

#### Developing Successful and Sustainable Agricultural Insurance Programs

Fundamental Concepts and Initial Steps

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he **purpose** of this document is to provide governments with a brief overview of agricultural insurance and important concepts that should be applied when developing any agricultural insurance program. When programs succeed it is most often the case that certain underlying concepts are correctly applied. Insurance can play an important role in managing many aspects of agricultural risk however it is not the solution to

all risks. Determining the correct role for insurance requires analysis and care.

The **objective** of this document is to delineate those concepts that are essential for success in developing agricultural insurance programs. Following these principles greatly increase the likelihood of success and will help assure that scarce financial and human resources are used wisely to address increasingly more frequent and more catastrophic natural disasters.

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<sup>1</sup> We would like to thank María Jose Pro Gonzalez, ENESA; Diego Arias, World Bank and Jean-Marc Lafrance, FADQDI; as well as Margarita Cruz Fernández, Juan Carlos Cuevas García and Elsa Sánchez Elizo, all from AGROSEGURO for their important contributions.

#### **Our Common Challenge**

Projections indicate that our world will have over nine billion people by 2050, compared to just over six billion today. How will we feed all these people particularly when over nine million people already die annually due to starvation and hundreds of millions more suffer from chronic or periodic food insecurity? Agriculture, particularly small and mid-sized farmers who produce a significant amount of food for the world, continues to be extremely vulnerable to the effects of natural disasters. Climate variability has direct impacts such as droughts, floods, and new and re-emerging diseases that reduce harvests, minimize household assets, threaten their livelihoods and weaken their ability to withstand future losses.

The impact of natural disasters has caused food prices to spike. The impact was first felt in 2008 and the world continues to be vulnerable. When people are hungry civil stability is threatened. The crisis in 2008 produced the overthrow of several governments. Plato once said, "Civilization is but a few meals away from barbarism". More recently, Lord Cameron of England said we are "nine meals away from anarchy". Distracted politically and financially by the global financial crisis we see fewer resources being devoted to actually solve the global food insecurity crisis, particularly in Latin America and the Caribbean (LAC). This dynamic raises the specter of more civil unrest in the future.

Latin America is oftentimes seen as a net good exporter however upon closer examination on a country by country basis and even within countries who are net exporters of food we see much more vulnerability. This is particularly true in Central America. The Caribbean region is clearly at risk to food price volatility because it pays approximately \$4billion a year to import food in 2008 (FAO 2011).

Provided for your consideration are a variety of facts that we suggest be factored into government policies to address each country's food security situation now and in the future.

- 90% of the 1.5 billion people born by 2030 will be in developing countries.
- Food production will need to increase 60-70% to feed the nine billion people in 2050.
- Countries in the Andean, Central American and Caribbean regions are highly dependent upon food imports. Some countries import 90% or more of their food.
- Approximately 15 million smallholder farms exist in Latin America totaling approximately 60 million people. They control between 30%-60% of all agricultural land and forests.
- Most farmers have little to no savings to withstand crop losses. 34% of small-scale producers and family-based farmers in Central America live in poverty and another 32% live in extreme poverty, which means that at least six out of every ten households of smallholders face problems in ensuring their own food security.
- In Brazil, for example, family farms produce 67% of the national bean crop, 84% of yucca, 49% of maize and 52% of the milk.

We are encouraged to see the G20 Declaration entitled, "Food Price Volatility and Agriculture" and the increasing prevalence of agricultural disaster risk management related themes surfacing at such events as the Rio+20 and the 2012 General Assembly of the Organization of American States. Still, we urgently need to move beyond the talking stage and turn to policy development and investment over the long term. It is certainly time for sustained action,

starting with a correct comprehension of risk management and the commitment from Heads of State and the Ministries of Agriculture and Finance for example, to become more

pro-active in preparing for and cost effectively responding to natural disasters and other forms of risk.

