes for the clients.

4. Results

The FTR closed its first season in 2009/2010 successfully. The loss ratio (indemnities paid out divided by total premium) has been 43% (expected loss ratio was 65%). This means that the indemnities have been covered by farmer's premiums only, leaving the Reserve Fund untouched.

In 2011/12, the selling of the insurance did not start until November and then only with a limited marketing campaign. Additionally, 2011/2012 was the first season that the insurance was no longer subsidized. These factors might have contributed to the low number of clients in that particular season. The average loss ratio in the years 2009-2013 has been 55%, oscillating between 37% and 100%, when in 2011/2012 damages caused by hail were high.

Table 4: Results of 4 seasons: 2009 - 2013

In USD	2009-2010	2010-2011	2011-2012	2012-2013
Total Premium	57'440	37'395	20'330	30'045
Total value insured	675'455	457'700	246'880	353'995
Indemnity payments	24'760	14'310	20'345	11'225
Insured ha	225	189	102	148
Number of clients	187	302	67	136
Number of clients indemnified	23	29	23	49
Ha/client	1.2	0.6	1.5	1.1

Initial effects on the clients

For the majority of the clients, the Viticultural Insurance means security for their investments. Even when hail causes damage, the insurance allows the winegrowers to retrieve the amount invested.

Furthermore, insured farmers are more attractive clients to microfinance institutions. Therefore, they get easier access to credit with favourable conditions. At El Churqui, interest rates for clients of the Viticultural In-

insurance are two percentages lower than for smallholders without insurance. At IDEPRO, clients whose vineyards are in a risk prone zone are only eligible for credit if they are covered by the Viticultural Insurance.

In order to receive a first feedback on the product and the service, PROFIN conducted a survey at the end of season 2009/10, which has proven a 95% client satisfaction with the product. 100% of the interviewed clients stated that the indemnity payments were fast (maximum 5 work days) and 97% would insure their production again next season. The insurance gives them security and tranquillity. A second survey has been conducted recently and will provide updated insights into the client satisfaction regarding product and services.

Upon demand of current and potential insurance clients, PROFIN has developed additional frost coverage. For the 2013/2014 season, winegrowers in Tarija will be covered against hail and frost damages. Since frost is a spatially uniform and widespread weather phenomenon, damage can be estimated by means of a meteorological index.

Box1: Client testimonies from 2010

Lindolfo Lazcano

"When the hailstorm fell, we used to receive (from the government) just a few pounds of beans and rice with weevils. That was not a palliative! God bless this insurance, it was awaited for a long time..."

Marcelino Ríos

"Hail fell in my plot. Instantly, I called the FTR of office and the evaluation expert came in order to make the damage evaluation. Initially, I thought that they would only make a rough approximation, but it has not been like that! Also, they have alerted me of another problem in the vineyard. Immediately I started treatment and it has already improved.

With the indemnity payment I bought remedies (to cure the plant), just after the event.

The insurance is very useful. I will get insured the next year. Without the insurance I would not have been able to buy remedies for the plant. And if one does not have the insurance or the money for the cure, pest take advantage and affect the weak plant.

I would like everybody to get insurance, because one is never safe. And if hail does not fall, even better for me."

Thelmo Miranda

"The manager of the FTR has explained me very well how the insurance works, and also the contract is very comprehensible. The insurance has helped me to recover my investment."

Carlos Peralta

"The damage evaluation is done professionally. The FTR has well trained personnel. It works!"

Initial effects on the insurance sector

In Bolivia, the insurance sector has been serving an urban high income segment with traditional products such as life and property insurance solutions. The high, correlated risks coupled with frequently lacking meteorological and productive information, paired with scarcity of experts in the field of risk calculation (actuaries), often deter insurance companies from developing agricultural insurances. By getting to know the insurance schemes developed by PROFIN and the results achieved, several Bolivian insurance companies are now interested in enlarging their portfolio with agricultural insurance products.

Initial effects on the Bolivian Insurance and Pensions Authority (APS)

Due to a proactive and open sharing of information on the agricultural microinsurance models implemented by PROFIN and on lessons learned, the APS respects PROFIN's know-how and role in financial innovation processes, and acts in an enabling position.

Because microinsurance products are new to the market and the adequate legal framework is lacking, PROFIN has been working closely with the APS, in order to work on regulations in this regard.

Initial effects on microfinance institutions

As distribution channels, El Churqui and IDEPRO are in direct contact with less risky clients. They have the opportunity to increase their client portfolio by offering the winegrowers better conditions in terms of interest rates and others.

