AGRICULTURAL INSURANCE AND RISK MANAGEMENT

International Experiences and Trends

PROCEEDINGS

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PRESENTATION

By means of Resolution Nº 411 of the XIII Inter American Board of Agriculture (IABA), the General Director of the Inter American Institute for Cooperation on Agriculture (IICA) was asked *"to promote and facilitate horizontal cooperation between the Member States, as well as the systematization and dissemination of successful experiences related to agricultural insurance and guarantee funds."*

In order to respond to this request, IICA identified the most noteworthy experiences that have been made available related to these matters in the countries of the region. The various ways in which the State and the agricultural insurance companies participate, as well as the scope and advancement of this insurance among farmers, were taken into account. Along with this, IICA requested that the Member States contribute to an exchange of information by experts on these issues.

Furthermore, given the importance of agricultural insurance in terms of improving the competitiveness of agribusiness, the International Seminar **"**Agricultural Insurance and Risk Management: International Experiences and Trends**"** was held in San José, Costa Rica, on February 20th and 21st of 2007.

This seminar was carried out within the framework of the Central American Agricultural Council (CAC), and it was coordinated and organized by the Ministry of Production (MIPRO) and IICA-Costa Rica. In addition, the event was sponsored by the Food and Agriculture Organization of the United Nations (FAO), the Instituto Nacional de Seguros de Costa Rica (INS) [National Insurance Institute], the Regional Unit for Technical Assistance (RUTA), and the Embassy of the Republic of China (Taiwan).

As a result of the seminar, this account of the proceedings has been drawn up prepared to systematize the presentations given during the seminar, and so that it may become an instrument for knowledge management. Said presentations explained the state of the art of agricultural insurance and examined the most successful experiences gained in the countries of this hemisphere.

Therefore, we are pleased to present the following proceedings of the International Seminar "Agricultural Insurance and Risk Management: International Experiences and Trends," within the framework of the Fourteenth Regular Meeting of the IABA, which was held in the city of Antigua, Guatemala in July 2007. We sincerely hope it will be useful for its readers, and that it will help IICA to comply with its goal of promoting the prosperity of the rural communities of the Americas.

Byron Miranda Abaunza
IICA Representative

EXECUTIVE SUMMARY

Central America is undergoing major transformations as a result of having entered the world economy, and the region's growing need to become more competitive. Within this context, the Central American agricultural sector has also become increasingly vulnerable to a large number of unexpected and uncontrollable risks, which have affected its growth and sustainability and are evidence of the need for efforts to improve the services offered for this sector. Therefore, innovative instruments are required in order to increase competitiveness. Such tools will involve management on the part of the public sector, and will provide opportunities for private sector management. Given these regional circumstances, the development of agricultural insurance constitutes a positive approach to providing assistance.

The seminar "Agricultural Insurance and Risk Management: International Experiences and Trends" was held on February 20th and 21st of 2007 in Costa Rica. This seminar was part of the collaborative initiatives aimed at strengthening and developing agricultural insurance in Central America, through the horizontal cooperation of the Hemisphere's Member States and International Organisms. Moreover, the seminar also had the goal of disseminating successful experiences in the various links of the agricultural insurance chain and related businesses that would make it possible to identify options for the deve-lopment of innovative mechanisms for managing agricultural risk in the region.

Central America offers a promising panorama for the development of the agricultural insurance market as one of the most effective instruments to reduce the vulnerability of agricultural enterprises and contribute to maintaining their income when hit by uncontrollable phenomena. It has been noted that the best options are those insurance systems that are designed with the participation of all stakeholders. These should include the political arena, state institutions, insurance companies, entrepreneurs, and the information generators, together with the agricultural producers.

Spain, Mexico, and Chile have offered good examples of successful mixed and participatory models. In the case of the Spanish system, its strongest point is the mutual trust between insurers, the insured, and public administration entities. This trust is based on transparency, stability, and institutional cooperation. The public-private complementarity of Mexico's system has allowed subsidies for farmers to be regionalized. In addition, this model has made it possible to develop new products and services, to reduce state operational structures, as well as to improve the existing technology. There has been greater social impact, and private companies have been able to contribute to promoting investment and to fully utilizing new competitive advantages. Finally, in Chile, the state's action with regards to insurance has been indispensable as it increased the levels of trust among stakeholders there, and contributed to decreasing the transaction costs. Thus, the sector has become more competitive in terms of entering the international market and working better within it. In contrast with these experiences, Costa Rica has a state-run monopoly that controls the insurance system.

It is very relevant to stress that Central American growers emphasize that the current agricultural insurance market does not offer an attractive portfolio in the area of agricultural insurance. They believe that their needs and requirements are not being met, that their relationship with these companies is not close, and that there is a lack of communication between them and the insurers. They also think that the premiums are too high and that the amount insured is too low when compared to their production costs and projected yields. They consider that the deductibles are tricks or mechanisms to pay a lower indemnity or not to pay any compensation at all, which has caused a lack of trust and credibility. Another limitation mentioned is that there is no link between credit and the agricultural insurance, so the region's growers need a mechanism to guarantee their loans and mitigate the risks, thus preventing the decapitalization of producers.

Because of all this, there are several measures in progress in the region. One of them is the project entitled "Support for the development of agricultural insurance in Central America" presented by the Inter American Federation of Insurance Companies (FIDES). This project aims at bolstering the current traditional insurance, and it is intended to create innovative products, such as indexed insurance for small and medium producers to be able to have access to an instrument that transfers risk at accessible prices. Another very interesting initiative is that being worked on by the Regional Committee of Water Resources (CRRH) which is creating a regional database to monitor and observe the climate. The CRRH database will be a public good, accessible to all, reliable, comprehensive and controlled; it will reduce asymmetries and increase the range of information available for environmental management. Similarly, the Inter American Institute for Cooperation on Agriculture (IICA) has proposed the creation of an Inter American Observatory of Agricultural Insurance. Such an observatory would make it possible to have access to the best real time technology available, with useful information that would permit premium costs to be reduced, and that could be trusted by all stakeholders.

Just as relevant is the reconsideration of agricultural public policies in order to create favorable conditions for developing the market. This means that a revision of the legal framework is required, as well as rethinking the role of the State, and consequently, adjusting the institutional framework that governs this activity. It is necessary to look for mechanisms that make it possible to prevent or reduce the effects of economic risk factors for farmers.

This is a topic of growing concern and attention for the leaders of the agricultural policies in the Southern Cone of the American continent, and the issue was included as a priority issue in the regional agenda of the Southern Agricultural Council (CAS). Moreover, the Inter American Development Bank (IDB) has stated that the region's governments should create policies for public goods and services. Moreover, the IDB proposes that such policies be oriented toward incentives and direct interventions in the market for the public sector. These measures would allow the agricultural insurance market to be developed.

Finally, it is evident that there is a need to undertake collective efforts in Central America in order to develop more comprehensive production programs at the regional level. This has to be carried out so as to be able to facilitate the insurance schemes and to develop the entire production chain.

AGENDA

Tuesday, February 20th, 2007	
Opening Address	Welcoming address of IICA General Director and the Ministry of Production of Costa Rica Signing of the Agreement: "General Agreement of Cooperation between the Inter American Federation of Insurance Companies (FIDES) and the Inter American Institute for Cooperation on Agriculture (IICA)"
Presentations	1- The Agricultural Insurance Market: Stakeholders and Importance for Agribusinesses
	2-International Experiences in the Development of Agricultural Insurance: Specific Cases — Spain, Mexico, Chile, and Costa Rica
	3-The New Paradigms: Innovative Instruments in Agricultural Insurance – Successful Experiences from Around the World
	4-Agricultural Insurance in the Agricultural Council of the South (CAS) Countries: Evolution and Compared Experiences
	5-Creation and Development of Private Agricultural Insurance in Central America
Wednesday, February 21st, 2007	
Presentations	1-Strengthening of Agricultural Insurance within the Public Policy Framework: Ongoing Actions in Central America "Support for the Development of the Agricultural Insurance Market in Central America"
	2-Public Policies for the Development of Agricultural Insurance Market and its New Instruments
	3-Panel: Agricultural Insurance from the Users' Perspective: Livestock, Horticultural, and Banking Sectors
	4-Climatic Information for the Development of the Agricultural Insurance Market: A Proposal for Central America
	5-IICA's Role in Agricultural Insurance and the Inter American Observatory in Agricultural Insurance
Closing Session	Mr. Mariano Olazábal, Director of Regional Operations and Integration, IICA Mr. Carlos Villalobos Arias, Vice Minister of Agriculture and Livestock of Costa Rica (MAG) Mr. Guillermo Constenla, Executive President, Instituto Nacional de Seguros (INS)

Ms. Daniella Gamboa
Coordinator of International Seminar on Agricultural Insurance

OPENING ADDRESS

Welcoming address of Mr. Chelston W. D. Brathwaite, General Director, IICA

The International Seminar "Agricultural Insurance and Risk Management: International Experiences and Trends" is an activity of great relevance for the Central American region, one that transcends not just its borders, but those of the entire hemisphere.

Taking into consideration that which was stated at its thirteenth regular meeting in 2005, the Inter American Board of Agriculture (IABA), the institute's directive board, passed a resolution (411) to request that IICA's general director undertake a number of measures. First among these was to promote and facilitate horizontal cooperation among the member states, as well as the systematization and dissemination of successful experiences in the area of agricultural insurance and guarantee funds. Member states were to be encouraged to contribute by exchanging information and the work of experts, as well as to establish alliances with financial institutions, both public and private, and with financial organizations in order to coordinate and complement efforts for the development and strengthening of the agricultural insurance markets.

Mr. Chelston W. D. Brathwaite, General Director, IICA

The Inter American Institute for Cooperation on Agriculture believes in the importance of agricultural insurance as an instrument to bring about competitiveness and stability in terms of producers' income, to prevent decapitalization, and to eliminate information asymmetries. As the need to promote public and private alliances is considered crucial, IICA has started to mobilize its capabilities so as to be able to respond to this resolution and to proactively identify new fields of action.

An agricultural insurance market that offers solutions for better risk management is incipient and, in some cases, both insufficient and deglobalized in the Central American countries.

Therefore, among other initiatives, IICA has organized this seminar in order to engage participants in a dialogue on the issue of insurance. This discussion will acknowledge the wide range of risks and opportunities related to the production for the global market, along with the current state of natural resources and regulations found in Central American agricultural activities.

The vision of agriculture that is extended, unlike traditional agriculture, entails the relationships of primary agriculture with those industries that provide production-related goods, the transformation of agricultural products, and the service sector. That is, this vision not only deals with knowledge of the agricultural GDP, but also the links, both into the past and the future, that primary activities have with agribusiness, services, trade, and, in general, with all the sectors of the economy. Nevertheless, other contributions that seem ignored and blurred have not been taken into account, as they are either not considered economical or hard to classify. These contributions include the stabilization of normal livelihoods, basic safety standards, preserving culture, the governance of rural territories, and the preservation of biodiversity.

In the case of Central America, the studies that have been carried out show an important participation of agriculture in the generation of the gross domestic product, which is contrary to information frequently reported, that the importance of agriculture is not only small, but even decreasing. However, the contribution of agriculture to the development of the region's countries may become much wider if more investments are made in the sector, and if it can be modernized. In fact, productivity in four of the six countries is lower than the overall average for Latin America.

The Central American agricultural sector is highly relevant; it participates in international trade, and, therefore, in the generation of foreign currency. In the period 2002-2003, the exported value of agricultural products for the five countries that take part in the Central American Economic Integration represented 43% of the total. In addition, the importance of agricultural trade among the countries stands out as it takes up a fifth of the exported value, and a little over a third of the total amount imported.

The first step has been taken demands that an international effort be made to systematize experiences, create indicators, record information, and contribute to the decision-making process of the stakeholders that depend on and promote these rural businesses. Thus, the creation of an observatory has been envisioned as a permanent space for the analysis and identification of experiences and patterns, as well as an opportunity to gather relevant information about a specific, well-defined topic, such as is the case of agricultural insurance. The Inter American Observatory of Agricultural Insurance represents today a vision of IICA's efforts, with the support of the government of Spain, and is the main outcome in response to the IABA resolution set forth in Guayaquil, Ecuador, to contribute to the exchange of information and experts on this matter.

In addition to these efforts related to the observatory, IICA appointed an internal task force that has worked over the last two years to define orientations and guide activities on this matter. There is already a plan to negotiate with the agricultural insurance technical cooperation teams. This has served as a guiding framework which has made it possible to attend to and support such activities as "Searching to Promote Agricultural Insurance," the seminar held in Bolivia, and the publication of a number of documents. These publications include "A Framework for Agricultural Insurance in Trinidad and Tobago;" and the "Proposal to Elaborate a Model Agricultural Insurance Program for the Caribbean." Moreover, a book was published jointly with the Agricultural Policy Coordination Network (REDPA), titled "El Mercado de seguros en el sector agropecuario del MERCOSUR ampliado" [The Insurance Market in the Agricultural Sector of Extended MERCOSUR]. Furthermore, together with the Entidad Estatal de Seguros Agrarios de España (ENESA), a proposal for the observatory mentioned earlier has been prepared; this proposal has already been presented to the Spanish Fund of the Inter American Development Bank (IDB) for consideration.

IICA has supported the Inter American Federation of Insurance Companies (FIDES) in the implementation of the regional project for Central America, thus assessing with this project the potential signing of mutual collaboration agreements.

More recently, this seminar, which has been promoted by the Ministry of Production of Costa Rica, was prepared and organized. This effort was jointly undertaken with the Instituto Nacional de Seguros de Costa Rica (INS, National Insurance Institute of Costa Rica), the Regional Unit

for Technical Assistance (RUTA), the Food and Agriculture Organization of the United Nations (FAO), as well as the Embassy of China (Taiwan).

All these activities are examples of the importance of working together, and the role played by the current ministers of agriculture of the continent, and by their alliance with all of the organizations of the agricultural sector. This collaboration is being carried out in order that rural companies and businesses be able to develop and increase their normal production and improve the livelihood in our member states.

Mr. Alfredo Volio
Ministry of Production
of Costa Rica

Opening Speech, Mr. Alfredo Volio, Ministry of Production of Costa Rica

It was Costa Rica that proposed, within the framework of the Inter-American Board of Agriculture (IABA), a resolution for horizontal cooperation intended to address the issue of agricultural insurance and to guarantee funds, and this country also assumed responsibility for putting the initiative into motion. A paradox, however, is entailed as Costa Rica is the only country in the Americas where insurance is still a state monopoly.

This event is an opportunity to listen to the experiences of other countries, companies, and organizations in their application of agricultural insurance. In Costa Rica, the doors are open to important reforms, possibly the most important since the creation of the Instituto Nacional de Seguros (National Insurance Institute of Costa Rica) in 1924 and Integrated Crop Insurance in 1969. In addition, there are other projects, such as the creation of a banking system for development, which is being promoted at this very moment by the current administration at the Legislative Assembly of Costa Rica. Obviously, the issue of risk management is a very important topic related to this bill.