Agricultural insurance remains an important risk management tool to help address the impacts of natural disasters upon food security. Above all, it is the farmer who is the primary actor in agricultural production and risk management. However, the farmer cannot address production and risk management alone. It is absolutely essential that countries implement the policies, laws, regulations and investments that would support the farmer and promote the development of such insurance.

Furthermore, there is often times a lack of coordination between the government, private insurance/reinsurance sectors, and farmer organizations that prevents the effective development and execution of agricultural insurance. We also note that while agricultural insurance is an important risk management tool, it is still most effective when applied with other risk management measures undertaken by the government and the agricultural sector to minimize or eliminate risks where possible. It is important to note that the World Bank has stated that "Agricultural insurance is an important component of risk management in agriculture, but does not replace good risk management techniques, sound production methods and investments in up to date technology. When coupled with these factors, agricultural insurance enhances the wellbeing of the rural community and enhances the security of production." (World Bank. 2009. Agricultural Insurance. Primer Series on Insurance 12).

### The Status of Agricultural Insurance in the Americas

Agricultural insurance has existed in the Americas for many decades. For example, three of the most developed agricultural insurance programs in the world are in this hemisphere (Canada, Mexico and the United States), Argentina has the oldest program in the world-over 100 years; and Uruguay boasts the highest percentage of cultivated land protected by insurance in the Americas.

In 2005, the Inter-American Board of Agriculture (IABA) comprised of the Ministers of Agriculture in 34 countries in this hemisphere instructed the Inter-American Institute for Cooperation on Agriculture (IICA) to work closely with governments to promote agricultural insurance in the Western Hemisphere. Since that time, IICA has taken a variety of constructive steps despite severe budgetary constraints. Of course, others have taken important steps as well.

The World Bank and governments such as Canada, Mexico and Spain have provided valuable technical resources to countries interested in developing sound insurance programs. Such participation is essential both now and in the future. Currently, many countries in the Americas are expressing strong interest in developing insurance programs, particularly for the small and midsized farmers.

Today we count at least a dozen countries that are pursuing some type of national or regional agricultural insurance program. However, we note that new program development over the past 10-15 years has produced mixed results. Reasons include:

- The lack of demand from farmers to access insurance,
- 2 Governments have unrealistic expectations regarding the purpose and complexity of insurance,
- Governments may have objectives that are not always compatible with the objectives of a sustainable crop insurance system,
- 4 Insufficient coordination among consulting/donor organizations,
- 5 Lack of private sector engagement,
- 6 Insufficient collaboration with the agricultural producers,
- 7 Inconsistent attention being placed on the development of a holistic approach to risk management and,
- 8 Inadequate coordination and policy development between public sector programs such as agriculture extension and agriculture credit, as well as between Ministries.

# CONCEPT 1 Think Long-Term: Insurance Takes Years to Develop Correctly

Typically, some form of political pressure generates a government's interest in developing an insurance program. The priority is oftentimes the result of a current crisis (e.g. severe drought). In the ideal world, we would not wait for the crisis before responding; rather we would look at trends and take some prudent steps before the problem becomes acute.

Because the crisis is oftentimes so significant, a quick fix (generally within a year) is usually the expectation. Certainly some solution exists that can be "pulled off the shelf" and made available within a few months! Unfortunately this simply is not the case. Creating a sustainable insurance program can take years, with the government taking the initial steps to create sound laws and gather critical information to understand the risks.

Obtaining appropriate results in the development of agricultural insurance requires analysis, foresight, risk taking, planning and time. Rather than responding to a single event countries instead should identify and evaluate trends, and make projections. Far too often we have seen countries rush to a supposed solution and then find later that their expectations or calculations were misplaced or incorrect. Accurate premiums cannot be determined without first knowing the risk. The more uncertainty in defining the risk the higher the insurance premiums-if insurance is even available.

Any insurance program also has many engaged parties; each with a particular role or function that must be clearly specified and monitored. Program design and administration requires coordination among various entities and these entities must develop the expertise and the trust of others to function well. This also takes time. Moving too quickly to perceived solutions greatly increases the danger of failure; incorrectly pricing and charging too much or too little in premiums, poor administration where farmers are not paid, companies exiting the business, poor education resulting in unrealistic expectations by farmers, etc.