5. Lessons learned

To design and implement a successful agricultural microinsurance product, there is no such thing as a singular secret recipe or ingredient, but a blend of many different factors that one has to take into consideration. In the following, you will find some deliberations that go beyond the unchallenged importance of high quality information and solid risk calculations.

- a. **Know your client.** Learning about the needs and livelihood situations of clients, for product design and commercialization, will assure that the insurance product is responding to a real demand of the client.
- b. **Simplicity of products and processes.** The insurance literacy of the target segment is still weak, therefore keep it simple and avoid small print.
- c. **Distribution channels.** Their selection should be based on criteria such as efficient service delivery, geographical outreach, institutional solidity and – last but not least - client proximity and trust.
- d. **Education and training.** This aims at potential clients as well as the insurance sector, the distribution channels, the government entities – basically at all actors involved.
- e. **Promotion and publicity.** Temporal effort in promotion and publicity do not produce results. Use local language and promote regularly through radio.
- f. **Never fail to pay.** The insurance business is all about trust, and regaining trust once lost is far more difficult than build in the first place.
- g. **Public subsidies.** It is recommended to involve public institutions from the beginning into the development of a product in order to get public approval. However, in absence of a certain continuity of public policies, insurance products should not be made dependent on subsidies.
- h. **Demonstration effect of the pilots.** The experiences made with the pilot insurance schemes have proven to be the best arguments when negotiating with insurance companies. Developing and implementing solid, cost-real and marketable insurance products and disclose good results, is the most effective way to persuade insurance companies to enter the microfinance segment.
- i. **Risk prevention and mitigation.** The services in risk prevention and mitigation regarding production losses in the vineyard provided by the evaluation experts during inspection and damage evaluation visits are highly appreciated by the clients. The experts are young local technicians in viticulture, who, being themselves winegrowers in the region, enjoy the client's confidence.
- j. **Continuity creates trust.** Alianza agreed to take over PROFIN's pilot product and to market it as such, without changing its characteristics. The continuity regarding the product, as well as regarding the distribution channels and the personnel of the damage evaluation team has been a major success factor.
- k. **Change in a society's perception and management of risks.** Introducing insurance products into a new market is closely linked to a change in a society's perception and management of risks.



6. Potential and Prospects

Bolivia is ecologically diverse and, due to local characteristics, will need different agricultural insurance models. The potential of the unexplored market is big, more than 320'000 rural families do not have access to insurance yet and urgently need protection.

The demand for new and innovative agricultural insurance schemes is high. Hence, PROFIN is developing and implementing different pilots.

- **Vida Agrícola:** With the support of the International Labour Organization ILO, PROFIN and Nacional Vida Insurance are implementing an innovative micro-insurance product for smallholder families: A composite multi-risk insurance that covers all crops and cattle against production losses, two adults of the family against death by accident, and the family's assets against losses caused by fire and flooding.
- **Risk Transfer Fund for winegrowers in the Cintis Valley.** The insurance scheme is currently managed and operated by PROFIN. It is agreed that in the near future, Alianza will expand its Viticultural Insurance and offer it in the Cintis Valley.
- **Risk Transfer Funds for peach growers in the Cintis Valley** (covering hail) and the **High Valley of Cochabamba** (covering frost). This season, PROFIN has started the knowledge transfer to BISA insurance company, who will operate the insurance scheme from the next season on.
- **Risk Transfer Fund for potato producers in the Altiplano region.** PROFIN is currently managing and operating the insurance scheme. Negotiations with the private insurance sector are planned.
- **Livestock insurance for milk cows:** Such an insurance scheme is in development.

International reinsurance companies can play an important role in microinsurance innovation. Unlike the local insurance companies, international reinsurers already have experience in the development and commercialization of micro insurances in other parts of the world. Moreover, the volume of their portfolio and their risk diversification make it easier for them to support new initiatives. PROFIN is actively exploring the interest of international reinsurance companies to participate in agricultural microinsurance models. SwissRe has manifested its interest in offering reinsurance coverage for local insurance companies entering the agricultural segment, under the condition of PROFIN's technical support.

The Government of Bolivia is designing a national insurance scheme for smallholder farmers. For this purpose, it has founded the National Institute for Agriculture Insurance INSA. In a first step, an insurance scheme for the poorest Municipalities has been launched, covering catastrophic events caused by hail, frost, draught and inundation. In the second step, INSA is working on a model including the participation of the private insurance companies. Together with AGROSEMEX, the Mexican national insurance organization, PROFIN is supporting the development of this model and the corresponding products.

Since 2006, the PROFIN Foundation has been opening a new and promising sector to traditional insurance companies and micro finance institutions. Accessible insurance products should give smallholders the opportunity to break the vicious circle of poverty.

For further information, please visit:

www.fundacion-profin.org

