



Interview with Salvador Mayoral, chairman of the Latin American Association for the Development of Agricultural Insurance (ALASA)

«There is not just a single model for agricultural insurance»

Latin America has been identified as one of the world's regions with the greatest interest in agricultural insurance; this is a consequence both of its production capacity and of the need to fix and guarantee income in rural areas. This region is a universe of contrasts and experiences that in ALASA has a forum for exchange and contact, as is explained by its chairman, Salvador Mayoral, and as we could see during the VII Congress of this Pan-American institution which was held in May in Seville (Spain).



The Mexican Salvador Mayoral is 47 years old and a graduate of the economics faculty of the Universidad Autónoma de México. He has also been awarded qualifications in Latin American Economic Policy and Public Finances and Planning by various bodies, amongst them the United Nations. After a long career in the Mexican public sector, in the most part spent in the Directorate for Public Credit and Development Bank within the Secretariat of the Treasury and Public Credit Department, he specialised in economic policy of the rural sector, the banking sector and agricultural insurance. He joined Agroasemex, a public agricultural insurance institution, in 1995 as consultant to the management. He was later promoted to head of planning and deputy technical general manager on February 16, 2001. Jointly with this position he became chairman of ALASA on the same date.

Question: What benefits does agricultural insurance provide in the area of agricultural planning in Latin American countries?

Answer: We start from the viewpoint that agriculture insurance is an efficient instrument for those public policies that aim to overcome the backwardness of rural environments and to develop the agri-

cultural sector's full potential in Latin American countries. In itself, this insurance represents an important element in the rural chain of production; it reduces the sector's vulnerability; creates conditions of greater solvency in the production units, avoiding decapitalisation due to the effect of random events, and reduces the need for public resources to mitigate the

losses produced by catastrophic events. In the last few years agricultural insurance has taken an evermore important place in planning the development of the region's rural areas, this has been helped by the liberalisation of the markets and a number of factors which have changed the profile of rural risks. Producers are being faced by complex risks as a result of



globalisation. In addition to events arising from the climatic or biological profile of each country there are other sources of constant worry such as market fluctuations, environmental risks and risks arising from the inappropriate use of production techniques. And with respect to livestock insurance, there is the possibility of plagues and epidemic diseases with high mortality rates spreading with between countries. Above all, the development of agricultural insurance and new insurance schemes is something that is fundamental for the welfare of rural families since, among other things, it contributes to protecting the income of the rural population, which in this way is not forced to move to big cities.

Q: How is agricultural insurance developing in Latin America?

A: First of all it should be said that it is not possible to talk about homogenous development, rather various degrees of development depending on the area. However, the development of new risk management instruments and reliable information systems is still pending in the region. In general terms, there are countries where the government plays an important part and the private sector collaborates in the development of agricultural insurance. In these, the state subsidises a percentage of the producers' insurance costs, increases the insurable sums and, in some cases, covers the risks that are not insurable by the private sector. On the other hand, there are other countries that have not managed to develop a system for the management of risks in the rural sector –neither public nor private– because of the instability of their economies or the lack of public resources. In these countries the strategies in order to deal with catastrophic situations

relegate or ignore the capacity of agricultural insurance to mitigate the effects of these. In these cases, in general, companies insure specific risks that do not encompass in the producers' whole exposure; as a consequence of this there is not sufficient incentive for the producer to become part of the insurance system. In summary, the development of agricultural insurance in the region is limited because of the presence of adverse economic conditions, which are reflected in a lack of, or reduction in, governmental resources to promote risk coverage schemes.

Q: Do the developments in aquiculture form part of agricultural insurance?

A: Aquatic and fishing activities are a real alternative to increase the range of food products in our countries, generate foreign currency and stimulate regional development. This sector therefore has enormous potential for the insurance market and its products. Whether it falls within the range of agricultural insurance depends to a great extent on the development conditions of these activities in each country.