### CONCEPT 2 Understand the Risks

The first priority in developing a program is to thoroughly understand the risks. Creating a risk profile of the entire country is an important initial step. This process requires an investment of both time and money. Just how much depends on many factors including the existence of sound historical data. A second step is to create an objective, protected and transparent data base that tracks such areas as weather patterns, damages to crops due to natural disasters, crop production and market pricing information by crop. The risk profile and database form twin pillars vital to any successful insurance program. Both also require ongoing maintenance and updating to assure the relevant information is available in making decisions.

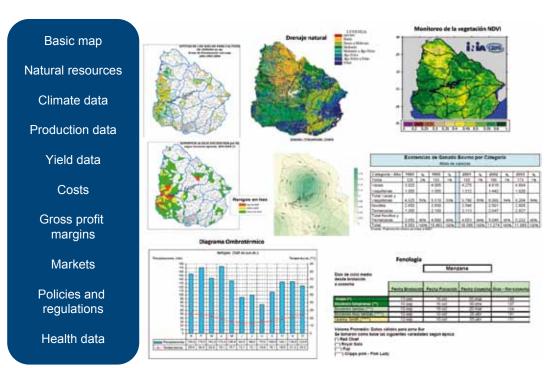
Developing the risk profile can be completed in stages beginning first with the key agricultural products or regions. This information may be sufficient to create a basic form of insurance while a broader and more holistic approach is designed.

Risk profiles will oftentimes contain the type of information displayed in Figures 1 and 2.

"Agricultural insurance is typically one of many tools that farmers can use as part of their comprehensive strategy for managing agricultural production risks."

World Bank, 2010.

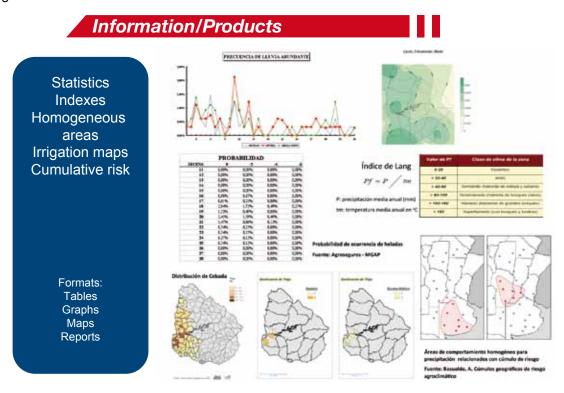
Figure 1



Source: Prepared by the authors with information from various sources in Uruguay.

Data

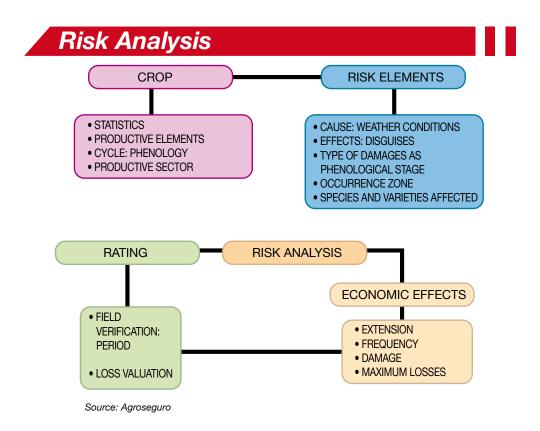
Figure 2



Source: Prepared by the authors with information from various sources in Uruguay.

There are many methodologies for analyzing risk. Some will concentrate on the important elements of frequency and severity while others use a model similar to below.

Figure 3



#### CONCEPT 3

## Insurance Should Complement other Risk Mitigation Actions

Once the risks are understood it is important to determine what can be done to cope with, mitigate or minimize the risk. For example, if flooding is a common occurrence then it would be prudent to evaluate the need for canals, reservoirs or other water management techniques to be implemented. If a crop cannot be successfully grown in certain soils or weather conditions, then cultivate crops that can adapt well.