Having a space such as that generated by this international seminar allows participants to identify within the experiences being analyzed ways to contribute to the design of effective measures and policies for the implementation of risk mitigation strategies. This contribution is one that is to be made from the Central American and national perspectives, and to achieve these ends, agricultural insurance is an instrument of undeniable value.

It is necessary to be creative, since the challenge of more competitiveness in the agricultural sector implies that simultaneous actions be carried out on many fronts within the open trade context in a world that is now mostly globalized. This is especially important for the insurance market, in which scale plays a predominate role.

Risk management is of particular importance for the Central American region. Recent history has proven this because of the impact of natural disasters, which we would hope to not have to go through again, that have had adverse effects on agriculture and, in particular, on the well-being of the people in our countries and in the region as whole. Within this context, agricultural insurance should evolve in order to be able to provide more extensive coverage, to become available at reasonable cost, and to offer non-traditional modes that allow us to offer more access to micro, small, and medium producers who today cannot afford to pay for a premium. It is necessary to work on developing a culture of insurance against risk for our farmers, but to do so there have to be viable and innovative options for them.

Signing of the Agreement entitled "General Agreement of Cooperation between the Inter American Federation of Insurance Companies (FIDES) and the Inter American Institute for Cooperation on Agriculture (IICA)." The agreement signed establishes:

The purpose of this agreement is to carry out joint actions to promote technical collaboration among countries and regions with respect to agricultural insurance and the mechanisms for the mitigation of agricultural risks. This is to be done by providing a legal framework and foundation for future agreements and specific charters, whether these arise from common concerns or from proposals for collaboration with other countries that are members of IICA.

FIDES is a non-profit organization that currently groups the associations of private insurers of the Americas and the Iberian Peninsula. One of the objectives of FIDES is to tighten the bonds among the members of the Federation by fostering the exchange of ideas and experiences, the establishment of the benefits of its members, as well as those services having general usefulness that are considered necessary. FIDES is carrying out the project called Support for the Development of the Agricultural Insurance Market in Central America, whose headquarters are in Honduras. This project is in response to the mandate of the Twenty-second Summit of Central American Presidents that was held in 2002, and which requested that the public and private sectors create and carry out a regional project on this issue.

SUMMARIES OF THE SEMINAR PRESENTATIONS

Agricultural Insurence Stakeholders and importance

Mr. Manuel Jiménez
Specialist in Trade Policies
and Agribusiness
CORECA - CAC

CAC
Consejo Agropecuario Centroamericano

The agricultural sector faces a wide range of risks: labor, legal, market, financial, and production. Of all these risks, those related to production are especially relevant, particularly recurring natural threats; equally important is the knowledge developed about these threats and their consequences, which are usually predictable, along with the needed experience to mitigate their impacts.

The manifestations of natural risks (hailstorms, frost, snowstorms, drought, flooding, excess humidity, cyclones, hurricanes, high winds, tornadoes, volcanic eruptions, earthquakes, etc.) are responsible for the loss of lives, repeated decapitalization of the agricultural sector, as well as the appearance or reappearance of plagues and diseases. These disasters in turn cause major economic losses, unemployment, and the destruction of income sources. As a result, farmers are unable to comply with their payment commitments, thus risking their credit worthiness and future access to financial resources. In general, natural disasters deteriorate living conditions in rural areas. These conditions underscore the uncertainty of agricultural activities, make long-term planning difficult, and further affect farmers' ability to obtain resources.

Water, due to excessive, deficient, or badly distributed precipitation, is the main cause of disasters or focalized losses which are nevertheless not severe enough to be called that. About 60% of the economic damages that occur as a result of drought happen in the agricultural sector. To a lesser extent, but still with high figures in absolute terms, extreme events such as hurricanes, have caused substantial economic damages. For instance, the global losses attributed to Hurricane Mitch are estimated at US$ 6.018 billion; 49% of these losses were recorded in the agricultural sector.

Agricultural Insurance: Concept and Importance

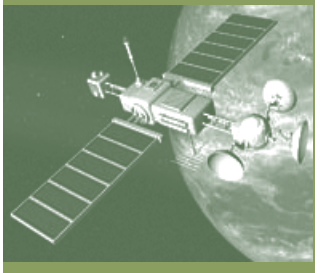
In general terms, agricultural insurance is a contract by which someone commits by means of the payment of a premium to indemnify for damages occurred. A crop insurance policy in Costa Rica provides a more specific definition: "It is the type of insurance that has the purpose of indemnify in the case of total or partial loss by causes not attributable to man of the harvest (crops), that is, an event which has taken place while the plants are still rooted in the ground and the produce has not been detached. Such causes include drought, excessive humidity, floods, diseases or pests, hurricane-force winds, fires, frost, volcanic eruptions, and other natural disasters."

Why Is Insurance Important?

Among other things, agricultural insurance provides certainty to producers and to their financial sources. It prevents decapitalization and bolsters loan guarantees, it provides more stability

in terms of earnings and income, and also encourages investment in agriculture. Moreover, agricultural insurance leads to better land use and improved production practices, and favors competitiveness among agribusinesses.

But agricultural insurance is also important for another reason: the significance of insurance at a political level, which has already been mentioned this morning. For example, the Presidential Mandate CA, XXII Ordinary Summit (2002) which agrees to promote an initiative to encourage the development of the agricultural insurance market, Support for the Development of the Agricultural Insurance Market in Central America, FIDES/FOMIN/BM/BCIE/CAC (currently in progress and approved within the framework of PPP/IMDS, dealing with index-based insurance instruments which almost eliminate moral risk and adverse selection, and foster access for small and medium-sized producers). The Ministers of Agriculture of Central America promoted the hemispheric initiative, Resolution 411 of XXIII JIA (Inter American Board of Agriculture—IABA) held in Guayaquil, Ecuador, on September 1st, 2005, about the "Horizontal cooperation in agricultural insurance and guarantee funds" along with initiatives related to information such as the projects to design a meteorological and hydrological database CRRH/BID, subtype BPR (SCAC and FIDES project at the board) as well as a complementary component of the Regional Program for the Reduction of Vulnerability and Environmental Degradation (PREVDA).



Relevant Stakeholders in the Agricultural Insurance Area in Central America

- Companies that specialize in agricultural insurance: there are fully private insurers, such as in the cases of Guatemala, El Salvador, and Honduras; mixed insurers, like in Nicaragua and Panamá; and a single state-run monopoly, unique in the Americas: Costa Rica's Instituto Nacional de Seguros. Also in the public sector are the Instituto de Seguros Agropecuarios de Panamá, and the Instituto Nicaragüense de Seguros y Reaseguros en Nicaragua. Among private companies, there is one in Nicaragua, another in El Salvador, four in Guatemala, and five in Honduras.

- Producers and grower organizations that demand insurance.

- Merchandisers: insurers, banks, brokers, and producer organizations.

- The State and its possible roles: operator, regulator, and public policy promoter .

- Reinsurers that absorb part of the risk that exceeds the financial capacity of insurers, that protect their financial health, and that guarantee the producers' indemnities.

- Information and knowledge generators, such as the academic sector that does research; if information were a public asset, the asymmetries in the data needed to generate new market possibilities would be reduced

- Ministries and national institutions, and councils at the political level. For instance, in this instance, Costa Rica's Ministry of Production, its Instituto Nacional de Seguros [National Insurance Institute], and the Central American Agricultural Council are participating. The Central American insurance project has been included within the Puebla Panama Plan. There is a resolution dealing with insurance throughout the continent, which was issued by

the Junta Interamericana de Agricultura; the Board is comprised by thirty-four ministries of state in the Americas that have adopted the resolution.

- Other stakeholders, including chambers of insurers, provide funding: national, regional, and international organisms, such as the Central American Agricultural Council, Inter American Federation of Insurance Companies (FIDES), the Central American Bank for Economic Integration (CABEI), the Ministry of Production of Costa Rica (MIPRO), the Instituto Nacional de Seguros of Costa Rica (INS), the Inter American Institute for Cooperation on Agriculture (IICA), the World Bank (WB), and the Multilateral Fund for Investments of the Inter American Development Bank (FOMIN/IDB).

CONCLUSIONS AND CHALLENGES

- **Growth Potential:** the agricultural insurance market is either incipient or insufficiently developed in the Central American countries (the degree of coverage is low even in those countries with the longest history).

- **Favorable environment:** new environmental conditions favor the appearance of innovative initiatives with the participation of the private sector.

- **Political will:** expressions of interest from the highest political levels confirm the regional interest in this activity, which is empowered by the willingness to coordinate institutional actions within the framework of the Central American Integration System (CAC, CABEI, Regional Committee on Water Resources—CRRH, etc.).

- **Stakeholders:** a large number of stakeholders from the public and private sectors, national and international organisms interested in agricultural insurance.

- Central America offers a promising panorama for the development of the insurance market, which will require continued support.

Spain's Experience in the development of agricultural insurance

Mr. Fernando Burgaz
Director Entidad Estatal
de Seguros Agrarios
(ENESA) Spain

ENESA

In 1978, a radical change occurred in the agricultural risk management model used in Spain; this shift was due to the enactment of Law 87/1978 on agricultural insurance by Parliament. This law was passed because of the consensus reached among the government officials, agricultural unions, and insurers in terms of the need to establish the insurance system as the most suitable instrument for dealing with catastrophic damages in the agricultural sector.

Up until then, agricultural insurance was exclusively managed without public participation by private insurance companies which only offered coverage against hailstorms and fire damage for some crops (basically grains), as they believed that it was not possible to insure other risks. Thus, when damage occurred for non-insurable risks, the government was forced to implement extraordinary measures to provide support for the affected farmers.

The new agricultural insurance system passed into law defines as insurable all natural risks beyond the control of the farmer, provided that producers previously carry out the corresponding technical studies to define the conditions for the insurance as well as the cost of the rate. The Ministry of Agriculture is in charge of these studies, which are carried out through the Entidad Estatal de Seguros Agrarios (ENESA) [State Agency of Agricultural Insurance].

As a consequence, each year the government has been complying with the agreement of not granting extraordinary aid to affected farmers who incurred losses due to insurable risks.

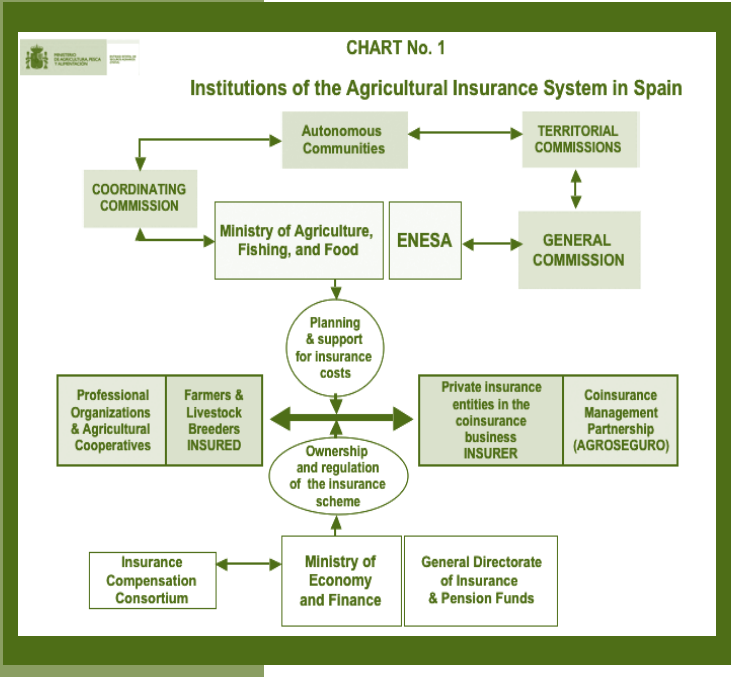
By analyzing the results of multiple experiences available related to the insurance models of various countries with regards to their organization, several important lessons may be learned that should be kept in mind when promoting a new design.

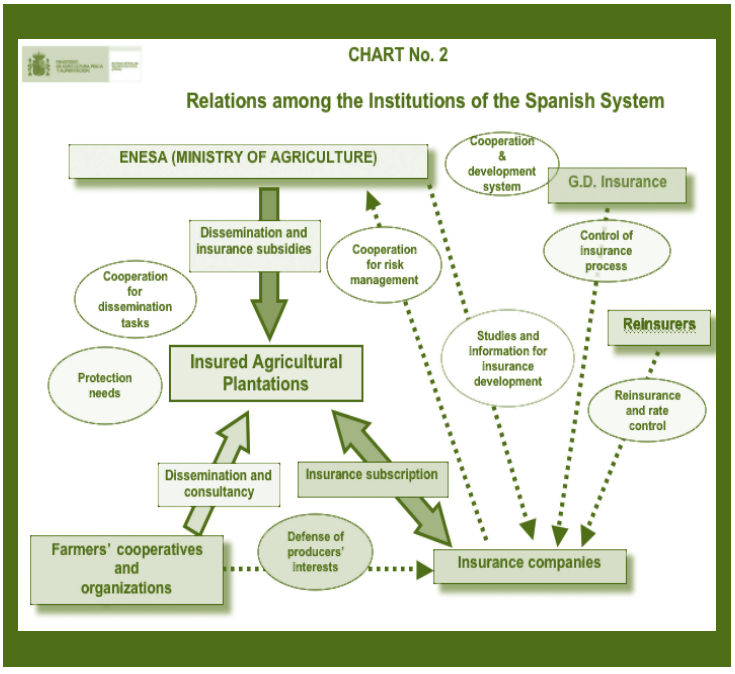
In this sense, it may be stated that in their own legitimate interests, purely private insurance initiatives tend to back just very low risk customers, or to guarantee only limited and very specific risks whose impact they have ample information about and experience with. Thus, when only private insurance companies are available, it can not be expected that they will offer a general coverage of agriculture.

In contrast, public insurance initiatives, in their efforts to offer general coverage and be protective, cannot sustain for a long time the required service effectively and remain economically solvent.

The public-private mixed models found in Spain and other countries have room for the private interests of the insured and insurers as well as for public interests—those of the government and society as a whole—which in turn contributes the technical and economic resources needed to make sustainable agricultural insurance available.

The legal framework that backs the system, along with the active and well- coordinated participation of the insured and insurers in its development, has made it possible for the agricultural insurance system of Spain to be characterized by its complexity and range, as may be noted in Charts 1 and 2 (see attached). These charts show the institutions and organizations that participate in the system's operations and development, in which the basic element is the relationship between the two private sector actors, insured and insurers, mediated through the insurance contract. This relationship is regulated on the one hand by the public administrations with regards to their planning and economic support, and the protection and regulation of the insurance scheme on the other.





As can be seen, other institutions are engaged in the contract represented by the insurance policy; these institutions include a) professional organizations and agricultural cooperatives representing the insured, b) Agrupación Española de Entidades Aseguradoras de los Seguros Agrarios Combinados, S.A. (AGROSEGURO, or Spain's Combined Agricultural Policy Ensurer's Group), representing private insurers, c) the Ministry of Agriculture, Fishing, and Food, through the Entidad Estatal de Seguros Agrarios (ENESA, or the state's Agriculture Insurance Agency), d) the Ministry of Economy and Treasury, through the Dirección General de Seguros y Fondos de Pensiones [General Directorate of Insurance and Pension Funds], the Consorcio de Compensación de Seguros [Insurance Compensation Consortium], and e) the Departments of Agriculture of the Autonomous Communities.