Q: On an International scale, the agricultural insurance systems of the USA, Canada, Mexico and Spain have great prestige. Is it however possible to talk about an ideal insurance model?

A: The basic differences between the agricultural insurance systems have to do with coverage and the development and participation of the public sector. The United States has an agricultural insurance system where the state actively participates by subsidising the insurance premium, covering private insurance's management costs, reimbursing the private sector's underwriting costs and providing reinsuran-

ce and even catastrophe cover. Canada has a harvest insurance programme, a subsidised savings programme for farmers (NISA) and an insurance network which guarantees the individual income of each production unit by a percentage of the past income of that unit (AIDA). Spain has a public and private joint participation system where the state plays an important role by providing premium subsidies and reinsurance whilst the private sector administers the programme and contributes to covering a portion of the risk. In Mexico we are undergoing a process in which the federal government –in order to provide the necessary incentives to stimulate greater participation of private and social players in the agricultural insurance markets– decided to rethink the presence of Agroasemex, and orientate it as a promotion instrument, with functions as reinsurer and development agency, responsible for partly backing the operations of the economic agents in the markets, and the deepening of this through the design of schemes which provided broader cover and the channelling of the subsidy of the cost of insurance premium for the producer, which on average is around 30 percent.

International experience shows us that there is no single unique ideal model of agricultural insurance. But the best development is achieved in countries where the producers, the insurance companies and the governments work together in jointly designing and promoting new schemes.

Q: With regard to your country, Mexico, what is the current situation of agricultural insurance and what are the present-day functions of Agroasemex?

A: It is going through profound changes. In order to boost the development of the national rural insu-



rance system and due to the need to expand the markets, the federal government decided to transform Agroasemex into a public policy instrument which seeks to standardise the system for managing rural risks and to extend agriculture insurance as a means of decreasing uncertainty in rural areas. Agroasemex acts as a development agency, in other words it is a federal government instrument in order to promote the participation of the social and private sectors and to develop the markets through the design of schemes which widen geographical, production and risk coverages, and bring this to rural segments which still do not have access to insurance. It also captures fiscal resources to be used for premium subsidies for producers. Another important function which it has is as reinsurer and to support the operations of economic agents which operate in the rural markets and to encourage the participation of reinsurance agents, it aims also to develop alternative schemes and instruments which allow costs to be decreased and to expand the frontiers of what may be covered by agricultural insurance. In summary, Agroasemex is focused on seeking risk coverage instruments, including types of alternative risk transfer.

Q: How do the new technologies contribute to the improvement of agricultural insurance?

A: These technologies affect all areas of production and the market; it is obvious they form the driving force behind the changes. Computer and data transmission technologies allow more people to have access to information and for this information to be of better quality in all areas, from availability of economic data to meteorological and phytosanitary information. Technologies are used in all production processes, packing, sto-

rage, transport evaluation, etc. We already know that good information allows appropriate decisions to be taken and that, if this information is of high enough quality, this leads to the development of structured insurance formulas such as derivatives, bonds, futures and options.

Q: On what foundations should agricultural insurance be based for it to be well accepted and have continuity?

A: All analysts agree that success depends on the joint participation of private insurance and reinsurance companies together with producers and to have public policies that act as an incentive to the development of the market and the design of alternative agricultural insurance schemes that allow them to expand. It is clear that neither governments nor private initiative can, on their own, provide the market with the types of guarantees that producers demand. This requires the combining of efforts in the processes of design and financing, together with the development and implementation of the systems and products. Even more than this, multi-line policies or those generating a financial yield or income, to mention only a few, have been viable in countries that have a transparent and ordered legal and institutional framework favouring the interaction of the players, the harmonisation of the insurance and reinsurance industry and the consequent development of the market. It is true that international experience shows that the schemes that cover the range of risks which producers and the governments themselves are interested in with the greatest efficiency and in the greatest proportion involve a significant participation of the state in legal, technical and economic aspects.