Transferring all or a portion of the risk (i.e. insurance) is often most effective when other risk mitigation steps are also taken - often times prior to establishing an insurance program. Otherwise there is the possibility that if insurance is available, the coverage may not be sufficient to the exposure and/or the premiums

may be cost prohibitive. In some cases insurance may not be the most effective response to a country's risk profile. Additionally, as stated previously, designing and administering insurance program requires significant resources so significant care is needed before implementing a program. The aim of insurance is providing protection against risks that are not adequately affordable or controllable by the producers.

Some countries rely upon disaster-assistance programs that are mobilized when a disaster strikes. However studies have found that they do not work effectively. In fact, ongoing insurance programs have proven to be less expensive and more effectively administered then periodic disaster-assistance programs.

## CONCEPT 4 Without Demand There Is No Program

Supply (affordable and relevant insurance products) should be designed to meet the demand. However determining what that supply should consist of can be a point of disagreement that requires dialogue between the government, private sector and the producers. Each has its own interests and expectations that must be understood and once agreed upon, carefully monitored and adjusted as needed.

Demand is generated by those who would purchase the insurance protection. In many parts of the Americas there simply is not a common understanding of or practice of purchasing insurance. Perhaps for some it is due to a lack of awareness about what insurance is and what its benefits are. For others it is because they do not trust the insurance company or they simply cannot afford the premiums. Still others may believe that disasters are the will of God and therefore must be endured.

Insurance programs must be demand driven rather than supply driven. Oftentimes countries will create a solution then go in search of a problem. Or put another way; provide a hammer when a wrench is needed. Farmers should be consulted early and often so as to understand their true needs and priorities.

It is essential therefore to identify and address these obstacles. Insurance programs should be designed according to the protections needed by the insured and the price must be affordable in order to be purchased. After all, insurance is really intended to directly benefit the farmer and in turn achieve economic stability.

Educating the purchaser and securing their support are critical elements of any successful insurance program. An informed consumer will reduce the likelihood of incorrect expectations. An informed consumer will naturally produce realistic demands upon the supply side and motivate the private sector and government to offer protection tailored to the demands of the market. Outreach to cooperatives, associations, and other similar organizations, as well as the individual farmers themselves should begin early and occur frequently. In field training and "train the trainer" programs are essential. Additionally,

well designed pilot programs can provide the farmers actual experiences with insurance. Areas to evaluate in a pilot program include terms of engagement/participation, determining insurable interest, measuring annual production yields and paying indemnities, to name a few. News of successful programs and claims payments should be shared. Word spreads especially quickly when actual testimonials are available.

Finally, experience has proven that an affordable credit program is oftentimes the best way to introduce or complement insurance and, in turn, create demand. However it should be noted that making insurance obligatory in order to secure credit is not always a successful policy over the mid term. It is recommended that the insurance coverage be available in amounts that exceed the value of the loan. Also worthwhile to examine is the effect of credit and insurance purchasing policies that favor men over women, as many farms are under the control of women who for various reasons find themselves responsible for the farm's operations and results. What has proven useful is applying the existing distribution channels of credit to promoting insurance.



#### CONCEPT 5

## Multiple Ministries should be Continually Engaged

Managing agricultural risk is both a technical and a financial process. Therefore both the Ministry of Agriculture and the Ministry of Finance (or equivalent) should be working closely together beginning at the initial stages of any program being developed. Other ministries may also play a role in the design of the program. Beyond ministries, many countries have established other agencies (e.g. Superintendent of Insurance) which should also be engaged. Without multi-Ministerial cooperation it is highly unlikely that a sustainable insurance program can exist.

Furthermore, agricultural insurance programs have several additional advantages for the public sector. For example, it contributes to the maintenance and improvement of the agricultural sector and crop practices-which are vitally important to the Ministry of Agriculture. The stabilization of incomes is important to the Ministry of Finance as a result of more consistent tax payments by the producers.