These institutions are represented by the General Commission of ENESA, which is the highest ranking decision-making body on matters related to agricultural insurance policies with equal participation of the representative of the agricultural sector and the state administration. Other members of this Commission are the Agrupación de Entidades Aseguradoras [Association of

Insurance Companies] and the Comunidades Autónomas [Autonomous Communities]. ENESA is in charge of coordinating the various institutions to facilitate the development of agricultural insurance.

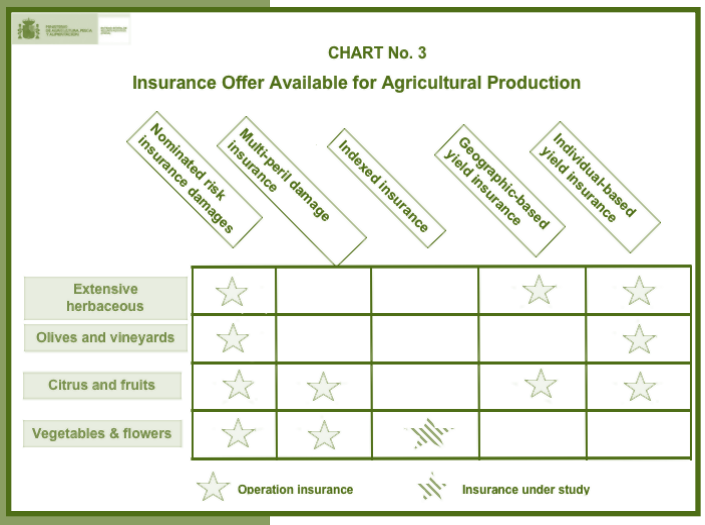
This participatory nature, with bottom-up proposals based upon onsite analysis by the final users of the insurance that is placed on the market each year, is a priceless source of innovation and development, responsible, to a great extent, for the constructive evolution of the agricultural insurance system used in Spain.

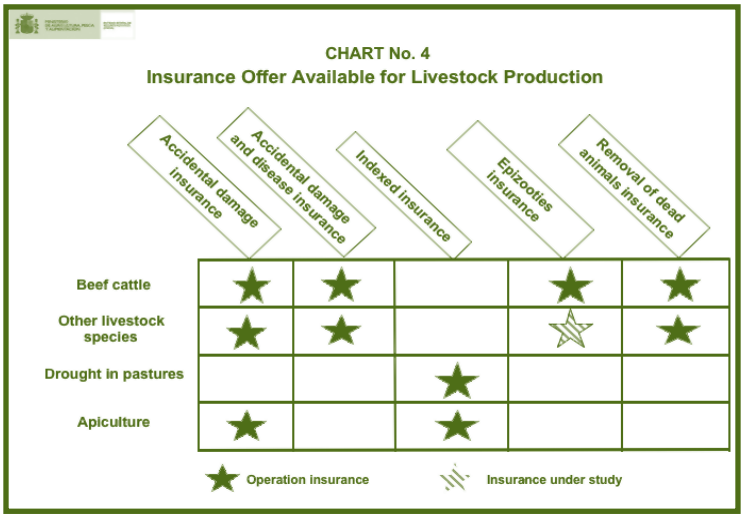
The main functions of ENESA (an autonomous agency operating under the auspices of the Ministry of Agriculture, Fishing, and Food) are the following: a) preparation of the Annual Agricultural Insurance Plan, which is the standard by which the government defines the guidelines that are to be applied to agricultural insurance, b) granting subsidies to farmers to pay for part of the cost of insurance, c) defining the minimum technical conditions for planting crops, the insurable yield, the prices for insurance purposes, and the datelines for taking out policies, d) carrying out the risk and damage studies accurately that are needed in order to be included in the insurance system, and e) promotion, dissemination, and providing consultations and advice for the agricultural sector.

The Spanish agricultural insurance system may be defined as a model capable of covering the damages caused to agriculture, livestock, and forests as a result of uncontrollable risks. The following basic elements should be stressed:

- Joint participation of public and private institutions with well-established procedures for facilitating the coordination of their efforts.
- Voluntary participation in the system, both for farmers when taking out an insurance policy, and for insurance companies through their inclusion in the co-insurance scheme.
- Utilization of insurance techniques or strategies in the development of the system.
- Application of subsidies for the cost of insurance by public agriculture authorities in order to promote the expansion and development of agricultural insurance; these subsidies on average amount to 5% of the insurance policy fees.
- Insurance companies establishing the conditions of the policies and the rates according to each type of crop and production area.
- Subscription carried out through the traditional merchandising venues and channels of the insurance sector.
- The system being based upon the compensation of risks, through:
  - The creation of a pool in the co-insurance regime among private insurance companies managed by AGROSEGURO.
  - The obligation on the part of farmers to insure all their land parcels within the national territory that are planted with the same crop.
- The assessment of disasters done by independent experts hired by AGROSEGURO, using the official standards established for this purpose.
- Indemnity payments carried out by the entity that manages the insurers' pool and covers a period of 60 days prior to the harvest.
- The system reinsured by the Consorcio de Compensación de Seguros, a state agency legally incorporated with its own equity and subject to the private legal regulations, and other private reinsurers.

Charts 3 and 4 show the current policy offers available to farmers and cattle raisers; they list the various insurance models and products covered and indicate whether the offer is available at present or under study. There is, as may be noted, a wide range of insurance models adapted for the various sectors. These have the following characteristics:

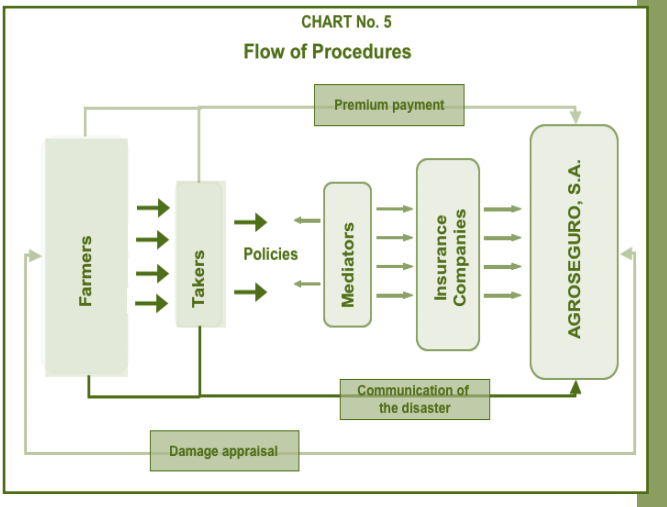




Insurance characteristics	Agriculture		Livestock		
	Named peril and multi-peril crop insurance	Geographic-based or individual assignment yield	Accident and disease damages	Indexed insurance	Epizooties insurance
Risks	Risks according to insurance contract	Climatic phenomena	Death or untimely slaughter due to contagious diseases	Drought, fires, and floods	Animal death or slaughter due to food-and-mouth disease and BSE (mad cow disease)
Guarantee	A percentage of the damage	Differential between the guaranteed yields and the yield actually obtained	80% of the difference between the animal value and the recovery value after the disaster	Compensation for an increase in feeding costs due to lack of vegetation	80% differential between the animal value and obligatory slaughter compensation, plus compensation for immobilization or quarantine
Yield	Set freely by the farmer	According to historical information (records) by geographic area and crop for each farmer	All animals of almost all species existing on the farm	All animals in all pastures, including sheep	All cattle existing on the farm or ranch
Premiums	Set for each area, crop, species, or variety according to the insurance line	Per geographic area, species, and insured results, or per farmer	For each species, type of animal handling, and recorded results	Set by geographic area and type of animal	Set for each type of animal handling and the bio-sanitary preventive health measures
Damage assessment	Per parcel	Per farm, compensation of damage between parcels or plots	According to damage affecting the animal	Based on satellite images	Assessment of the damage affecting the animal, and the official intervention data

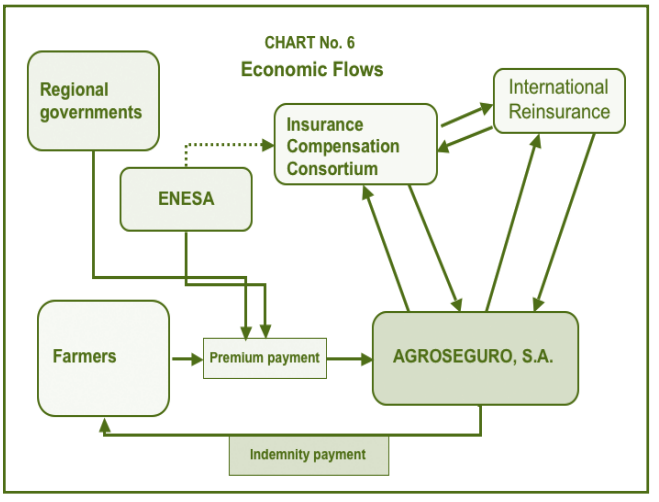
In order to summarize the operation of the insurance model, Chart 5 includes the various operation procedures that regulate the relationship between farmers and insurance companies. Farmers' cooperatives or associations act as collective policyholders; their policies are drafted with any of the mediators belonging to the merchandising network of the insurance companies, which focus on the set of policies held by the AGROSEGURO pool.

In case of disaster, the farmer or policyholder has to inform AGROSEGURO so that it, together with the insured, can assess the damage and the corresponding indemnity be paid.



Regarding the set of economic flows reflected in Chart 6, it should be pointed out that the beginning of the financial cycle is when farmers pay the unsubsidized part of the insurance premium. Full payment to insurers is complemented by the subsidies provided by ENESA and regional governments.

In the case of a disaster, the pool of insurance entities (AGROSEGURO) directly pays the farmer the indemnity that corresponds to the damage assessed at the farm. To guarantee the system's solvency, there is a reinsurance system led by the Consorcio de Compensación de Seguros and several international reinsurers, so that there is a payment flow for the reinsurance premiums or for the payment of reinsurance indemnities.



As a result of all of this, Spanish farmers now have at their disposal a framework regulated by the Sistema de Seguros Agrarios, which allows them to face the economic consequences resulting from the damages caused by natural disasters without having to incur in debt or request that government agencies grant them extraordinary aid.

The main parameters that describe the progress achieved thus far in the application of agricultural insurance in Spain are summarized below:

Insurable products	All agricultural products Cattle, sheep, goats, horses, pigs, and poultry Farmed fish species: bream, sea bass, dorado, turbot, trout, and mussels Some forestry plantations
Risks insured	Agriculture: the major natural hazards (hail, frost, floods, drought, high winds, heavy rains, fire, etc.). Cattle: death or untimely slaughter due to accident, disease, and epizootic plagues Fisheries: accidental damage, losses due to contamination, and some diseases
Number of insurance policies	More than 470,000
Insurance implementation	The average national insurance is about 40%. There is wide variation according to the sectors, amounting in some cases to 75% or more
Value of insured capital (as of 2006)	More than 9,100 million euros
Cost of insurance bought (as of 2006)	More than 654 million euros
State subsidies of insurance costs (in 2006)	278 million euros

The results obtained in the application of this insurance system show that the system is balanced in terms of disasters thanks to the fact that premiums are better adapted to the actual risk of each area, and to the fact that the system's development has made it possible to disperse risk. In addition, as the insurance has been perfected, farmers have been assuming a larger percentage of the cost due to the gradual reduction of the average level of public subsidies for policy costs.

After more than 25 years of development of the Spanish agricultural insurance system, there are several consequences and lessons that may be discussed based on the experience gained; the most significant are summarized as follows:

- Agricultural insurance, as an "ex – ante" system has very significant advantages with regards to "ex – post" action procedures based on the adoption of ad hoc measures after the occurrence of a disaster. Insurance of this kind, because of its characteristics, is an efficient and optimum means to aid farmers who may be affected by a natural catastrophe.

- The results of our experience evidence the contribution of insurance to the stabilization of producers' income after the occurrence of a natural disaster. Thus, for instance, thanks to the application of insurance it was possible to compensate for 28% of the loss of income in the agricultural sector that had been stricken by frost and drought in 2005.

- Although the subsidies for producers are a necessary incentive for the implementation of the most developed insurance systems, the protection system should be able to grow independently from the subsidy amounts. In this sense, it has to be kept in mind that subsidies granted by the government to foster agricultural insurance should be considered an investment rather than an expense. The existence of an insurance system that prevents the granting of extraordinary aid due to insurable risks, and that contributes to the economic stability of rural areas, is a good investment of public funds.

- It is common to find critical comments in academic literature and analyses about the results of agricultural insurance models labeled as traditional. Their message usually deals with the lack of viability of these types of insurance due to the systemic nature of risk, moral risk, asymmetrical information, adverse selection, or reinsurance limitations. To face all these matters, which could actually become an obstacle for the development of insurance models, the insurance experience available in many countries indicates that there are work procedures which function to reduce their impact and overcome their effects.

Regarding this last issue, I would like to express my point of view regarding the already classic discussion about "traditional insurance" and "new insurance modes (mainly of the weather derivatives type)." I believe that this discussion is useless since each insurance mode has its own well-defined action framework, outside of which the results derived are not satisfactory.

Indexed insurance, erroneously considered by some institutions as the ultimate solution for the success of agricultural insurance, are in my opinion an oversimplification that may reproduce historical failures in the implementation of insurance systems.

In Spain, we have been working on the design of indexed insurance since 2000. And I should say that this is a type of insurance that is hard for the insured to define and understand. Farmers cannot manage to understand how a loss in their crops, one that they can undoubtedly verify just by looking at the ruined crop after the disaster, may be considered non-indemnifiable because it has not exceeded certain threshold levels (i.e., the trigger for the indemnity) recorded at a remote meteorological station or by satellite.

The solution to this debate is the creation of insurance models that after a detailed case-by-case analysis include an adequate combination of both "traditional insurance" and "indexed insurance."

Going on to a related topic, it should be taken into consideration that the changes which have been occuring in the international markets, and the evolution of agriculture in our societies, are generating new uncertainties about the future of the rural world, which is causing the appearance of new chances for the development of agricultural insurance. Globalization and trade liberalization are increasing market risks and the risks derived from animal and plant health factors. The growing concern about the incidence of climate change is increasing the uncertainties about the future incidence of production risks. Finally, the increase in awareness of environmental risks, along with the need to have tools to manage them, should also be considered.

Important conclusions that may be drawn include the following:

- Due to uncontrollable phenomena, insurance is one of the most effective instruments to reduce the vulnerability of farmers and to contribute to maintaining their income. But it is necessary not to expect more from insurance than what it can actually give.

- There are higher possibilities of success when the insurance system is designed with the participation of all stakeholders, all the while paying attention to thepeculiarities and capacities of each country and the needs and conditions of the farmers. The best opportunities are in the mixed private-public models.