Q: Is it possible to conceive of harvest insurance without government subsidies? How do you see this aid within the context of the WTO discussions?

A: There are many ways of viewing these matters. For example, in Europe, Germany has an entirely private agricultural insurance system where the state does not subsidise the cost of the premiums. In a perfect world, the insurance markets should be able to provide various risk management tools for the rural sector, but the problems inherent in the markets and –given the unstable nature of agriculture– the possibility of systemic risks which limit the development of a private market, make the intervention of governments justifiable and necessary. This is a type of insurance in which the characteristics which define a peril as being «insurable» are not set, either because the risks are not independent or due to biased information involving high monitoring costs in order to reduce adverse selection and moral hazards. Also, the possibility of systemic or catastrophic hazards motivates the search for financial solutions, mainly involving international reinsurers. But the agricultural reinsurance markets are limited because of the high degree of specialisation which they require, and while it is true that international financial markets allow mechanisms to be developed to distribute risks with a higher positive correlation than agricultural risks –such as prices, rates of interest or exchange rates– agricultural production risks do not show the same degree of correlation as do, for example, price variations. It is then that the state must intervene in order to guarantee the continuity and development of agricultural insurance, creating, among other aspects, the legal infrastructure for the development of risk coverage



markets and a reduction in the cost of agricultural insurance through premium subsidies.

With regard to the second matter, derived from the redefinition of global policies which are consistent with the openings of commercial flows and the decrease in those domestic aids with distorting economic effects, for the first time in many years farmers have markets which are freer in terms of production and marketing. There is greater freedom on the part of the producer to take decisions, which also implies greater exposure to market risks. The integral handling of risks has

become a fundamental element in the adjustments towards market conditions that are increasingly liberalised and efficient, but also more demanding and selective, which with time will incline agriculture towards specialisation and the exploitation of its comparative advantages. It is important to point out the growing importance of agricultural insurance within the framework of the international agreements of the World Trade Organisation (WTO) where aid that is given for its development has, under certain conditions, the consideration of internal aids which are not subject to the

obligation of reduction, which is an inducement towards exploring new types of aids and more efficient public policies, with regard to the necessities and characteristics of each country. This gave rise to the challenge to adapt our insurance systems to an economic environment which requires an increasingly specialised coverage of specific risks, which will affect the restructuring of the insurance sector and will push it to cross boundaries and link itself to those markets –principally financial– which complement and increase its capacity to provide a solution for these new types of risks.

REGIONAL COOPERATION

Q: ALASA has been a point of reference for Latin American agricultural insurance from the time it was set up. How was this achieved?

A: ALASA was founded in 1986 and since then has held many meetings and carried out many activities with the aim of promoting training, exchange of experiences, technologies, schemes, products and services. It has in addition to this maintained an active presence in all bodies relevant to the insurance and agricultural sectors. Thanks to this we have achieved significant advances in the development of our organisation, which in this way contributes to the analysis, discussion and progress of appropriate solutions for the region. For the last 16 years in ALASA we have seen the agricultural market change and we have been capable of evolving. I think that maybe the success of our organisation lies in an attitude that is open to dialogue and the collaboration of all the members of ALASA, together with a full awareness of the importance of agricultural insurance as an instrument to promote the development of the rural sector in our societies.

Q: ALASA recently held its seventh international Congress in Seville, what were its main features?

A: One of the main contributions of this Congress has been the open and fruitful exchange of experiences that helped to broaden our horizons. I believe that the participation of reinsurers was a fundamental aspect, as was the presentation of new products that broadened the limits of insurance, and the participation of international bodies such as the WTO, the World Bank and the European Union, which bring a broader vision. The comparison of agricultural insurance schemes greatly enriches the perception of the shared vision of risks that we try to have.

Q: What future strategies is ALASA, of which you are chairman, creating?

