

CHALLENGES IN IMPLEMENTING AGRICULTURAL INSURANCE & REINSURANCE IN DEVELOPING COUNTRIES

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Like many other developing - or I ought to say “fast developing” countries, India is an agricultural nation with at least one third population depending on agriculture sector directly or indirectly. With food being the first basic need of the population, there’s no doubt that the agricultural sector will continue to be the primary concern of the government economic and social development plans.

The challenges in developing countries agricultural sector are quite different from those faced in the western European or North American countries. The enormous pressure to produce more food from less land, in order to feed the fast growing cities is a tough task for the farmers. In this respect the perspectives of the national market, especially in India, are quite motivating. Farming sector can count on a labor force which is numerous and competitive. High level of agro technology and education are now available and are being broadcasted. On the other hand farmers have to face chronic adverse climatic conditions that are far more prevalent than in so called “temperate” climates.

In this context, insurance is a key factor for success. It should allow long term continuous individual development of the farms, smoothing the economic impacts of natural - or even market - hazards on crops and livestock.

INTERNATIONAL EXPERIENCE

I regret to say that I am not sufficiently familiar with the most recent developments of the Indian agro insurance scheme to dare being specific in this particular field. Nevertheless, I am going to share briefly with you constants, trends and tricks granted from agricultural insurance experiences abroad, in countries as various as Argentina, Brazil, Equador, Mexico, New-Zealand, Spain, South Africa, South Korea, Tunisia, Turkey, USA, France.

One must first remember that from an international standpoint, agricultural insurance has for a long time been synonymous of crop-hail insurance. The oldest insurance company that I am aware of in that respect is a company called LA CERES that was created in France at the beginning of the 19th century. Technically speaking, hail be can strictly considered as an insurable peril. Hailstorms are sudden, localized, unforeseen. Even if their frequency may vary

according to the latitude, altitude or coastal vicinity, they can nearly strike anywhere. Preventive measures are either costly (nets) or inefficient (silver iodide). The damage on the plants and their consequential loss on yields are fairly assessable.

But along with the development of world trade competition and the emergence of new producing markets, the demand for agricultural insurance has changed. In so called “developed countries” under temperate climates, tighter margins due to heavy investments and chronic overproduction together with an economic liberalization trend that limits state welfares, has created a need for multi-peril coverage and private revenue stabilization tools. In developing countries, under subtropical or monsoon climates, water management is THE critical problem, sometimes along with typhoon/hurricane exposure. Farmers cannot invest in selected seeds or agricultural machinery if their economic survival is not assured during a reasonable time, the period of reimbursement of their credit loan for instance.

The big issue here is that insurability of drought or excess of water is not so obvious as for hail. The damage those

perils cause depends largely on various local factors including landscape, type of soil, agricultural practice and whether public drainage, flood control or irrigation exists. Adverse selection is therefore a typical feature of such insurance. The geographical scale of those perils that can sometimes affect a whole country is also limiting the effectiveness of mutualization (pooling).

Taking this into consideration and in order to compensate effectively for risks incurred by farmers, most of the major exporters of agricultural produce have set up national systems of private insurance but that have strong State financial backing. In general, public funding comes into play at two levels, each presenting significant collateral effects.

- Firstly, part of the insurance premium normally paid by the farmer is covered by the State, thereby limiting adverse selection. This support is from far the easiest to put in place at market level. Basically expressed as a percentage of the insurance premium, it allows a fair split of the State welfare between all insurance companies, whatever the diversity of their products. Nevertheless, this tool may be controversial as it automatically tends to give stronger support in absolute value to those risks which are most expensive in terms of rating i.e. those which are statistically the most exposed. Taking it to the limit, it can even worsen the risk by financially allowing farmers to plant in a difficult area for example.
- Secondly, the state provides excess of loss reinsurance protection to the insurance companies, protecting them against catastrophic losses due to major climatic events where

mutualization is not achievable at country level. This is the primary condition to allow reinsurance companies to step into the crop insurance market (at least in proportional reinsurance) with acceptable Return On Equity ratios. Designing such a State reinsurance system is of great difficulty because it has a direct impact on the way the national insurance market will be structured in the future. Governments that have implemented State-supported Stop-Loss per state for instance, have contributed to the disappearance of the small regional insurance players where there were some. To be fair, such schemes also basically require that all players in the market offer the same terms and ratings in their policies. In many markets the implementation of an insurance pool which is globally protected by the state represents an acceptable technical solution.

In those countries which have built National Agricultural production Insurance Schemes, a technical structure has also been set up, often under the aegis of the Ministries of Agriculture and Finance, that is capable of proposing or assessing the appropriateness of insurance products proposed by the private sector and of granting public aid accordingly. Where possible, the State reinsurance company in the country concerned can naturally develop or represent such a structure. Then, underwriting knowledge of agricultural risks can easily be brought in.

FOCUSING ON DEVELOPPING COUNTRIES

Designing a coverage technically viable that meets the actual needs of

farmers is a difficult exercise that will not be approached here. Proposed answers are several and specific to each country, region, farming practice or type of production.

If we also set aside the purely financial part of the problem, there are two main issues that have to be overcome: achieving mutualization and risk control.

Achieving Mutualization is a primary factor of success in agricultural insurance. The creation from the start of an insurance market, especially in rural areas where the largest "customer" sometimes only cultivates one acre, is most challenging. Insurance network is very often non-existing due to the relative lack of insurable wealth except, of course, the productions themselves.