- Policies should be founded on the insurance technique, and its operation should be adapted to predetermined legal norms.

- Insurance has the capacity to respond to the changes in agriculture and the appearance of new uncertainties.

- The result of others' experiences should be the starting point to perfect insurance. The implementation of insurance requires constant work over time.

AGRICULTURAL INSURANCE IN MEXICO

Mr. Agustín Gutiérrez
Regional Representative
of Münchener Rück
Compañía Reaseguradora
México

Münchener Rück
Munich Re Group

Agricultural insurance is a fundamental instrument for the operation of agricultural markets in highly developed and industrialized nations such as the US. In these countries, a wide variety of important forms of "support" are allocated to insurance for farmers. In Latin America, the issue has become more relevant, where Brazil, Argentina, Chile, Peru, Guatemala, Honduras, El Salvador are promoting its development (the climate change crisis has been accelerating this). Mexico is the Latin American country that has made the most progress on agricultural insurance, which is an issue that has gained worldwide relevance. Various kinds of subsidy systems, as well as public and private partnerships, have been created, in addition to the development of some products associated with the single most important upcoming factor: climate change.

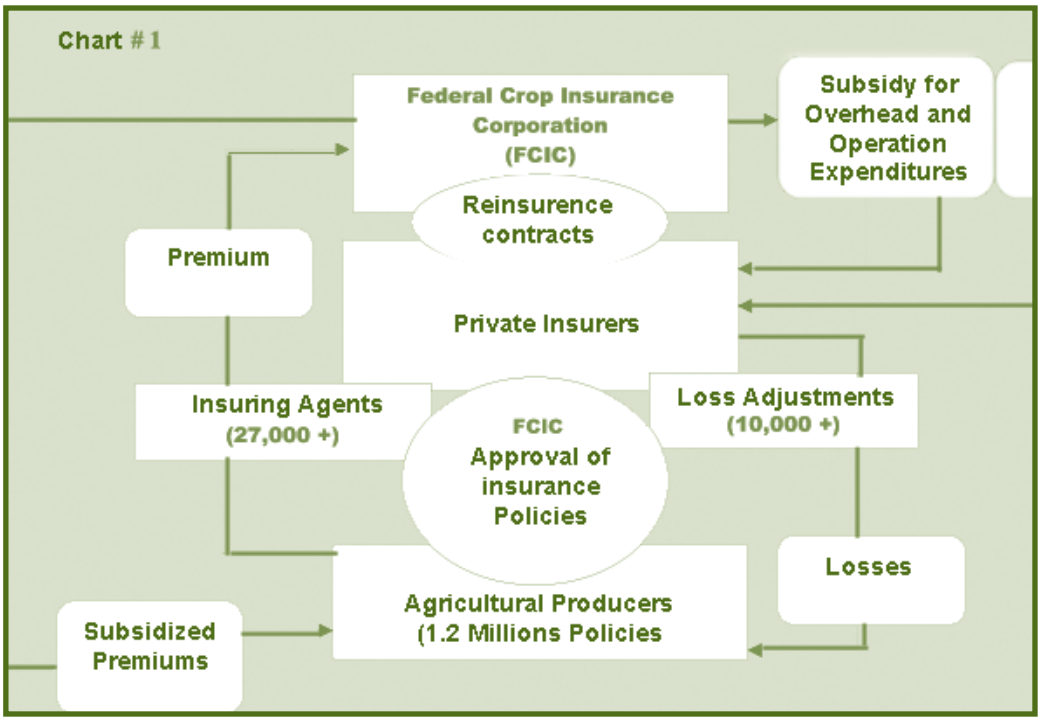
As a political and developmental instrument that is being accelerated by climate change, agricultural insurance has gained more relevance in Latin America, and especially in Central America. Agricultural insurance stabilizes companies' operational overhead and farmers' expenses as it turns the risk into a fixed rather than variable cost, as is the case among those who have no insurance. By means of a premium that may be budgeted and managed, it is possible to know how much will be paid out over a given period. In contrast, if there are losses but no insurance coverage, total outlay for damages cannot be known in advance. Insurance provides a great deal of stability for economies. What climate change does is to introduce an additional risk factor, one that is highly important but not altogether unique.

The American Model

A successful model is that which is used in the United States. This model is difficult to replicate given the large number of fiscal resources being funneled, yet the vision and experience of its schemes are very instructive for our region. Let's see some figures and features of this model: a total worth of more than 40 billion dollars insured; 218 million acres (88.3 million ha.) of insured land, equivalent to about 80% of coverage; 100 different crops insured; about 4 billion dollars in subsidies, which are considered non-distorting by the World Trade Organization (WTO); 22 state-of-the art, world-class insurance plans, which include schemes that protect the projected farmers' insurance and which are based on the participation of private enterprises. The current model is the result of a transformation process. In the past, the State was the first-tier insurer. The situation was characterized by ever-increasing overhead and sector sluggishness.

Due to these circumstances, a change was made by which the State became a second-tier insurer. Thus, the ratio between premiums and insured land was altered while maintaining a tendency toward regional coverage throughout the country.

For government expenditures, this transition was also optimum since from that moment on, the insurance balance had a surplus (premiums higher than indemnities).



The current American insurance system has private insurers, considered the critical operation factor, at its core. There is also the Federal Crop Insurance Corporation (FCIC), which through the federal government, supports reinsurance subsidies for overhead, operations, and losses. Thus, producers that are insured against disaster-caused losses, migrate toward insurance policies that cover losses in earnings.

The Mexican Experience

Aseguradora Nacional Agrícola y Ganadera Sociedad Anónima (ANAGSA), a public insurance agency, was founded in 1963. This organization was a State insurance monopoly for the rural sector linked to loans from BANRURAL, a banking institution that was also state-owned. Eighty percent of the insurance coverage was for rain-fed crops that had a high probability of incurring losses due to climatic phenomena. Both the insurance and the operation became very expensive and fiscally unsustainable. Thus, in 1988 a process to liquidate ANAGSA was initiated.

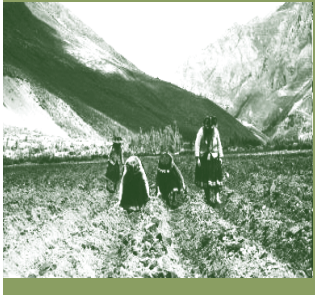
Afterward, AGROASEMEX, which focused on insuring irrigated areas and the best rain-fed areas, was created. The participation of other agents in the market, private insurers, and social sector insurers was promoted through the insurance funds. Integration began of the Sistema Nacional de Aseguramiento al Medio Rural (SNAMR) [National Rural Area Insurance System]. An important factor that supported the development of SNAMR was the 20% subsidy of the premiums for agricultural insurance, which started in 1991. In 1992, the subsidy was increased

to 30% for farmers insured by AGROASEMEX, which made it impossible for private insurers to stay competitive. In 1994, however, this subsidy was extended to the private sector. Moreover, in 1995, livestock insurance was created.

By 2000, AGROASEMEX was competing unfairly with private companies, and recorded greater operations with 40.4% of the insured lands, while private companies only accounted for 28%. In the livestock area, AGROASEMEX was the leader as well, with 72% of the policies, versus private insurers, which covered just 26.6%. It operated with high costs for the government, which received fiscal resource transfers for 113 million pesos representing four-fifths of the gross operating costs. On the other hand, it suffered an accelerated decapitalization process as a result of accumulated losses that reached 80 million pesos, the highest ever. Private insurers and the Funds noticed that AGROASEMEX had become an unfair competitor that was inhibiting market growth (by means of rate wars, subsidy manipulation, and so on).

As a result of this crisis, AGROASEMEX became a second-tier insurer with the following benefits: subsidy regionalization to favor development in the southeast (i.e., those who actually needed the subsidies), resource injection to cover the minimum guarantee capital, development of new products and services, reduction of its operational structure, redefinition of its organization and operation, development of its technological platform, transfer of its insurance portfolio to the private sector, creation of new products, staff streamlining, and reinsurance operations for private companies as well as funds. In the end, greater social impact was the overall outcome.

Since then, from 1995 to 2005 the market has almost doubled Private insurers, unlike other participants, protect exportable crops from risks and contribute to promoting investments and the utilization of our competitive advantages. Private companies and professionals capture today three-fourths of the risk covered by the whole industry. Private companies used to cover only 29%, but today handle 53% of all conventional insurance policies. In addition, coverage of cattle herds increased from 26% to 83%. These achievements have meant much lower costs for the government, since the agricultural subsidy dropped from $213 per hectare to $134.6, and the trend continues downward.



Therefore, there is higher social impact due to the use of a self-insurance model. These funds are regionally created by farmers and cattle breeders from specific areas who comply with certain regulations which allow them to create their own insurance agency or regional insurance cooperative; they are reinsured by AGROASEMEX, which allows them to manage their own risks.

CONCLUSIONS AND CHALLENGES

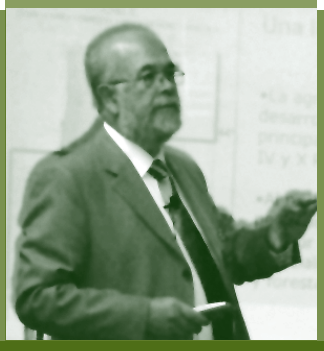
- Agricultural insurance is an indispensable tool for countries with a broad rural base.
- Free trade agreements and globalization demand the existence of agricultural insurance systems to provide certainty during times of change.

- Not only should we be concerned about the trade and economic change, but climate change must also be taken into account.

- The development of agricultural insurance should be partially in the hands of professional organizations and ought to have the participation of social sectors and, due to competition, government support will become indispensable.

- Systems need to be created which have the capability for constant self-improvement, so that the public and private resources will be used more effectively and efficiently.

Chile's Experience in Agricultural insurance against climatic Phenomena



Mr. Gino Buzzetti
President of the Directive Council (COMSA)

GOBIERNO DE CHILE
COMITE DE SEGURO AGRÍCOLA

CONTEXTUALIZATION OF THE CURRENT JOINT VENTURE

The emerging partnership is defined as a joint venture mostly because scientific development does not mean that the world is safer. New uncertainties, new manufactured risks, along with new risks arising from climatic change and diseases, all predominate. Risks are part of social conflicts that start to appear as a result of how society is being organized. Risks are no longer isolated; on the contrary, they are now global. Nevertheless, society also organizes itself and starts to have a different dimension. (Risk = insecurity, alarm, difficulties, obstacles, danger, contingencies, etc.)

Physical, Geographical, and Climatic Reality to Understand How The Credit Operates

Agriculture in Chile is organized according to its physical and geographical features. Given this diversity, risk is also very variable. The territory extends from the extreme north to the end of the continent for 4,220 Km., along a meridian. Agriculture is practiced from meridian 32 to 44, mostly in the northern desert zone and in some northern valleys where there are water bodies.

Thermal variation throughout the country is substantial; so agriculture is organized according to temperatures and precipitation as well. In the most common place where crops are found, precipitation levels reach about 1800mm, and average temperatures are around 10º C. Chile has a benign climate; there are no large weather-related disasters such as hurricanes that may cause massive damages.

There is a good source of climatic data that have been used to define homogenous risk areas. Throughout the national territory, there are 120 different risk areas because of the country's geography.

Characteristics of its Agriculture

There are two types of agriculture in Chile. One is modern and connected to the market, while the other is traditional in nature, with production only for survival with no technology or clear orientation toward the market. Another way of looking at it is that there is a corporate agriculture that contrasts with a family-based subsistence agriculture, composed of small producers. Some of them are market oriented and incorporate technology as their resources allow. This small group is so important that are found in 30% of the country and run 80% of the plantations. It is estimated that there are about 10,000 of these producers that are related to the export markets through export companies or agribusiness.

How does Agricultural Insurance Operate in Chile?

Beginning in the year 2000, a policy was defined to favor the creation of instruments so that producers could manage their risks better and in order that the policy would contribute to shortening the range in income variation. Agricultural insurance against climatic risks was defined, with the understanding that risk management is more complex than the issue of insurance itself. Such insurance obviously covers agriculture carried out through contracts, security for specific crops, most especially timber, and the diversification of crops that is usually set by the producers. Along with this, the information for decision-making that is based not on what has happened, but on future prices for producers, and bio-security due to the demand fundamentally from producers based on the likelihood that crop losses will occur.

Insurance in Chile covers climatic events such as frost, drought, excessive and unseasonable rain, high winds, hailstorms —which are almost nonexistent in the country--- and snowfall, events that due to their intensity, frequency, or magnitude may affect agricultural yield. The benefits for the farmers allow them to recover their working capital, generate a stable financial situation, and this ensures the farmers' continuous participation in the production process, but it mostly allows for technical development on the plantations.

Why does the State Participate in Insurance?

The state participates to increase the levels of trust among stakeholders, and for this in turn to contribute to decreasing transaction costs and making them more competitive in the workplace, or for entering the international market in a better position. Moreover, it generates a culture of modern risk management in order to develop the agricultural insurance market, which did not exist before 2000, and to have income stability, which implies permanent improvements in the production processes.

Agricultural insurance is operated by the private sector. The state does not commit itself to any part of the risk; it participates in co-financing the premiums, and it both provides guidance as well as defines which crops will be subsidized. This system operates for all farmers in the country, and is carried out through the Comité de Seguros Agrícolas (COMSA) [Agricultural Insurance Committee], an entity that depends on the Corporación de Fomento (CORFO) [Development Corporation]. COMSA defines which crops are eligible for subsidies and in which areas, the prices for producers to be able to estimate the total insurable price, the maximum rates for the premiums (private companies may charge less), the coverage, and the calendar dates for taking out policies.

In about 98% of all cases, the producers go to a financial institution to request funding. The credit institutions, such as agribusiness, grant and approve the funds and immediately get an insurance policy. When they are loan entities, these usually being state-run, they calculate the loan directly and the information is sent online to the insurance companies. The effectiveness of the policy starts at the time that the insurance company approves the contract from the financial institution. The financial institution calculates the cost of the premium and the cost of the insurance, but only charges the percentage of the premium that the producer has to pay. Later on, the insurance

company requests that COMSA pay the subsidy, which is financed by the state. At COMSA, the cost is validated based on previously set parameters, and the subsidy is paid directly to the insurance company.

Promoting insurance is one of the difficulties being faced. The state and COMSA have been promoting the use of insurance, but private insurance companies have not been involved in this task. Therefore, the remaining 2% of the producers enter into a contract with these companies through an insurance broker.

The subsidy covers 50% of the net premium plus 50 dollars for the policy; the maximum amount for the subsidy is US1,900 dollars per farmer. The minimum amount of the premium is 120 dollars, thus there is positive discrimination against the smallest growers (though discrimination is never positive).

CONCLUSIONS AND CHALLENGES

- The successes of the experience of these last five years in the implementation of agricultural insurance have been made possible only to the extent that there has been consensus between public and private actors. There is a permanent work team composed of insurers and the state.