#### CONCEPT 6

### Laws, Regulations and Policies Transcend Politics

This is a particularly challenging concept because government policy is by its very nature political. We are suggesting that sound policies based upon science and proven economic principles will greatly facilitate successful programs. Attracting private sector investment, identifying best practices from other countries, building government risk management capacity, promoting free markets and creating stable government structures are critical.

Insurance is a long-term proposition. It is designed to endure for decades, even centuries. Laws, regulations and policies should follow suit. Sound laws, regulations and policies promote stability, transparency and accountability. They both obligate and protect all engaged parties whether it be the government, private sector or the producer. Policies can be developed while other program design is underway.

Constant change will breed distrust and will doom the program to failure. A commitment of all political forces is vital in order to guarantee the long term stability and success of the system.



## Concept 7 Include Reinsurers Early

Reinsurers constitute an essential and significant financial and technical resource of any insurance program. Reinsurers are experts in developing risk profiles and generally analyzing and understanding risk. Their technical modeling is extremely advanced. They can also play a key role in designing the right kind of data base information to assess risk.

Additionally, the reinsurance community serves as the insurance company for local or national insurance companies. Reinsurers are often times ultimately responsible for paying losses and therefore, they must be comfortable with the risk and the administration of any program before they will be willing to put their financial resources at risk.

Even if a government believes that it can fund all catastrophic losses, reinsurers are absolutely necessary for insurance to function sufficient to meet the potential risk. Reinsurance affords the system long term sustainability by limiting the maximum amount of losses to be assumed by the insurers and alleviating the effects of losses accumulating. Therefore, including them early in any design process is essential. It serves little purpose to create a program that is not acceptable to the reinsurers unless the government decides to act as the sole reinsurer for all risks.

Reinsurers also have expectations of the country. Reinsurers seek countries and regions that;

- Promote stable governments,
- 2 Are committed to public-private partnerships,
- 3 Encourage free markets,
- 4 Have functioning export markets,
- 5 Produce 2-3 major crops covering a significant region with reasonably homogeneous soil and climate conditions,
- 6 Have at least one successful insurer engaged in agriculture,
- 7 Create a supportive institutional framework of insurance and financial regulation with incentives for companies to invest in crop insurance, and
- 8 Have market oriented farmers focusing on commercial agriculture.

Countries with this type of profile can expect reinsurers to build capacity within governments, local insurers and the agribusiness industry as well as contribute resources to develop insurance products. In some cases, this profile is best achieved through a regional insurance program.

"Agricultural Insurance is key in assisting farmers, herders, and governments lessen the negative financial impact of these adverse natural events"

O Mahul, and C Stutley, World Bank, 2010.

## CONCEPT 8 No Single Insurance Product is a Panacea

A country's risk profile is by its nature complex and sometimes even contradictory. For example, in some areas the country will be susceptible to drought or flood or hail or wind while in other areas it enjoys a more tranquil climate. The soil and water conditions can also play a role. Elevation or slope can have a major impact on risk. Different crops will adapt differently to various environmental or land characteristics. Furthermore, the composition of the farming community can play a role in developing the correct insurance program. Farmers may have different needs depending on the size of their farm and how well they are organized.

There are many forms of agricultural insurance (e.g. micro-insurance, cost of production, production loss, price risk, parametric index, named peril, multi-peril) and these can vary by crop or weather event. To make matters more complicated, no product will address all risks within a country's risk profile. Usually a series of insurance products are needed to adequately address the range of agricultural characteristics in each country. These products will also likely need to be adaptable to changing expectations and risks.

## CONCEPT 9 The Devil is in the Details

A crop insurance program should be simple to apply and easy to understand. This is easier said than done. Insurance protection is governed by the actual insurance policy in place and the supporting laws, regulations and policies, which at times can become quite complex. The actual wording of the documents is essential to evaluate to ensure the actual operation of the policy matches the intent of the wording. Therefore, it is imperative to learn from the experience of others when crafting defining documents. This concept applies to virtually any aspect of developing insurance. No detail is too small (e.g. establishing correct planting dates that vary from season to season or clearly defining different deductibles or subsidies based on crop).