A: We are working so that the exchanges of experiences in our organisation are reflected in products that bring concrete benefits to all our members. In order to do this, we have to transcend the traditional concept of a representative body and move towards another concept of a market that brings value and is of use to both its members and to the other operators in the sector. Our organisation is a space to innovate, suggest solutions, promote strategic alliances between companies and design systems and products with benefits for all, in summary to maintain proactive and constructive relations between its members. But above all, it is an opportunity to exchange experiences, which is why we will centre our efforts on the development of the communication and the dialogue instruments which allow all the information –of which there is much– to be spread and to be available to the various institutions and bodies which deal with the agricultural sector.



MEASURE AND TRANSFER RISKS

Q: In general, is the historical meteorological information for determining accumulation control areas reliable?

A: This is a key point. In the same way that agricultural insurance shows various levels of development, there are cases of countries with a long tradition of meteorological measurements, with modern electronic measuring infrastructures and, therefore, very reliable information. Other countries only have rudimentary means, or historical information from only a few decades ago with gaps and errors in their records, which however –and within certain limits– can be remedied through mathematical methods and models. Why is this subject important? The answer is that the last few years have seen the explosion of alternative risk transfer systems such as catastrophe bonds, climatic derivatives and indexed insurance. The first two, in the main, being used as substitutes for traditional reinsurance because of its high cost. The catastrophe bonds cover excess of loss or the outermost layers of probability distributions; the derivatives cover the intermediary layers of the distribution and permit higher occurrence frequency risks to be transferred, indexed insurance is an alternative in order to reduce transaction costs because it does not require loss adjustment. The development and management of any of these three systems (derivatives, bonds and indexed insurance) requires reliable meteorological information and for a number of processes to be carried out, for example:

- The mathematical association between the climatic events and the losses.
- The actuarial calculation of the frequency of the climatic events under study.
- The rating of the event to be insured.
- Verification of the event in order to, if applicable, pay compensation.
- Monitoring of climatic conditions.
- Unreliable information implies an increase in the base risk, in other words that the risks that are intended to be transferred are not well represented by the climatic events with which they are associated. Speed and reliability of information is necessary in order to generate secondary markets. The involvement of supply and demand agents is impossible without easily available rapid information. The participation of these agents gives the market liquidity and allows risk intermediaries to balance their portfolios.

Q: Reinsurance has traditionally shown great prudence in agricultural risks, what message would you now send to reinsurance companies?

A: The agricultural reinsurance markets are limited due to the degree of specialisation which they need, and due to the fact that the income which is expected in order to cover underwriting costs and possible compensations is frequently rather unattractive for the private sector. However the present-day situation of the market in the region allows an increase in the demand for reinsurance in the next few years to be inferred, this will be accompanied by greater levels of retention, therefore the participation of international reinsurers will continue to be fundamental for the development of the market. It is clear that the viability of agricultural insurance institutions is closely linked to the achievement of synergies with reinsurance companies in order to share risks. The support of reinsurance is necessary so that, together with the insurers, new possibilities are explored which allow agricultural insurance to be viable and to spread. In this respect, the promotion of more efficient risk management in the rural sector demands that the conceptual framework be broadened further than that related with the formal models of agricultural insurance. Joint collaboration is the only way to promote and design better ways to protect the balance sheets and sources of income of insurance and reinsurance companies.

After September 11, the international reinsurance sector was confronted by the pressure and the question of whether its business model should include changes in order to adapt to an environment in which the size, prognosis and global nature of the risks continued to develop to a greater extent than rational expectations. Difficult decisions have to be made with regard to exclusion clauses, sectors of cover and risk assessment. However a long-term view will certainly allow the international reinsurance sector to see the massive implications that may be brought about by a world economy with stable indices of low inflation and, together with this, low rates of interest and a decrease in return on financial investments. When confronted by this environment, insurers and reinsurers need to guarantee a stable flow of income; this will take them to increase their markets and confront the development of derivative products that will surely be created as new risk management instruments.