- The concept of risk management has been internationalized. Multi-peril insurance policies have been feasible and viable as the climate is very diverse, and farmers from both the north and south take them these policies out, thus preventing disasters from drastically affecting a single company.

- The state subsidy has played a constructive role by providing access to the producers without discrimination. The disasters that have taken place have proven that climatic events in fact do not ruin all crops.

- Among the challenges for first half of this year is the incorporation of fruit orchards by substantially expanding either the area covered, or the potential number of policies obtained.

- It is also necessary to perfect the instruments in operational aspects so that companies may recover their policies more quickly.

- There is also a need to provide better responses to producers' demands, and to establish closer relationships with them, because when farmers pay the premium and no disasters occur, they tend to believe they did not make a good business investment.

- Also important is improving the business network of private insurance companies in order to open new markets.

Crop Insurance: Costa Rica's Experience

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ORIGIN AND BACKGROUND

Crop insurance originated with Law 4461 of November 10, 1969. The bylaws that were inserted into the policy established the general terms and conditions of the guidelines that would rule its operation as well as the role of the Instituto Nacional de Seguros (INS) [National Insurance Institute] as administrative agent. Its original purpose was to encourage farmers, especially those sowing basic grains, and was later extended to cover cotton, sorghum, and after some time had passed, other new crops. Its peak was in the mid 80s. At that time there was major state and financial support. Banks practically made it mandatory for farmers to take out insurance, and they used policies as collateral. This generated a great deal of cautious business, but as these elements were modified due to some reorientation of loans, the portfolio began to gradually decrease.

Types of Insurance and Activities

The insurance offered is traditional, with comprehensive coverage for climatic and biological risks, including pests and diseases, especially due to uncontrollable humidity. The insured amount is calculated based on a crop's direct production costs from sowing to harvest. The insurance may be obtained beginning at the germination phase, during the rooting, and under either the investment mode or on a per-plant basis. It is an indispensable requirement to use certified seeds for crops subjected to certification. The insured unit is defined within the regulations, and includes all parcels that are located within a kilometer of one another.

The insurance policy is bought annually and rates are defined by crop and by area. There are dates for planting as well as a classification of what are considered to be small, medium, and large producers. At present, the insurance program covers 24 crops; the most important include rice, beans, palm oil, and plantains. The current crop insurance portfolio is small. About 90% of the farmers are independent producers or are grouped in cooperatives or some other kind of association. Historically, the crop that was most often insured was rice, which amounted to 80% overall. Over time, this grain has been losing ground, and today accounts for only about 50-60% of all earnings

Aspects with an Impact and their Consequences

One aspect that has seriously influenced the fall in the level of insurance is the granting of loans without insurance as security or collateral. A change in loan policies with a downward trend, with a greater tendency toward selecting risks in addition to the moral risk aspect should also be noted. There is predilection toward other crops and insurance in areas that are frequently stricken

by adverse events. Moreover, there is little cultural precedent for taking out insurance along with low voluntary subscription despite the fact that the insurance itself originally came into being by law.

All this has resulted in high rates necessary to cover the operation costs; in turn, these rates decreased the demand and reduced the number of planted areas that get insured as well as the variability of insurance generated income. The high vulnerability and low subscription volume also influenced the increase of costs for covering damages. The result of all of this resembles a vicious cycle, which has given rise to a limited, deficient insurance policy with a tendency toward increase rates that restrict the availability of reinsurance support as a means to disperse risk and losses.

CONCLUSIONS AND CHALLENGES

- INS cannot currently offer an attractive portfolio in crop insurance.

- Costa Rica is headed toward imminent trade opening, and INS as a state-run monopoly has generated much expectation at the consumer level of having the option of an open market, thus it is indispensable to start guiding actions that both update the product and expand the offer so as to increase the demand for crop insurance.

For this purpose, a new model encompassing the following actions is proposed:

- Develop other insurance modes for some crops or varieties in addition to comprehensive insurance, such as the risk insurance already mentioned, or yield insurance.

- Promote and coordinate the creation of databases and statistical information among institutions that will aim at supporting data in addition to yielding parameters and provisions per area, crop, and producer; undertake as well the necessary technical studies and research to update them.

- Promote, together with the national banking system and other agricultural funding institutions, the need for insurance.

- Promote and coordinate among institutions the creation and implementation of techno-logical tools and simulation models for monitoring both climatic factors and the correlation of crops to yield or actual production.

- Within the current macroeconomic and legal context, carry out revision of the current comprehensive crop insurance along with its bylaws in order to promote the needed legal changes to adjust and update these policies.

- Undertake the studies and legal determinations to establish the terms and conditions that correspond to the insurance so that the rates adequately cover disasters and administrative expenses.

Agricultural Insurance in the expanded MERCOSUR

Mr.Arnaldo Chibbaro IICA Regional Hemispheric Specialist in Agricultural Policies and Trade Negotiations and Former Secretary of CAS-REDPA Uruguay

AGRICULTURAL INSURANCE MANAGEMENT: A REGIONAL CONCERN IN THE SOUTHERN CONE

The search for mechanisms that make it possible to prevent or reduce the effects of economic risk factors for agricultural producers is a topic of growing concern and attention for the leaders of the agricultural policies in the Southern Cone of the American continent. This issue surpasses concerns for national environments, and has become positioned as a priority on the regional agenda of the Agricultural Council of the South (CAS).

What is CAS? This is the Ministerial Forum of Regional Consultation and Coordination of the Ministers of Agriculture of Argentina, Bolivia, Brazil, Chile, Paraguay, and Uruguay, a group also known as the expanded MERCOSUR. (Venezuela is a very recent participant that has not yet joined CAS as a formal member). CAS was created in 2003 due to the initiative of the region's ministers of agriculture in order to have a sectorial mechanism that would collectively deal with circumstantial matters inherent to agriculture in a practical manner; this measure was needed in order to complement the region's formal integration mechanisms.

The CAS Ministerial Forum is supported by a regional articulation system of the agricultural sector composed of a group of integrated technical networks; these networks are comprised of the national directors of the various agricultural public services (i.e., entities dealing with, for example, agricultural policies, international negotiations, agricultural sanitation and health standards, and technology), to which the regional forum of the private agricultural sector and the regional forum of agronomy schools (www.consejocas.org) are added for reference.

The Agricultural Policy Coordination Network (REDPA), which is composed of the directorates or national offices responsible for such policies, is the technical support group of CAS in charge of moving forward the joint work of looking after the regional priorities defined by CAS with regards to agricultural policies. One of these is "risk management and agricultural insurance" which was assigned to a task force made up of professionals from the ministries of agriculture of the six countries (GT3), this being a task force which has generated several regional action proposals in its two years of operation. The task forces on information systems in policies (GT1) and agricultural markets and crop forecasts (GT2) complement the work done by the GT3.

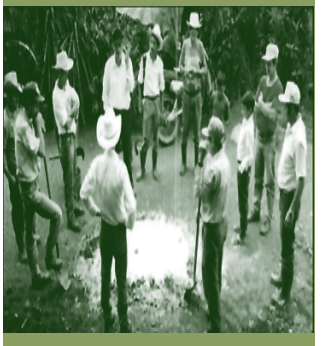
IICA's collaboration to the regional coordination process on agricultural risk

The support provided by the Inter American Institute for Cooperation on Agriculture (IICA) to CAS and its policy coordination network is embodied in two lines of action. On the one hand,

it performs the function of technical and administrative secretariat of the Council of Ministers of CAS, REDPA, and the Group of the Agricultural Negotiators of the Americas (GINA-South). In addition, it provides operational and technical assistance through its hemispheric, regional, and national specialists, as well as consultants to REDPA task forces, including the GT3 on risk management and agricultural insurance.

This task force's goal is building institutional technical capacities in the CAS countries on risk management and agricultural insurance, and creating a network for exchanging information and experiences related to public policies and risk management instruments.

IICA's support for this group has taken the form of development, monitoring, and technical support for its management, as well as the organization of technical workshops, the preparation of projects, and the process of securing the external financing needed to carry out regional initiatives on agricultural risk management.



CONCLUSIONS AND CHALLENGES

During the years it has been operating, GT3 has generated, with IICA's support, a set of results and proposals with a regional approach so as to advance toward the reduction of agricultural risk, among which the following outputs may be mentioned:

- An initial region-wide diagnostic on the "Situation of agricultural insurance in the extended MERCOSUR nations that comprise CAS" (see annex). This pioneering document provided global statistics and figures on the numbers of insurers, premiums collected, policies issued, hectares insured, capital insured, disasters financially covered, as well as risk and per-product coverage. The work also makes reference to the information system for the assessment of risk existing in each one of the MERCOSUR member countries, the risk maps, and the relationship between agricultural insurance and the financial system. It also discusses the issue of reinsurance in each country, the type of system used, and the number of reinsurers that operate in each of the markets. It also includes the legal framework that supports agricultural insurance policies in the countries, along with the organisms related to the system. These include regulators and implementers of insurance, public policies that back the legal regulations and the application mechanisms of the insurance system, as well as catastrophe and emergency policies, state policies for risk mitigation, and premium subsidy policies.

- A diagnostic of the agricultural insurance market in Argentina, Brazil, and Chile, which shows a higher concentration of agricultural insurance in Argentina in contrast with these other countries.

- An instructor training program in agricultural risk management with thematic proposals and identification of trainers.

- A technical proposal for the incorporation of the issue of agricultural risk management in the academic curriculum of majors in agronomy, this was presented at the Regional Forum of the School of Agronomy of MERCOSUR, Bolivia, and Chile.
- A regional project of about US$1 million that was developed with the participation of

more than 20 professionals from the six MERCOSUR member countries. This took place with the technical and operational cooperation of IICA in order to develop a regional information system designed to mitigate agricultural risk, a system which has been approved by the Inter American Development Bank (IDB) and is currently being executed.

Furthermore, the technicians of the six countries work in the region on the issue of agricultural insurance that focuses on small farmers within the framework of the Red de Agricultura Familiar (REAF) [Family-Based Agriculture Network]; this network is being fostered as part of the judicial structure of MERCOSUR.

Finally, in order to comply with the CAS mandate, the REDPA task force on agricultural risk management is committed to advancing in the future, in consultation with the insurers group, on the development of a proposal for regional agricultural insurance. This effort would permit the dispersion of risk and the reduction of insurance costs.

Creation of private agricultural insurance in central America

Mr. Juan Carlos Cortés
Director, Protección Agropecuaria (PROAGRO)

PRO AGRO MÉXICO

BACKGROUND AND ORIGIN

PROAGRO was founded fifteen years ago as an insurance company. It started growing when the state monopoly of ANAXA ended and insurance was opened to the private market. In the beginning, PROAGRO had ties to the American agricultural insurance parent company that had created it in México.

It began operations in Central America about ten to eleven years ago, at a time when agricultural insurance was virtually unknown there. The first country to express interest in such coverage was Guatemala. PROAGRO's goals were to add comparative advantages, establish a long-term relationship, create a win-win scheme, lower transaction costs to reduce expenses, and to maximize the participants' investment.

PROAGRO is a private company that only provides agricultural insurance. Over the years, the demand and the market have grown substantially, as has cultural awareness of the need for insurance. There are two elements that have brought about great opportunities for the development of agricultural insurance. One of these factors is the change in the economic model of the agricultural sector: the State has taken a step back in Latin America. Moreover, the role of these instruments has been redefined, and trade opened worldwide is a reality. The other factor is the role of the financial sector; when the shareholders changed and the sector became more global and redefined its priorities, this also caused a change in the position of the sector. An additional aspect that has aided the development of agricultural insurance is the current discussion about climate change. The prospect of stronger cyclones has scared producers, and this has increased their awareness about the need to protect themselves.

At present, PROAGRO is the largest agricultural insurance company in Mexico. It covers about 60% of the private sector market, and about 40% of the market overall.

Insurance Operations in Mexico and Other Regions

In Mexico's agricultural sector, the gross domestic product is the most volatile GNP in the entire economy, undoubtedly as a result of the risks inherent to this sector. This allowed PROAGRO to start operating first in the north of Mexico and to later extend its operations to the whole country. It then expanded to Brazil and Central America.

Agricultural markets today are more complex. They are much more interdependent, and there are more economic agents. They also require a higher degree of specialization. Information

has become a fundamental variable, and awareness about the risk levels for participants has also increased. Moreover, the inherent characteristics of Latin America increase the potential for agricultural insurance. Its legal structure is not very solid, which has turned land into the main asset. Consequently, the financial entities that are involved in the sector prefer more liquid guarantees, of which insurance is one. PROAGRO has major interaction as an insurer not only with banks and with producers as clients, but with almost the whole sector as an important number of stakeholders are interested in insurance.

Today's governments with successful models have three types of participation, the main one being a premium subsidy. There are also operation cost subsidies for insurers and reinsurance coverage, especially for disasters. What has been noticed in Latin America, Central America, and in Mexico is that what functions best is the premium subsidy to provide all producers with the same opportunity to get insurance, usually by giving larger subsidies to smaller producers, with proportionately less to the medium and large ones. There is a state-owned insurance company in Mexico which is very transparent and has professional management. So the private sector has had to be constantly engaged in a negotiation process. Mexico's Ministry of Agriculture does not get involved in the definition of the conditions of policies or establishing premium costs, which are instead defined by each company.

At PROAGRO, it is possible to get either a multi-risk policy or a very specific one. The effects and specifications of a policy, such as the product, area, phase, time, and risk type are listed in the conditions of the policy contract that is signed by the producer. It is essential that the market be open so that each party may define whatever is required. Policies should adapt to every producer's conditions and needs; this is fundamental for the company to be able to carry out negotiations. If the insurance is limited, the enterprise's development will also be limited. It has proved more effective for farmers to cover the costs (premium) in advance, and policies may be taken out by both large and small producers. The same conditions may be used for all if they are in the same area with the same potential. Agricultural insurance is based on indexes, but it is customized for each farmer rather than applying generalized indexes, and disaster coverage is also available.

At present, a service company is open in each country. PROAGRO operates as reinsurer of local companies recommended by Munchener. The local company selects the insurer and the local operation fund, issues the policies, and collects. PROAGRO is in charge of reinsurance operations as well as administrative and payment control, competition analysis, technical training, and manual preparation. To lower the sector's risks, PROAGRO has financial instruments available in the form of insurance and futures, both of which are very much used and developed in the countries that are PROAGRO's business partners. Furthermore, PROAGRO is interested in entering the market in both Panama and Costa Rica.

Caution should be exercised when copying the schemes of other countries (for instance, the US and Europe). Their treasury systems are not the same. Moreover, in order to channel the subsidies, foreign insurance models need to be adapted to Central America's reality. For instance, the large plains, whose weather patterns and soil types are uniform, are not found in Central America. On the contrary, these conditions vary completely over only a hundred kilometers. In North America, farmers are used to getting policies; they simply pay the premium, and their price and production are guaranteed. Transaction costs are lower and their risk management improves. These conditions need to be implemented in the Central American region as well.