Insurance knowledge, understanding and confidence is to be brought through various vectors:

- *Municipalities and regional governments*

Governments and their local "arms" are the primary incentive bodies for developing insurance schemes. Their clear interest is to allow growth of the Gross Domestic Product by involving as much as possible financing from the private sector. However, and practically, we firmly believe that governmental interaction should be limited to general organization of the schemes upstream (as exposed before). There must be a clear distinction in the farmers' mind between State welfare brought by subsidies which is purely politically driven, and insurance which is based on a signed contract including provisions fully accepted by both parties. Where politics interfere with contractual obligations, there is a great danger

of disaffection on the part of the assured over the long term. It has been partially the case in Brazil for instance. This also requires that the insurance companies accepting liabilities with a State reinsurance backing, ensure that in case of an insured disaster, corresponding reserve funds are actually available at State level.

- *Banks:*

While moving from subsistence agriculture to market productions, the natural interlocutor of the farmers are the banks. Looking worldwide at the ranking of the banking institutions which are originated from the agricultural sector is amazing! Banks are an obvious support for insurance development. They have access to the full financial history of the farms. They generally offer a large and decentralized network. Being an obligatory step, they can even request that insurance be subscribed before delivering a loan which makes insurance become compulsory, therefore limiting adverse selection.

Partnership with banks is a common feature of the agricultural insurance industry worldwide. But one must keep in mind that the bank's interest is slightly different from that of the insurer. For the banker, insurance is the way to secure credits where mortgage is not possible. A large part (if not the totality) of the risk is then transferred from the banker to the insurer... As an underwriting concern, it is important that selection and risk control including loss adjustment remain under the responsibility and initiative of the insurer. The Turkish insurance market keeps painfully in mind an experience of loan based insurance for imported cattle in the

mid 90ties that was mainly bank driven and led to disastrous results to insurance and reinsurance markets...

- *Cooperatives and mutuality*

The cooperative network is the natural ground of mutual insurance companies. This has proven to be a very efficient system that allows the farmers to keep the control of their assets by managing their own insurance company through an elected board of directors. Premium can be easily deducted from harvest collection. Natural neighborhood watching represents an efficient risk management: a fraud against the insurer would be considered as a trickery against the whole community.

There are a lot of examples in the world of mutual farmers' companies, playing today a major role in the international insurance market. French insurer GROUPAMA, literally "Group of Agricultural Mutual Insurance Companies", whose turnover reaches now US\$ 14 Billion all lines of business, is a federation of small regional mutual companies initiated by farmers, 100 years ago. It has kept its typical mutual pyramidal organization: all around the country, some 10,000 local insurance companies are reinsured by 20 regional companies, who in their turn are reinsured by a central company in Paris. Each entity at each level of the pyramid manages its own risk retention and reserves. Schematically, the board of directors of the central company is formed by the chairmen of the regional companies.

As one can see, contrary to the classical network of agents which is "commission driven", every level

of this organization is theoretically "result oriented" which sounds somewhat more secure in term of underwriting.

The same organization can be found in Mexico where so called mutual "fondos" are reinsured by a central company (AGROASEMEX). The Mexican example is particularly interesting as during the last 20 years, it worked so well in advertising insurance within the farming community that it allowed the development of several other insurance players on this market.

- *Other*

There are additional vectors that can be used for broadcasting insurance. Let's quote briefly rural development and other non governmental organizations: I understand India is using successfully women backed associations. The use of Agrochemical providers is also an interesting concept developed in South American markets: insurance is sold to the farmer together with fertilizers, seeds or chemicals and covers the price value of these products in case of crop failure due to climatic conditions.

Underwriting Control and Risk Management is another big issue. Sound agricultural underwriting should be based on adequate risk selection and professional loss adjustment. It must at least be ascertained that the insured farmer has actually planted in a suitable area and has done everything to prevent or limit the loss. Then, loss adjustment is to be performed in due time, using clear and strict procedures that allow a fair compensation of the damage. This is costly and necessitates that insurance companies invest in

skilled agro staff. Pyramidal structuring has also proven to be efficient here.

We must emphasize that loss adjusting represents the "after sale" service that is a key point in keeping customer confidence year after year. The insurance offering has to be designed by taking great consideration of this element which is often a limiting factor. It is useless to deliver a very sophisticated insurance policy, with complicated trigger options and indemnity formulas in countries where the probable loss will have a "disaster" characteristic with many farms on a vast area encountering a total loss. Products that permit transparent and rapid loss assessment have to be put forward. In this respect, the future developments of the World Bank

supported projects of weather index based protection schemes will be most interesting to follow. Those are not strictly speaking insurance products because the compensation paid is not proportional to the actual loss suffered individually by farmers. We may still have some outstanding technical questions regarding confidence in local precipitation recordings, in farmers' future behavior in term of risk management, in long term correlation between the statistical meteorological model and actual loss experience. But this project seems to propose a real solution for a disaster type protection, adapted to the particular needs of developing countries, that allows independent and rapid compensation.

As an "open conclusion", I would just like to stress that our experience shows on numerous occasions that farmers are individualistic and conservative people whose "trust" is difficult to obtain. Nevertheless, despite their sometimes very basic educational level, small farmers are risk averse and very receptive to any economic concept able to smooth over their exposure.

They are also very fast at taking advantage of the loopholes in protection systems which enable them to get good coverage for very low prices... "Common sense" is not a vain word in agriculture! And this is equally shared from the richest industrial farmer to the subsistence farming one.

S.K. Desai Memorial Essay Writing Competition and D. Subrahmaniam Award Essay Writing Competition 2004-2005 of the Insurance Institute of India

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