# CONCEPT 10 Government and Private Sector Collaboration Strengthens the Program

Woven throughout the discussion thus far is the importance of private sector engagement. Engagement with the private sector is the first step with the long term goal being an enduring and mutually satisfactory partnership. Both sectors share the same strategic objectives, share risks together and produce benefits for all. Both sectors must see effective collaboration as the top priority, if for no other reason than to understand each other's expectations. For the purposes of this discussion the private sector is comprised of the insurance companies, reinsurance companies, for-profit consulting firms and other who provide services for profit. We are specifically excluding the farmers themselves in this category because they are the "market", or put differently, the consumers of the insurance products.

In this form of partnership the public sector is not limited to a supervisory or oversight role. It also serves as a coordinator, a supplier and provider of correct and timely information and plays an essential role in sharing information and promoting agricultural insurance among the farming community.

Establishing these alliances or partnerships where they do not already exist is a process of learning, adjusting and channeling information frequently. It may require creating cooperatives, associations, and other forms of farmer organizations to more effectively promote and service insurance programs.

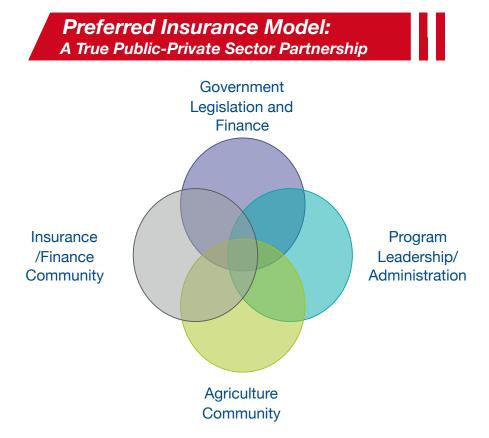
The public and private sectors each bring complimentary strengths and each has an important role to play for any program to be successful. The roles of each engaged organization need to be clear, complementary and supported by the appropriate authority to carry out these roles. For example, the public sector should play an oversight and regulatory role that supports the development and use of agricultural insurance instead of giving extraordinary aid that is often times liked to political interests. The private sector can perform roles such as research and product development, reinsurance and marketing. Also important is to define accountabilities subject to external reviews-trust by verify. Finally, both the public sector, private sector and the producers should share in the financial risk of any loss.

Figures 4 and 5 identify essential elements of any Private-Public Partnership (PPP). Experience has shown that PPP's offer the most advantages and help avoid repeating failures of the past. Figure 6 shows a sample model for developing an insurance program with roles identified for both the public and private sectors.

"Agricultural insurance helps agricultural producers mitigate the effects of natural hazard shocks and enhance the efficiency of resource allocation."

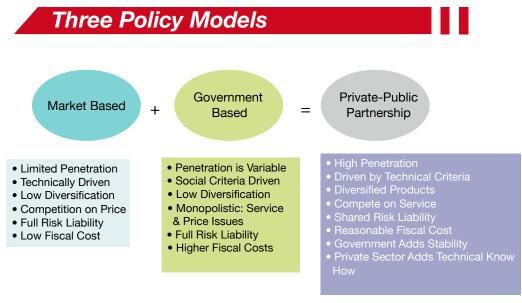
IDB, 2006.