Human and Technical Resources Available at PROAGRO to Make it Happen

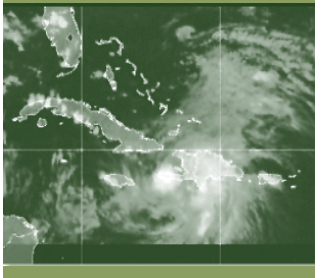
The main problems are information and transaction costs. The investment in human capital, equipment, infrastructure, the fundamental system, operational overhead costs in rural areas, and the portfolio composition is very high. Sometimes, the portfolio varies greatly from one customer to another. Furthermore, the cyclical feature of income needs to be considered as well. PROAGRO has two sources of income a year: the spring-summer cycle and the fall-winter cycle. Thus, it is essential to be able to increase and reduce costs quickly.

The operations are carried directly out by the company's staff. They are in charge of inspections and adjustments, and establish a permanent relationship of trust with the farmer.

PROAGRO has important databases for each region of each country in which they work. All of this information is in a digital format, including data on climate, crops, including annual harvests and risk. A risk analysis per crop is done, and there are more than 2000 insurance programs for Central America.

The reinsurance component is fundamental. PROAGRO has been working with reinsurance companies for some time. The leader in this area is Munchener, a company that in addition to being a shareholder of PROAGRO, is a vital ally, as it informs PROAGRO about the potential partners in each country.

Since the issue of climate change is so important, PROAGRO is affiliated to Luna, a company that specializes in weather forecasts. Luna provides PROAGRO with digital information gathered from 1100 stations around Mexico and from all stations in the region. In fact, in Mexico they sell these services to the state governments and to banks. They also send data to the customers so they can plant at the time with the highest success possibilities. Clients are never denied insurance, but policy conditions are constrained in accordance with the type of crop, the region, and the time of the year.



PROAGRO has a referenced geographic information system to visualize the impacts in each region. Their customers may see their entire operation online, and they inspect one hundred percent of what they insure. They also have satellite pictures for regional evaluations of the crop situation, and prepare schemes not only for large producers, but also for banks, state governments, as well as small and medium producers, by working through their organizations.

Insurance reveals specialized information that is useful for the markets that would otherwise not be able to obtain it. The main problems encountered are adverse selection, moral risk, asymmetrical information, and reinsurance limitations.

CONCLUSIONS AND CHALLENGES

- PROAGRO is a private Mexican company that has been highly successful in the agricultural insurance market.
- Agricultural insurance is viable and highly specialized; there are no miracle models.

- It is necessary for the private market to engage in constant negotiations with the government.
- The promoter's role should be aligned with the given market; it should not copy other models.
- It is necessary to work more with index insurance, that is, actuary tables, and, under no circumstances, would this be a solution for the problem because there is a wide diversity of climates.
- Regarding the portfolio, the risk should be split: less for the farmer, a little more for the insurers, and even more for the reinsurers.
- This is a matter of technology and operational costs since earnings are not generated at all times.
- Agricultural insurance needs to be a free market. The more products there are, the more crops and the more regions involved, the more viable it will become.

Project: Support for the development of agricultural insurance in Central America

Mr. José Luis Moncada
President of the Technical Matters Committe, Inter American Federation of Insurance Companies
FIDES

WHAT IS FIDES?

FIDES is the Inter American Federation of Insurance Companies, a non-profit institution with 24 affiliated countries. Its function is to create and manage innovative products for the development of the various markets in Latin America.

Project Objective and Context

The main objective of the project dealing with agricultural insurance is to strengthen the current traditional types of insurance and to create innovative products, such as the index insurance, so that small and medium producers may have access to a risk transfer instrument at affordable prices. The project components are going to generate instruments and analysis that will reinforce traditional insurance, as well as give backing to experiments and pilot projects in agricultural insurance by indexes.

At present, the World Bank and the Inter American Development Bank (IDB) (which also designed the project) are financing it. Moreover, three prestigious American universities, including the University of Columbia, along with research and risk analysis offices and specialized companies, are all providing their research support for these types of products. The World Bank will also become a specific reinsurer of index insurances; this reinsurer will be called INDESRI, and will be comprised of eight insurance companies.

Traditional insurance has opened the field in Central America. In the countries where it has been implemented, the experiences have been good. However, there have also been a number of negative experiences that have created some reluctance. This is part of the process; these obstacles will be overcome with more dissemination, more training, and more compliance with the commitment assumed toward the producers of the region and the type of policy generated which directly responds to their demands.

With regards to the public sector, I believe that the issue of subsidies should be handled cautiously in accordance with the capacity of the governments of Central America and the degree of impact that they have on the countries' economies. The sustainability of subsidies does not necessarily create the conditions for the development of a given type of insurance. This project is part of what could be considered another type of subsidy for the development of products, which in essence, may generate more reasonable and accessible values for small and medium producers.

Project: Support for the development of agricultural insurance in central America

Mr. Ralph Oberholzer
Project Director
FIDES Honduras

FIDES

BACKGROUND AND INSURANCE SCHEMES

In 2002, the heads of state of the governments of Central America, and the companies and associations of insurance companies, through FIDES—the project executing agency—requested that the Central American Agriculture Council (CAC) lend the technical and financial support needed to strengthen the insurance market. As a result, IDB's support was also requested in order to be able to comply with this mandate.

Among the problems the sector has endured is the ambiguity in the analysis of the agricultural production risks by the companies and producers. There have been failures in the market, as well as high magnitude and low frequency events, and the respective emergency programs in case of disaster have both decreased the demand and increased the insurance premiums. Furthermore, the lack of access and availability to data, as well as the inadequate quality of the data that actually is available, end up causing difficulties when attempts are made to analyze the actual risks faced by producers.

At present, traditional forms of insurance, such as multi-peril and individual risk schemes, are available. There are also parametric or indexed insurances for variables such as rainfall, temperature, wind force, as well as vegetation or planted area indexes that use satellite images, in addition to daily sunlight requirement indexes, cattle mortality indexes, hurricane forecasting, and others (Index: list, catalogue, table, summary, series, sample, guide, etc.)

What is Indexed Insurance, Its Uses and Advantages

Indexed insurance is a contract whose contingent payment is based on a predetermined variable rather than on the volume produced per se. Although there is a high correlation between them, indexed insurance is not directly based on the producer's loss. To be able to use an indexed insurance setup, it has to be observable and measurable; moreover, it must be objective, transparent, and verifiable by a third-party institution that specializes in the matter; finally, it has to be reported frequently and must be stable and sustainable over time.

The main characteristics of indexed insurance are its effectiveness and low administrative and operational costs. This form of insurance has a number of advantages: it has moral risk control and adverse selection control. The administrative costs are low since this type of insurance does not require subscription supervision or adjustment in the case of disaster because adjustments are carried out depending on what happens with the variable. Indexed insurance also has a transparent structure: contracts are clear enough so producers know how much and when they

are going to be paid. It has versatility in merchandising, as the instrument is channeled through financial intermediaries, risk transfers, the capacity of diverse financial markets such as reinsurers, international banks, and investment funds. There is flexibility in the design of indexed insurance. The coverage is micro for individual producers, banks, insurers, and cooperatives. However, the coverage may be macro for federal governments and municipalities.

Indexed insurance is not the solution to all problems; actually, it has to coexist with traditional insurance. Both offer advantages and disadvantages.

Challenges of Indexed Insurance

The main challenge faced is the rate, which is the risk measurement. Measuring risk also faces the challenge of capturing cyclical variations, such as the El Niño phenomenon and the existence of microclimates. The potential use of indexed insurance is more limited for high frequency phenomena whose effects are highly localized. With respect to education, users should fully learn the operation of these instruments.

What Is the Project About?

Currently, six companies are carrying out pilot projects involving indexed insurance in Nicaragua, Honduras, and Guatemala to demonstrate its effects on agricultural insurance and to achieve a rapid expansion of its coverage. The companies participate in the pilots—not necessarily in the project—and in training programs for public officials, companies, banks, NGOs, and producers.

The project consists of three different components:

Analysis and review of the public policy framework in the three countries in which the insurance and reinsurance companies operate; this is done to encourage the use of management instruments and the transfer of private agriculture production risks.

The legal framework offers technical and legal elements that contribute to improving the existing agricultural insurance regulatory framework in the three countries; the framework also serves to issue recommendations or modifications that allow improvements. These improvements encourage the use and innovation of agricultural insurance as a whole, thus promoting the development of the market.

Applying the processes or reinforcements to information systems that give access both to insured and insurers.

Achievements and Benefits

In Guatemala, both insurance companies in the market, Columna and La Ceiba, are participating in the project's implementation. Four companies from this sector are participants in Honduras, with Atlántida and Equidad are taking part in the pilot program for maize and sorghum. In Nicaragua, the entire insurance sector is participating in the project, while LAFISE and INISER have been collaborating on the development of pilots that are to initiate the merchandising of a policy for peanuts, sorghum, rice, and soybeans.

By the end of next year, it is expected that three new models will have been developed in Honduras and Guatemala.

CONCLUSIONS AND CHALLENGES

- Traditional insurance and indexed insurance both can and should coexist and operate simultaneously.

- The project has generated several benefits, including:

  - Subsidies for small and medium producers by developing access mechanisms to information with production purposes.

  - Support for public policies to reach small and medium producers by facilitating their access to insurance when there are no state subsidies.

  - Easier access to banks for these producers because the insurance is affordable; the credit conditions are also improved because of the guarantees they may offer.

  - Improvements in the average income of producing families.

- It is necessary to develop training and dissemination processes for governments, producers, the financial system, and other stakeholders in order to generate a culture of agricultural insurance and knowledge of new insurance products.

Developing the agricultural insurance market and its new instruments

Mr. Diego Arias
Economist in Natural Resources, Inter American Development Bank (BID)
USA

CONTEXT OF THE PUBLIC POLICY FRAMEWORK

Lately there has been increasing interest from the private and public sectors in agricultural insurance. This constitutes a true opportunity to make development of the market, especially in Latin America, sustainable and viable for both companies and farmers.

Governments should seriously consider continuing their support to the development of this market, but have to do so carefully as the experiences gained thus far show that some policies may generate adverse effects, and even effects that run counter to the proposed objectives.

The first step is to ask why the agricultural insurance market is not yet fully developed in our region. To begin with, the nature of yield probability distribution and non-explicit public interventions causes ambiguities and uncertainty for such insurance to both the companies and the insured customers. In addition, there is a lack of quality or dependable information about production variables (climatic factors, yield statistics, etc.), as well as risk analysis. Finally, the transaction costs to reach rural producers are high, especially those small growers in the Central American region which are at times quite isolated.

If the public policies required to develop the market were grouped into two large groups, they would apply to both traditional agricultural insurance and to index insurance, that is, actuary tables:

- **Public Goods and Services**

Providing goods and services is necessary to create an environment in which market development is promoted, in order to have more immediate and longer-lasting impact. There are three groups of indispensable policies that accomplish this:

- Stratification of agricultural risk at the national level: (i) high-risk or catastrophic level; (ii) medium-risk level, which is covered by the agricultural insurance market; and (iii) low-risk insurance, which is covered by the producers themselves. If producers face an external event (of a climatic nature, for instance) and they do not have access to loans or insurance, they will be forced to decrease their assets, and as a result they will enter into what is called the poverty trap. It is in these cases when the insurance market may have a major impact on improving the well-being of producers. During a catastrophic event, the public sector's role becomes highly important. For example, with regards to public policies, it is crucial to stratify the agricultural risks so that they will be clearer to the insurer sector (private) in

order that it may be developed, and for the producer to clearly understand what risks are covered and who covers them. Such stratification has a vital function and a relatively low cost.

- Improvement of the information systems and infrastructure needed to gather, process, and store data: information systems are a fundamental public asset for development of the agricultural insurance market and, in general, for increasing the sector's productivity. Access to this information should be reliable as well as timely, and it is essential in order to undertake private and public responses intended to orient the needs of the agricultural sector.

- Improvement of the regulatory and legal framework: For this to be brought about, it is necessary to count on rules adapted to the agricultural insurance sector. Also very important is support for training, and for knowledge transfer to the public sector (especially the regulators or supervisory entities) and to the private sector (entrepreneurs and producers) on the features of agricultural insurance and why specific standards and rules do or do not exist. An adequate regulatory framework must be provided for the supervision of new lines of business, since the insurer may expose the industry as a whole to unsustainable risk levels.

• Incentives and Direct Interventions in the Market by the Public Sector

The government's intervention or support poses both opportunities and challenges. With regards to the benefits provided by the insurance subsidies to those who cannot afford them, as well as in the case of aid due to natural disasters, this type of support may facilitate the financial management of those negative economic effects that are beyond an individual's control.

The various types of interventions and incentives may be divided into three areas:

- **Premium subsidies:** premiums may be broken down by component. The key elements of a subsidy are its structure and distribution, and it should be carefully designed in accordance with the target producers. For instance, if subsidies reduce premium cost too drastically, a moral risk is introduced into the system.

- **Public insurance agencies:** there is a role for the public sector in the market development, but the public sector is not necessarily more efficient and effective than the private sector in terms of direct sale of these instruments.

- **Voluntary vs. compulsory insurance:** ideally, bank credit officers who analyze the risk profiles of their customers should be trained to encourage clients to make use of agricultural insurance beyond simply fulfilling a requirement. Very often, credit officers do not utilize agricultural insurance as an instrument with which to analyze their customers' risk profiles, but merely consider it as an additional corporate requirement.

The steps to be followed with regards to public policies that support the insurance market—once the political-economic decision to back it has been made—are to stratify the risks the sector faces, and to provide assistance to both insurance companies and producers at the three risk levels mentioned earlier. For the lowest risk stratum (self-insurance), the public sector should support production diversity and institutional strengthening through cooperatives.

CONCLUSION AND CHALLENGES

- The sluggish development of agricultural insurance markets alone does not justify providing direct support to the insurance markets. There are flaws in the market, but these could be corrected through the provision of public goods and services as previously mentioned. When considering the various direct support options, it is important that the insurance system not be turned into a social assistance program.

- The low-risk levels and the individual management methods of agricultural risk should be implemented and supported further.

- The private sector should have the incentives to participate in the offer of agricultural insurance in order to promote competition and to offer market incentives; thus, the insured can improve and diversify their risk management strategies, especially in this context of trade liberalization.

- Due to the need for reinsurance in the case of Central America, a regional cooperation agreement should be reached with regards to the systematization of the data and standards that will allow for transaction cost reduction.

Climatic Information to develop the agricultural insurance market: A Proposal for central america

Ms. Patricia Ramírez, Director of Meteorological and Climate Projects, Regional Committee on Water Resources (CRRH), Central American Integration System (SICA)

Central America is highly vulnerable to extreme climatic events, with its agricultural sector being the most severely affected. In the last 30 years, the region lost 9.8 billion dollars, and more than 50% of these losses were in the agricultural sector. This vulnerability has a very strong impact on the Gross National Product (GNP) of our region's nations. Therefore, the issue is very important within the political agenda of these countries and their governments. During the Twentieth Presidents' Summit, which was held in October of 1999 in Guatemala City, a strategic framework was adopted to mitigate the region's vulnerability to disasters, to foster weather monitoring and observation systems, and to develop basic risk analysis tools. Then, in 2002 at that year's summit in Costa Rica, the leaders of the region included the development of innovative insurance within producers' means.

