

Rural and technological innovations in the new model for development

- **Agrifood chains:** an instrument for strengthening the agricultural and rural institutional framework
- **The U.S. Farm Bill** and its impact on the WTO negotiations
- **Rural tourism on the rise in Uruguay**
- **Food security:** the case of Kwamalasamutu





Foreword

4



Social and technological innovations

in the new development model for rural territories

6



Agrifood chains:

a tool for strengthening the institutional framework of the agricultural and rural sector

26



CREDITS

- **Coordination:** Federico Sancho
- **Editing:** Olga Patricia Arce
- **Secretary:** Maria Elena Cedeño
- **Design and layout:** Karla Cruz Mora
- **Translation:** Language Services Unit
- **Printed:** IICA Headquarters

Authors in the current issue: Carlos Julio Jara, Miguel Garcia-Winder, Hernando Riveros, Iciar Pavez, Daniel Rodriguez, Frank Lam, Joaquin Arias, Danilo Herrera, Antonio Donizeti Beraldo, Maren Mackinnon, Alejandra Bentancur, Adrian Sanchez, John King, Andrew Baker, Cromwell Crawford, Brahma Ramsoedit, Lori Finch and Melanie Gardner.

Editorial Board: James French, Carlos Jara, Rafael Trejos, Ricardo Molins, Miguel Garcia, Enrique Alarcon, Bernardo Badani and Gustavo Cardenas.

Pictures: Photos.com, CENTA-El Salvador, IICA Uruguay, IICA Suriname.

ISBN: 978-92-9248-147-6



The U.S. Farm Bill and its impact on the WTO agricultural negotiations

39



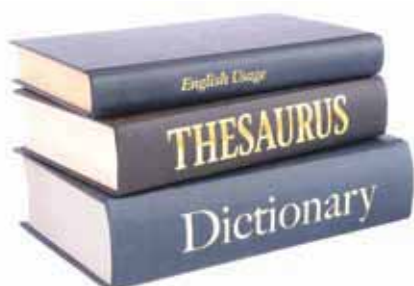
Rural tourism in Uruguay: a growing trend

52



From flood relief to food and nutrition security to income generation in Kwamalasamutu, Suriname

61



Diversity in agricultural terminology of the Americas

70



The Inter-American Institute for Cooperation on Agriculture (IICA) has been emphatic in calling attention to the need for a new model for development, one that is based on the rural economy and multidimensional agriculture and will ensure the availability of sufficient food and income, provide dignified work, preserve natural resources, etc., as a means of keeping our societies free from social unrest.

To resolve the problems and tap the opportunities emerging in the global agrifood sector it will be necessary to propose new ways of thinking and acting in the political-institutional, production-trade, ecological-environmental and

sociocultural-human dimensions of the sector. All these challenges have been reflected in the hemispheric agenda by applying the Agro-Matrix, used to define strategic actions and renew the guiding framework of the AGRO 2003-2015 Plan, which was discussed at the Fifth Ministerial Meeting "Agriculture and Rural Life in the Americas," held in Jamaica from October 26-29, 2009.

In this context, and in the interest of contributing to the improvement of agriculture and rural life in the Americas, the present edition of the magazine *COMUNICA* offers a series of reflections on the need to develop joint public-private mechanisms for carrying out actions in the territories.



The different thematic areas of the Institute offer perspectives, experiences and points of view that contribute to developing this new model for development, via: social and technological innovation, within the framework of the solidarity and participation of local actors; the strengthening of agrifood chains and the need to develop a new institutional framework and types of technical cooperation; rural tourism, its legal frameworks and mechanisms to motivate citizens to acquire training in and promote this type of tourism; and the coordinated work among assistance organizations and international cooperation organizations that, in the face of natural disasters, become the source of new solutions and bring hope

to those who on many occasions have nothing left.

Also included are other topics of great importance for equitable and comprehensive dialogue among countries, such as legislation governing international agricultural trade and its impact on political decisions between countries, as well as the need to develop highly effective controlled agricultural terminology systems which reflect cultural differences and strengthen the management of information.

The Editorial Board welcomes contributions on these and other topics of interest in developing new ways of working in agriculture. **COMUNICA** is also available in electronic format at www.iica.int.



Photo: CENTA

Social and technological innovations in the new development model for rural territories

Carlos Julio Jara¹

Abstract

This article advocates the need to promote social innovation in the rural world, in a context of participation and solidarity, with the aim of guiding processes of productive diversification alongside social inclusion policies, such as the conservation, restoration and rational use of natural resources. In Latin America, the central governments have shown growing political will to apply rural development strategies that seek to “territorialize” public policies so that local governments, together with the social stakeholders, can democratically define their own management models and sustainable development priorities. Certainly, a country’s greatest potential and wealth lies in its own people. Therefore, this document proposes to reexamine the value of the people’s accumulated know-how, promote access to knowledge and support the creativity and innovative talent of the social grassroots and the local communities settled in the different territories. This implies establishing an inclusive system for processing social initiatives.