Figure 4

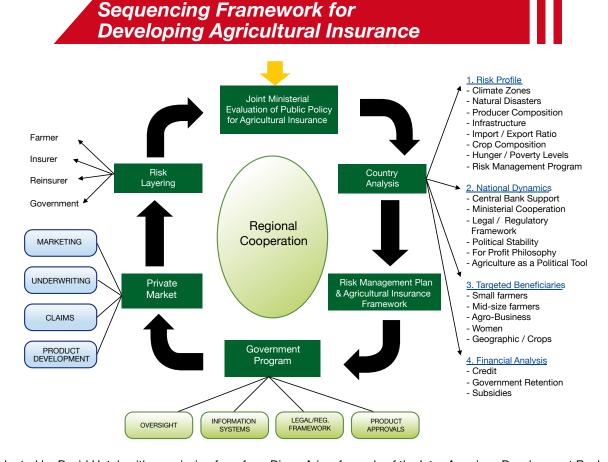


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Figure 5



Adapted from R. Iturrioz, World Bank



Adapted by David Hatch with permission from Diego Arias, formerly of the Inter-American Development Bank.

## Concept 11 Develop Government Technical Expertise

The design and application of sound policies is fundamental to any successful program. Recognizing the complexity of the subject, it is recommended that each agency or department engaged in the program possess the technical expertise that would include actuaries, agronomists, veterinarians, attorneys and others.

It is very common for governments to find themselves with little to no personnel with experience in the above technical specialties or in risk management and insurance. Therefore capacity building is oftentimes an essential early step. For example, the agency or department charged with monitoring the operational and financial capacity of an insurance company before granting it permission to engage in agricultural insurance must understand how to evaluate that capacity. Few things are more counterproductive to a program then a misinformed official making important decisions.

In reality the government should know as much as the private sector in key disciplines. Actuaries and financial analysts are two fundamental positions for any government to have. It is essential for each government to develop an ongoing employee development process to ensure adequate knowledge and experience is located within the relevant government agencies. The government must be able to understand the program thoroughly and effectively govern itself and monitor the private sector. In so doing the government will earn the respect of all the participants and avoid costly errors.

# CONCEPT 12 Be Self Critical: Constantly Evaluate and Implement Best Practices

A common characteristic of successful long term insurance programs anywhere in the world is their commitment to learn constantly and then apply that learning as frequently as possible. Asking the difficult questions will create a rigor of analysis that will build confidence in the program and help avoid costly mistakes. A formal process of review and periodic audits by external experts are important elements of successful programs.

Concept 13
The Tortoise Wins
the Race

A slow and steady pace will create a successful program. There are plenty of examples in which countries have developed or expanded a program too rapidly causing severe problems. Understanding a risk before fixing a premium and providing coverage is just one example. Each crop brings its own risk and that risk must be understood and measured. Risks

associated with rice production are different from soybean risks. Livestock risk is certainly very different from crop production. Governments can be prone to put significant pressure on insurers to expand a program without adequate testing, education and pilot programs. This not only invites counterproductive tension between partners and can also create failure on a large scale; failure that could take decades to recover from, if ever.

There is no question that a sense of urgency is required. The population is growing, food insecurity is increasing and natural disasters are more intense and more frequent. Farmers are experiencing losses that threaten their farms and their livelihoods. Yet, urgency is best translated into setting priorities, establishing and meeting reasonable timeframes, and dedicating adequate resources over time to those priorities.

### **Critical First Steps**

Learn the World of Agricultural Insurance

Agricultural insurance is one of the most complex types of insurance in existence. It combines finance, science, legislation, administration, information technology and a host of other themes that create a uniquely complex topic. The challenge becomes even more difficult in light of climate change. Its complexity demands great respect and rigorous analysis. As a first step, it is recommended that the reader become very familiar with the content of the links provided at the end of this document.

Create a Development Team to Include The Government, International Organization(S) and Producers

A team approach is highly recommended, with representation from various parties who would be involved in any long-term program. The team is best led by a single government entity (e.g. Superintendent of Insurance) should also include representatives from the Ministries of Agriculture and Finance. International organizations with expertise in the field of agriculture and insurance can also add great value.