The Regional Committee on Water Resources (CRRH) promotes a regional database to monitor and observe the weather in response to the aforementioned mandates. This Committee coordinates all of the actions taken by the region's countries' on issues related to meteorology, climatology, climate change, and integrated water resource management. The CRRH committee is composed of thirty-eight institutions which deal with matters that are related to water, water power, natural resources, and meteorological services. Moreover, the committee has presented a proposal to create a regional database as a public asset that is accessible to all, as well as being reliable, comprehensive, and controlled in order to reduce asymmetries. This would allow the information gathered to be standardized, and would increase the amount of information available for environmental management.

In Central America there are currently about 100 stations with records which have been kept for over 30 years and that are being used in order to monitor the climate. Nevertheless, not all of the information may be accessed to calculate the climatic risks. At Universidad de Costa Rica, for instance, there is a database with figures on precipitation in different places of the region that is called "Numerosa," but it has no feeding mechanism to enter the most recent period's data.

Therefore, CRRH is proposing the creation of a regional, database that is to be established in one of the Central American countries, the exact location will be agreed upon by consensus, and fed by the regional database with quality controls, standard formats and procedures for collecting accurate information about each country. Thus, all of the information would be kept within a single point of reference.

As can be seen in Chart No. 1, the climatic data would be gathered at the stations of the seven meteorological services of the region, assessed through a process of national quality control, and then sent to the collection center that would be located in Guatemala. After this, the information would undergo additional quality control before being entered into the regional database. The database would be directly accessible and open to any online user. Certification processes would later be created to give full support to the quality of the information. Each country would keep its own data records, but could share them in accordance with the standards and regulations established by the World Meteorological Organization, these being norms that deal with the commitment to freely exchange data for civil protection and prevention purposes. This database would contribute to developing the agricultural insurance market in the region because it would reduce the costs of generating information, assure transparent access to the data both to the insured and the insurer, and guarantee the reliability and quality of the information.

This proposal promises to be sustainable due to the commitment already received from the countries. They will share a minimum of information under the same schemes and within the exchange protocol of the Central American Integration System (SICA). The database would continue to be fed and updated. The data would be very useful for the development of agricultural insurance, so the Inter American Federation of Insurance Companies (FIDES), the Central American Agricultural Council (CAS), the Inter American Institute for Cooperation on Agriculture (IICA), and the Regional Office of the World Meteorological Organization, which supervises and sets the standards for the observations, focus, quality control, and storage of meteorological data worldwide, would all take part in the initiative.

The project components include an evaluation of the information currently available online, the hardware and software conditions, as well as communications systems in the region's countries. This would be followed by a campaign to recover old data (which are not in a digital format) presently stored at state institutions or private companies. The next step would be to prepare a route map for each country to submit their procedures for data observation, transmission, and gathering to an ISO quality certification process.

On the other hand, a Regional Climate Center for Central America is being built following a decentralized model to which each country contributes its respective strengths and resources. The country with the greatest capabiity for data management would handle the information; the country that is best able to manage the models would carry that out, and so on. Everything will be exchanged online to produce short-and-medium term forecasts that support decisions, especially those that are related to investment, crop planting and agricultural campaigns as a whole, and other kinds of economic activities. One step that has already been taken as part of this integration of meteorological services includes the preparation of climatic perspectives.

Another regional project whose negotiations have already started and that is to later become part of this proposal is the creation of the meteorological radar network. The studies carried out on the network distribution are ready, as well as others that would make it possible to issue short-term forecasts in the near future.

CONCLUSIONS AND CHALLENGES

- Given the agricultural sector's vulnerability to natural disasters and its effect on the region's GDP, the Central American states are willing to foster weather monitoring and observation systems.

- As a consequence, CRRH is promoting the creation of a regional database for weather monitoring and observation, to be located in one of the Central American countries, but fed by the regional database with quality controls and standardized formats and procedures for gathering data in each country. Each country would keep its own data, and would share the information according to the standards and resolutions of the World Meteorological Organizations that deal with the commitment to freely exchange data for civil protection and disaster prevention purposes.

- The other regional project that would be later added to this proposal is the meteorological radar network that would allow short-term forecasts to be made.

Inter american observatory of agricultural insurance and IICA's role

Mr. Francois Dagenais,
Director,
External Financing
and Investment Projects
(IICA)

RESOLUTION APPROVED BY THE MINISTERS

In Resolution 411 approved by the Ministers of Agriculture, it was requested that the General Director of the Inter American Institute for Cooperation on Agriculture (IICA) work to promote and facilitate horizontal cooperation among the member states. This collaboration was to be carried out with regards to the systematization and dissemination of successful experiences related to agricultural insurance and guarantee funds. At present, IICA has filled the position of Director of Horizontal Cooperation, and a task force to support this process was recently appointed. This directorate will:

- Request that member states contribute to the exchange of information and experts.
- Request that the General Directorate build alliances with public and private financial institutions as well as with financial organisms to cooperate and join efforts in order to develop and strengthen the agricultural insurance markets.

IICA offers the environment for the government and the private sector to fulfill their respective roles. Thus, it has carried out several studies to aid ministers of agriculture, finance, and others to make decisions. It has also organized meetings and prepared documents that allow it to be noticed if there is a good information system and flow. The premium cost for producers is going to be lower with this information than if there is none available. In addition, it would be easier to convince farmers to sign a contract if they receive enough information through their associations, the ministry of agriculture, their bank, or their companies.

There are two levels of information; the public level may be shared among all the ministries, so it is necessary to look for systems to do so. The private level belongs only to the private companies, and is not going to be shared.

Inter American Observatory

IICA has been working on the creation of an observatory in an attempt to comply with the resolution; its objectives are:

- To develop a platform to share technology, information, and experience about risks in the agricultural sector.

- To offer a place for all the stakeholders (institutions, companies, associations, or individuals) to communicate with each other; this site would make it possible to offer and manage all kinds of services related to agricultural insurance through the new technologies and communications channels provided by Internet.

- To establish the Inter American Observatory of Agricultural Insurance.

A draft project will be prepared in order to define how to implement it, how it could be organized, where the information will come from, who will use this information, how they will use it, and how the project will be financed.
There are four phases for the preparation and implementation of the observatory:

Phase 1:
Analysis of content and functionalities:

At the end of this phase it will be possible to know who has the information, why, how, and when it is required, as well as how much it will cost.

- Identification of information needs
- Definition of population of users
- Content proposal

Phase 2: Design:

- Graphic design of the site

Phase 3: Definition of requirements to start the observatory:

- Human resources
- Software and hardware

Phase 4: Draft the implementation plan:

- Definition of the objective and scope of the project
- Establishment of technological environment to support the site
- Configuration of the task force
- Project planning
- Detailed economic assessment of the implementation
- Project presented to IICA

CONCLUSIONS AND CHALLENGES

✦ Building the Inter American Observatory of Agricultural Insurance in order to provide access to the best technology available in real time, and to use its information to reduce

costs. Therefore, it is necessary that the information produced by the various countries be organized so as to be able to develop other information and idea exchange systems, and identify the actual needs of the producers.

- In the future, many products in agricultural insurance will be on offer. In order to be able to sign a contract over the Internet one day, it should be possible to analyze additional information and study unpublished information.

- The organisms engaged signed an agreement with the Inter American Federation of Insurance Companies (FIDES) that several public and private institutions and other interested sectors would collaborate together on the issue of insurance.

- To create a training and education platform among several institutions, it has been determined that there is a need to create a project directive or steering committee that defines the various orientations.

- The Observatory project was presented to the Inter American Development Bank (IDB) for funding, and it is expected that its future development and implementation will become clearer at the next meeting in Guatemala.

Panel On Agricultural Insurance from the User's Perspective

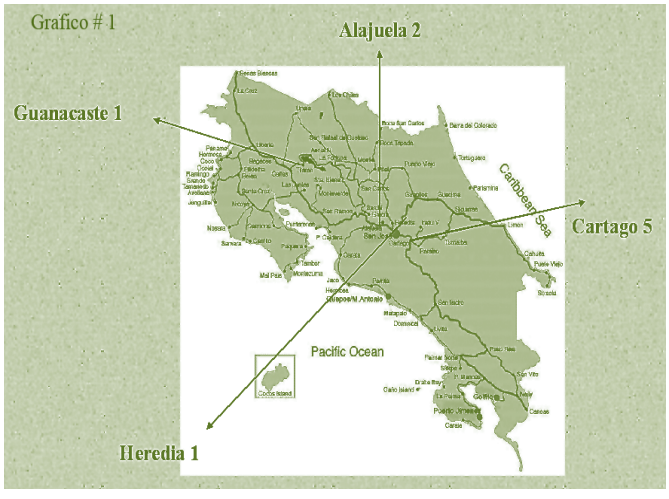
PANELIST

Sr. Geovanny Masís
Corporación Hortícola
Nacional de
Costa Rica

Sr. Carlos Bolaños
Corporación Arrocera
Nacional
CONARROZ
Costa Rica

Panelist: Mr. Geovanny Masís, Corporación Hortícola, Costa Rica

The contribution of horticulture to the Costa Rican economy reaches 9.2% of the value added. There are 8 thousand direct producers, 15 thousand hectares, and the horticulture industry employs 150 thousand people. Faced with opened trade, critical factors are specialization, innovation, and productivity. The latter includes insurance for uncontrollable and unpredictable climatic risk exposure that requires a mechanism to guarantee the loans and reduce risks, thus preventing producers' decapitalization. Between 2001 and 2007, ninety-five thousand hectares set aside for the production of certified potato seeds were insured for a total of three hundred thousand dollars. Disasters amounting to forty-one thousand dollars (14%) were reported.



An important limitation with respect to the development of agricultural insurance is that there is relationship between loans and the crop insurance policies. This relationship should be part of a governmental policy that works as a tool to promote its development while working in a coordinated fashion with stronger producer associations rather than individually with each producer.

As can be seen in Chart No. 1, it is proposed that the country be divided into four zones: Guanacaste, Alajuela, Cartago, and Heredia, and that the forms of insurance be adjusted in accordance with the particular conditions of each area. Furthermore, the state-run monopoly of the Instituto Nacional de Seguros de Costa Rica (INS) [National Insurance Institute] should come to an end, and effective alliances must be created between the private and the public sectors.

Panelist: Mr. Carlos Bolaños, Corporación Arrocera Nacional-CONARROZ, Costa Rica

In Costa Rica, rice is especially important for the country's economy. Rice is basic in Costa Ricans' diet, as they annually consume 54 Kg per capita. Rice comprises 8.65% of the average family's food expenses. A total of 54,093 hectares are planted, and there are 1300 farmers; this number is decreasing due to insufficient support, difficulties in gaining access to credit, price

variability, and losses due to climatic phenomena, plagues, diseases, and the rice growers' limited capacity to face them. For instance, the El Niño phenomenon causes losses that amount to more than one billion colons. Producers, then, have trouble trying to pay off their loans; they run the potential risk of losing the lands offered in guarantee, and find it more difficult to get credit in the future, which limits their possibility to grow, diversify, and modernize. There is migration to other crops, such as sugarcane, which makes it necessary to import rice, thus compromising our food sovereignty and security. Although the government has granted some aid, the assistance that is received either arrives too late or is insufficient; furthermore, it is hard to get such financial aid. Therefore, it is believed that agricultural insurance, even with its limitations, is the best option to protect growers against risk. Yet, today only ten percent of the total planted area is insured.

A task force on banking and insurance was created. This team identified the reasons underlying the low demand for agricultural insurance, and proposed alternatives to improve such insurance and promote its acceptance. Their findings and results are summarized below:

- There is a lack of established relationships and communication with producers, who believe the premium is too high and the amount insured too low when compared with the production costs and expected yield, and consider the deductible to merely be a mechanism or ruse that enables the insurer to pay a lower indemnity or not to pay at all. This causes a lack of credibility. There should be communication with farmers, and information provided about agricultural insurance, its coverage, operation, and the payment mechanisms for the indemnities. Transparency must rule in the assessment of the damages, with strictures and norms related to how the technical evaluation is carried out, as well as clear knowledge of the rights and duties of each of the parties.

- The beneficiaries of insurance indemnities are the banks, and the producers' risk is not covered. Coverage should indemnify the labor and corporate management as well as the damages resulting in yield losses based on real calculations. There should be collective insurance through CONARROZ.

- There is no participation of the producers in the insurance models, even though the law allows it. If the farmers participated, the insurance would be adequate and would become more accepted.

- Current insurance rates for rice do not reflect the disasters affecting this crop because they only cover a very low percentage (10%) of the total area planted. The volume of the insurance per crop and area should be increased in order to be able to better distribute the risks and rates. The insurance should be a guarantee for loans.

- With respect to weather information, although there is ample data about climatic phenomena, it is not used. There are no agreements with the Meteorological Institute to provide information for preventive purposes.

- There should be coordination among public institutions, associations, and banks. To do so, it is proposed to create a Coordinating Commission for Crop Insurance as soon as possible in order to coordinate activities, develop advantageous insurance proposals for the country in agreement with the farmers' demands and payable by the insurer.

PANELIST

Mr. Hugo Herrera
Del Monte-Banana
Development
Company BANDECO

Mr. Roberto Mejía
AMPROSOR
Nicaragua.

Mr. Jorge Zelaya
CAMAGRO
El Salvador

Panelist: Mr. Hugo Herrera, Del Monte-BANDECO, Costa Rica

BANDECO has no local insurance to cover losses on its plantations. Losses that are due to flooding have been absorbed by the company, but they have affected its earnings and have also increased its production costs. It is not possible to get insurance abroad because the current national legislation does not permit it. Thus, free negotiations are clearly indicated. Both bananas and pineapples are enormous crops in the country. Since it is unlikely that any producers have their plantations insured, the risk is very high, and this affects investors as well as owners.

Panelist: Mr. Roberto Mejía, AMPROSOR, Nicaragua

AMPROSOR (Asociación Nicaragüense de Productores de Sorgo/Nicaraguan Association of Sorghum Producers) is part of UPANIC (Unión de Productores Agropecuarios de Nicaragua/ Union of Agricultural Producers of Nicaragua). This union is comprised of rice growers, sorghum producers, maize growers, soybean producers, sugarcane farmers, peanut growers, cattle raisers, dairy cow breeders, and cheese producers. A Mexican insurance company currently operates in Nicaragua. Because of the way this company works and its seriousness and credibility, these producers are very enthusiastic about farmers' insurance. The company promised to pay and it did. Producers do not agree with using subsidies for agriculture because the funds would come from taxes paid by the whole population, thus creating more bureaucracy that is also paid for by the people. The best solution is that the cost of the insurance be included in the bank loans, and that it be considered the loan guarantee. Natural disasters have taken place throughout human history; because of them, there have always been good and bad harvests. Insurance should be voluntary rather than not obligatory because in this way the insurers will have to explain it and convince the users to take out policies. Farmers do not consider insurance to be a bad thing, but their mindset needs to change because, in reality, good business relies on having the insurance policy, but not having to file claims on it when the farmer does well. Good business is for the house not to fall on top of us, even it means paying insurance for a whole year. In short, good business is to have good harvests.