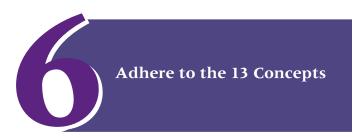
Involve the Right Team of External Experts

Complimentary to the internal team's strengths, expertise is needed in a wide range of areas such as risk assessment, insurance, reinsurance, information technology, law, finance, agriculture/agronomy, etc. It is therefore essential to have the available expertise necessary to meet the tailored needs of the country. A suggested first step is to meet first with an international organization such as the Inter-American Institute for Cooperation on Agriculture (IICA) or a member of the donor community such as the World Bank who is familiar with both agriculture and agricultural insurance and the community of experts-each with specific technical capacity according to the needs of the country. IICA's unique mission in the hemisphere permits it to serve as an objective facilitator between the public and private sector. Representatives of the public and private sectors not only include local insurance companies but also representatives from the international insurance and reinsurance community in this hemisphere or Europe such as Spain. Governments with well developed programs are also often available to provide expertise based upon their many years of experience.

This team of experts, once constituted, can provide invaluable counsel and expertise in highly technical specialties to the development team led by the government as described briefly in 2) above. They can help the country develop an action plan and can also help the government develop its own capacity. Finally, they can put the government in contact with the correct counterparts in other countries to identify best practices. Countries can learn from the experiences (both successes and failures) in other countries by collaborating with external consultants, experts from the insurance and reinsurance companies and public sector institutions located in other countries.



Typically the first step to understanding risk is the completion of the country risk profile. In this way, any program will be tailored to the unique needs and priorities that are identified. No sound program can exist without it. From this profile a country can identify priorities and constraints, establish program characteristics and develop tailored products.



Developing an insurance program will be complex and challenging. It is vital to avoid taking short cuts, particularly when external political pressures exist. A periodic review of the 13 Concepts can help maintain the necessary direction and adherence to the correct process.

## Create the Information Database

As mentioned previously the database of weather, production, damage and market information is vital to measuring risk, identifying trends, making projections, identifying program priorities (crops and types of risks covered) and determining premiums. The risk profile, combined with database, will form the foundation of any sustainable program and will permit the government to make important adjustments based on experience and projections.

At times the needed information is not available, so it is likewise important to establish mechanisms to gather that information in the future.

It is vital that the information be protected from manipulation, be transparent and available to all concerned. Not only will this practice assure decisions are made based on common information but it will also reduce program costs when others attempt to duplicate the information for their individual purposes.



#### References:

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http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/Agricultural\_insurance\_in\_LAC\_web\_FINAL.pdf

World Bank (2010), Government Support for Agricultural Insurance: Challenges and Options - Authors: Olivier Mahul, Charles J. Stutley,

 $http:/\hat{b}ooks.google.com/books/worldbank?Id=fulaxymxgl\&c\&printsec=frontcover\&dq=government+support+to+agricultural+insurance\&cd=1\\ \#v=onepage\&q\&f=false$ 

#### Other resources:

Agricultural Insurance International Observatory at http://www.oisaweb.es/web/oisa/inicial

Agroasemex at http://www.agroasemex.gob.mx/

ENESA at http://enesa.mapa.es/

Financière agricole du Québec - Développement international (FADQDI) at http://www.fadqdi.qc.ca/index.php?id=86&L=1

National Ag Risk Education Library at http://agrisk.umn.edu

Self Learning Courses from (FARMD) at www.agrisktraining.org

The Forum for Agricultural Risk Management in Development (FARMD) at http://www.agriskmanagementforum.org/farmd

- FARMD Brochure
- FARMD Orientation & Navigational Tour PowerPoint Presentation
- FARMD Flyer

World Bank Insurance for the Poor Program at www.insuranceforthepoor.org

• Making the Case for Insurance that Benefits the Poor

United States Department of Agriculture - Risk Management Agency (USDA/RMA) at http://www.rma.usda.gov

#### Other Publications:

- Agricultural insurance in the Americas (IICA REPORT 2012)
- Financial Protection of the State against Natural Disasters: A Primer (PDF Document)
- Weather Index-based Insurance in Ag Development A Technical Guide
- Partnering for food security in emerging markets, Swiss Re



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