Panelist: Mr. Jorge Zelaya, CAMAGRO, El Salvador:

I represent the Cámara Agropecuaria y Agroindustrial de El Salvador (CAMAGRO/Agricultural and Agribusiness Chamber) and the Corporación Algodonera Salvadoreña [Salvadoran Cotton Corporation], which is part of it. Agricultural insurance in El Salvador started with cotton crops during the 2004-2005 harvest as a governmental effort to reactivate the country's cotton plantations. It received a double risk score before the financial system. The guarantee was collateral on the crop, with coverage of 90%. The loan was also insured, so this was used as a guarantee for the banks. Then, in the 2005-2006 harvest period, Hurricane Stan hit, and farmers claimed their indemnities. The insurance companies were not prepared for this catastrophe, so they started to pay attention to the small print in the policies in order to find a reason not to pay, and no agreement could be reached. So, the matter was taken to the Superintendencia del Sistema Financiero [Superintendency of the Financial System]. Finally, they paid the indemnities, but many growers were discouraged.

Insurance is offered for coffee, sugarcane, and fruit orchards. There are two insurance companies, both of them backed by the government in order to strengthen the value chain: second-tier banking, credit lines with state banks, and a guarantee program. Moreover, 50% of the premium payment is subsidized. In addition, there is a guarantee fund that the association handles, and an agreement was also signed with the textile industry.

The loan should be tied to the agricultural insurance policy in order to create the culture of considering it as a benefit rather than as an obligation. Finally, what is expected of the insurance companies? Together with the government, they should have a fund for disasters. Otherwise, the insurance in Central America is never going to be anything other than incipient.

CONCLUSIONS AND CHALLENGES

- An important limitation affecting the development of agricultural insurance is that there is no established relationship between credit and crop insurance. This relationship should be part of a governmental policy that may be used as a tool to promote its development. At the same time, such a policy should be coordinated by strong producers' associations instead of individually, that is, by each producer.

- It has been proposed, , to divide insurance coverage for Costa Rica into four main areas, these being the provinces of Guanacaste, Alajuela, Cartago, and Heredia. This should be done so that insurance can be adapted to the particular conditions of each area.

- The state-run monopoly of the Instituto Nacional de Seguros in Costa Rica (Instituto Nacional de Seguros, or INS) has to be ended, and there should be an alliance between the private and public sectors that works efficiently.

- There should be communication with producers, as well as education and training for them related to agricultural insurance, its coverage, operation, and indemnity payment mechanisms. Also needed is transparency for assessing damages, with firmly established rules, expert opinions, and a clear knowledge of the rights and duties of the parties involved.

- The premiums are very high, and the amount insured is very low when compared with the expected production costs and yield. The deductible is considered a trick or device that makes it possible to pay lower indemnities or not to pay at all, which creates low credibility.

- The indemnities should include labor costs and corporate management, as well as damages resulting from yield losses based on actual calculations.

- In the case of rice growers in Costa Rica, it is believed that there should be a collective form of insurance through CONARROZ.

- If producers participate, the insurance would be more adequate and better accepted.

- The best solution is for bank loans to include the cost of the insurance, which could at the same time be used as guarantee.
- Insurance should be voluntary, rather than obligatory.
- In Costa Rica, there should be the possibility of getting insurance policies abroad if they do not exist in the country.
- Insurance companies should have a disaster fund that is managed together with the governments. Otherwise, insurance in Central America will continue being incipient.

Closing Session

Mr. Mariano Olazábal, Director of Regional Operations and Integration, Inter American Institute for Cooperation on Agriculture (IICA)

With regards to the current situation, agricultural insurance is now being reborn. There is agreement among the presenters that the circumstances are particularly positive for its development. The situation has changed for good, although it is still possible that some adjustments are required in order to be able to foster the development of the agricultural insurance market.

A warning that has been reiterated during this seminar is that the replication of experiences should be undertaken cautiously. It will always be necessary to take into account the national or regional particularities. Prudence is called for in the sense that innovative insurance models for the region should be carefully analyzed.

The project "Support for the Development of the Agricultural Insurance Market in Central America," which is being implemented as a response to the mandate of the Twenty-second Presidential Summit of 2002, is on the right path in this respect.

Experts suggest that what may be ideal for the region's countries is a mixture of products. There is agreement on the fact that no standard insurance exists that meets all needs, and that it is important to guarantee the participation of the beneficiaries in the design of the insurance products.

Another element is the role of the governments. The experiences made known thus far show that the participation of the governments continues to be relevant, and that the modes of participation vary considerably among countries. Even among the Central American countries themselves, it has been noticed that this participation may assume multiple forms, such as operator, regulator, promoter, policymaker, and supporter through subsidies. Subsidies are a common denominator among the systems presented. However, it may be understood from these presentations that if the Central American countries opt for this option, they should keep in mind that insured capital does not grow at the same pace as subsidies. Subsidies may be useful, in particular, during the initial phases of the market development; moreover, it is suitable that clear indications be provided with regard to which insurable risks will not be object of special state compensation.

An important task ahead for Central American countries is the process of formulating agricultural policies and creating favorable conditions for the development of the insurance market. This process may involve various stages that range from reviewing the legal framework to rethinking the role of the state and the subsequent adjustment of the institutional framework that governs this activity.

An element that the specialists repeatedly addressed here is the crucial role of information to support the development of the market and the design of products especially crafted to meet its

needs. This may have two components: one that gives rise to information products as regional public goods, and another that strengthens or creates a private market with specific products.

The role of international organizations, such as the Central American Bank for Economic Integration (CABEI), the Inter American Federation of Insurance Companies (FIDES), the Inter American Development Bank (IDB), the Multilateral Investment Fund (FOMIN), and the World Bank (WB), has to be considered as well. They are not only interested in participating in the support of this market, but already have several initiatives underway in the region.

Another point of agreement is the identification of the main problems of agricultural insurance. Standing out among these are moral risk, adverse selection, asymmetry with regards to information, as well as difficulties in offering products that meet the needs of small and micro plantations in particular. Certainly, it has been accepted that these difficulties exist, but the message has been encouraging: These problems are not unsolvable. There are no universal solutions, but with imagination and creativity, it is possible to reduce these obstacles significantly.

Mr. Carlos Villalobos Arias, Vice Minister of Agriculture and Livestock of Costa Rica

This seminar should be fruitful in a new direction, not just in Costa Rica, but throughout Central America, so as to be able to have an instrument that makes it viable to do business more safely. Moreover, such an instrument will make it possible to include a series of sectors of the productive field that today are being covered by this system, and to make it possible for different national productive sectors to enter into a much more competitive scheme than is currently available.

During this seminar, we have heard producers talk about their requirements with respect to some indispensable changes, mainly with regards to premiums, the payment percentage, and the use of information available at the institutions—because this information exists, but is not being used. It is necessary to build institutional alliances to make insurance schemes viable for the farmers, so they may get funds from the national banking system. Moreover, the banking system could use this instrument as well, not just on an individual basis, per producer, but rather as an organization that covers all producers in the various productive areas. It is also important to have the state institutions, at least at the beginning, contribute so that the organizations can start operating and becoming aware of the nature and focus of agricultural insurance, and of the need for this insurance to ensure the success of their activities.

We may conclude from this seminar that there is a need to undertake joint efforts at the Central American level in order to develop more comprehensive regional production programs. This would make the insurance scheme easier, and would also contribute to the production chain and its development.

It is expected that this gathering will not just prove to be useful for getting information about the experiences being developed in other countries, but that concrete achievements will be brought into being. Such achievements would allow for the development of a new insurance system that will be able to progress further in this matter.

Mr. Guillermo Constenla,
Executive President
of Instituto Nacional de
Seguros NS
Costa Rica

The Instituto Nacional de Seguros (INS) is the state institution in Costa Rica that is in charge of granting insurance to members of all strata of the society. INS anticipated the need for this type of instrument 38 years ago. Unfortunately, for a variety of reasons, it has not attended to such important matters as agricultural insurance, to the point that now out of the total number of policies INS sells in Costa Rica, only two thousandths (0.002%) are negotiated in crop insurance.

The political will exists; in the current administration both the Ministry of Production and INS, as well as other governmental entities, clearly understand that it is necessary to take the issue of insurance for producers quite seriously, and not just for agricultural pursuits, but also for livestock raising. The truth is that drastic changes are needed to reverse the negative tendency, which implies transformations of a legal nature. Thus, congressional representatives should work with more expediency than usual in order to process the pertinent legal modifications. Without these transformations, it will also be difficult to organize the basic processes that can inject new life into the agricultural insurance sector. Similarly, INS will have to make the needed changes so that with a wider vision, it may design, if necessary, its own insurance systems.

Together, INS and the Ministry of Production are going to take all necessary measures and work to bring about a true transformation in crop insurance and agricultural insurance by providing national producers with the subsidies that are indispensable for their development. Moreover, these farmers are making a great effort; in fact, together with Chile, Costa Rica is one of the largest per capita exporters in Latin America. Therefore, this effort has to be rewarded by the state, which obviously must provide the necessary subsidies.

Conclusions and Recommendations

CONCLUSIONS

Agricultural insurance is one of the most effective instruments for reducing the vulnerability of farmlands and livestock enterprises, and maintaining their earnings when faced with uncontrollable phenomena. It is an indispensable tool for countries with an important rural base.

The agricultural insurance market has not been sufficiently developed in Central American countries; however, the inherent characteristics of Central America increase the potential of agricultural insurance by offering particularly positive conditions. Still, adjustments are required in order to promote the development of the market.

It has been warned reiteratively that the successful experiences of other countries should not simply be copied, as the climatic conditions, the relief provided, and monetary reserves are very different. There are greater possibilities of success when using systems that have been designed with the participation of all stakeholders, by paying attention to the particularities and possibilities of each country and region, and taking into account the farmers' needs and conditions. There is also agreement on the point that there is no standard insurance that meets all needs; thus, experts state that a mixture of traditional insurance and indexed insurance is what would probably work best in the countries of the Central American region. Nevertheless, so far there has been little collaboration on the part of producers in the design of insurance models.

The growers' panel made it evident that producers feel that their needs and requirements are not being met, and that relationships and communication have not been established with them. They believe that premiums are too high, and that the amounts insured are very low when compared with their production costs and expected yields. Moreover, they consider that policy deductibles are tricks, that is, devices that enable insurers to pay lower compensation, or to even avoid payment of such awards altogether, which causes a lack of credibility. Another limitation expressed is that there is no relationship between crop credits and insurance, so they need a mechanism to guarantee the loans and minimize risks to prevent the producers' decapitalization.

Another relevant aspect that emerged in the seminar is that some Central American countries lack information systems. Specifically needed is information about the risk maps, insurance systems and the characteristics of each type, along with financial systems related to agricultural insurance. Moreover, they need information that provides references to geography and types of crops, climate change, and environmental impact, especially in areas that are critical from the point of view of the agricultural productive sector. These data gaps make it difficult and expensive for insurers

and reinsurers to get such vital information, which in turn increases premium rates. This situation also increases the ambiguity between producers and insurers about the risks being covered.

It was concluded that the best opportunities are found in the mixed "public-private" insurance models. Governmental participation is relevant, and the form that this participation takes varies widely among Central American countries. Among the other roles that these governments assume, they function as operators, regulators, promoters, and policymakers, as well as supporters when they subsidize premiums. Subsidies are a common denominator among the systems presented; however, specialists agree that they can be especially useful at the initial stages of the market development (i.e., for premiums) and that the key is how states structure and distribute this support.

There was agreement with regards to the problems that affect agricultural insurance. These difficulties have included moral risk, adverse selection, both the lack and asymmetry of information, obstacles when trying to offer products that meet the needs of growers, particularly small and micro plantations. Added to these drawbacks are the weak marketing strategies of private insurance companies, and cultures that have little receptivity toward agricultural insurance. Nevertheless, it is recognized that these problems may be solved or mitigated with creativity, political will and governmental support, access to information, training, and technical assistance.

This seminar successfully met its objectives, including the signature of the agreement between the Inter American Institute for Cooperation on Agriculture (IICA) and the Inter American Federation of Insurance Companies (FIDES). This agreement will allow joint actions to be carried out in order to promote technical collaboration among countries and regions on agricultural insurance, and to mechanisms to decrease agricultural risks by providing a framework that can be used as the legal base for future agreements.

RECOMMENDATIONS

There is a need to make an effort at the Central American level to develop more comprehensive production programs for the region that not only facilitate agricultural insurance systems, but also the development of a productive chain.

This is an important task for Central American countries in order to be able to formulate agricultural policies and create favorable conditions for the development of the insurance market. Such conditions would range from reviewing the legal framework to rethinking the role of the state and, in turn, bringing about the adjustment of the institutional framework that governs this activity. A need was also identified to clearly indicate what insurable risks should not receive any special compensation, and what types of catastrophic events justify the participation of the government and the international community so as to reduce the ambiguity between producers and insurers with regards to the risks to cover.

It is also necessary to promote producers' associations or cooperatives that would allow them better access to information and operating systems, as well as make it possible for them to carry out negotiations as a group rather than individually. Better responses to producers' demands and opening the channels of communication, along with providing explanations and training about

agricultural insurance and its coverage, operations, and indemnity payment mechanisms, are also needed. There should be transparency in the assessment of damages through rules that are clearly stated, consultation of experts for their opinions, and mutual knowledge of the rights and duties of all the parties concerned.

The information systems and necessary infrastructure to gather, process, and store data for the development of the market and to increase the sector's competitiveness, not just with respect to insurance, must be improved. Access to this information has to be reliable and timely, so it is essential that private and public responses be undertaken in order to guide the needs of the agricultural sector. In this sense, more training and dissemination of pertinent information to governments, producers, the financial system, and to other stakeholders is needed. This information sharing would allow a culture to be built around agricultural insurance so that it could be considered an asset rather than an obligation, and would also facilitate general knowledge and understanding about new insurance products.

Novel or innovative insurance modes should be analyzed carefully before expanding their use in the various regions. The characteristics and possibilities of the region as well as the needs and requirements of farmers have to be taken into account. Both traditional agricultural insurance and indexed insurance have their particular role in risk management at the producer and the company level, and both types of instruments can be crucial to make it possible to finance rural projects.

The private sector should offer agricultural insurance to foster competitiveness and to provide market incentives so that insured growers will be able to improve and diversify their risk management strategies.

It is proposed that a Coordinating Commission for Crop Insurance be created as soon as possible. This is needed not only in order to coordinate activities, but also to carry out advantageous insurance proposals for the region as demanded by farmers and that may be assumed by insurance companies. Thus, better coordination can be achieved between public and private institutions, producer associations, financial entities, and international organisms.

Annex

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