¹ Director of Sustainable Rural Development of IICA, carlos.jara@iica.int

Key words: *social innovation, creativity, social fabric, rural territories, sustainability, sustainable rural development.*

Mega-trends and distorters of the rural world

In a context of multidimensional crisis, filled with uncertainties and enormous territorial imbalances, it is urgent to define common strategies for the sustainable development of agriculture and rural life. These strategies must be innovative, inter-sectoral, inspired by new-generation concepts, new paradigms and ethical principles, capable of positively influencing the international contexts, according to changing territorial dynamics.²

In this sense, the world economy constitutes an interdependent whole. The current global financial crisis has weakened the economic structure built in recent years and has changed a number of strategic variables, such as the flow of remittances to national economies, credit restrictions, the freezing of foreign and national investment, and the decline in growth, all of which modify development prospects.

Nearly all the countries of the region now operate in a highly unstable context. There are no orthodox solutions for the current cycle, though it is clear that the alternatives must not focus solely on profitability, which would further

It is urgent to define common strategies for the sustainable development of agriculture and rural life. These strategies must be innovative, inter-sectoral, inspired by new-generation concepts, new paradigms and ethical principles, capable of positively influencing the international contexts, according to changing territorial dynamics.

increase inequality and social exclusion, weaken the national community, create political ruptures and produce environmental degradation.

We are sailing in chaotic, uncertain and stormy seas. Strategically navigating



² A crisis exists in the traditional models of interpreting the rural world. There is a risk of continuing to do more of the same, because that is what is dictated by common sense. The system of “modernizing” ideas that has helped us to change the “reality” of agriculture is called into question. We are challenged to redefine innovation itself and particularly its institutional framework, the game rules defined by a particular system of power. We need a change of paradigm in the scientific-technological policies that have led to the compartmentalization of reality. There are emerging situations and contexts that must be explained in another way, for which the old theories are no longer useful.



► *The current global crisis forces us to change our perceptions of agriculture, of rural territories and small farmers' organizations, understanding these as drivers of a process of inclusive and sustainable growth, seeing their potential to reduce hunger and unemployment and to adapt, at the territorial level, to unforeseen changes in the environment.*

through these implies redefining national development priorities, revaluing the agricultural sector and the heterogeneous rural worlds. The current global crisis forces us to change our perceptions of agriculture, of rural territories and small farmers' organizations, understanding these as drivers of a process of inclusive and sustainable growth, seeing their potential to reduce hunger and unemployment and to adapt, at the territorial level, to unforeseen changes in the environment.

Although agriculture now plays a more important role, the contexts, territorial configurations and cultural influences are so diverse and changing, that there is no single model of innovation and technology transfer that is universally valid. We are challenged to rethink our actions and our institutional arrangements.

Agriculture is not the sum of primary products, but rather an historical framework of multiple social relationships, production systems and livelihoods, institutions, cultural

patterns, knowledge of cultivating the land, connections with the natural milieu, market links, among others. In general, innovation is not only the result of applied research – efficient, profitable and capital-intensive- but is the outcome of social creativity, a manifestation of collective intelligence.

Innovation must provide useful and sustainable solutions, not only to the production-related demands of farmers, but also to the complex and multifunctional needs of local communities. For this reason we must listen to and value the initiatives and accumulated knowledge found in “territorialized” communities, support autonomous small-scale peasant (*campesino*) production systems and respect their cultural characteristics.

Given the complexity and heterogeneity of the territories in which small-scale family farmers are immersed, there are no innovation systems capable of responding in a timely and appropriate manner to the immense variety of rural, agricultural and non agricultural demands. Each territory has complex challenges, processes of change, intercultural dialogues, a set of variable patterns. It is therefore necessary to encourage open systems of dialogue, exchange and mutual learning, and to build bridges between scientific progress, communication-information and local knowledge. Coordinated groups of local producers in the territories must find solutions to their changing problems, based on new types of “*know-how*”.

In most of our countries, the structural order of the rural milieu remains polarized. It is profoundly affected by

Is therefore necessary to encourage open systems of dialogue, exchange and mutual learning, and to build bridges between scientific progress, communication-information and local knowledge.



problems arising from “*minifundismo*” (small holdings) and the concentration of land ownership. With the myth of universal modernization, the productivist concepts, methodologies and practices derived from the paradigm of the “green revolution” were disseminated or reproduced.

Conventional science, with its simplified view of the situation, limited to the explicit material order and to profitability, has led us to multiply the risk of error. Technical progress would lead us toward a growing competitiveness, reflected in low wages, low investment in quality education and a negligent use of natural resources. It was assumed that the mere increase in agricultural production and productivity would lead to progress, without mobilizing the social energies of small-scale farmers so that communities would feel responsible for the development of their own territories and outcomes.

The sector’s response to the challenge of competitiveness has essentially relied on the generation of technologies and techniques applied to the physical and biological aspects of agriculture, while in some measure ignoring social, cultural and environmental aspects, which complement a set of social or “soft” technologies that enrich the social fabric. However, we have not known how to combine the rationale of production methods and techniques with the social and cultural demands of communities in the territories (Touraine 1998).

That vision overlooks the fact that sustainable innovation is essentially a process of collective creation, which springs from proximities, from contacts

and also from the power of negotiation (Bohm 2002).

The institutional framework for agriculture, including the technological innovation and research systems, as perceived by most stakeholders, is very far from functioning as a system of inter-related subsystems. We do not know how to coordinate the various institutional systems. Institutional discoordination, internal incoherence and cognitive dissonance prevail, which translates into inefficiency, inconsistency and tends to reproduce political ruptures by sustaining islands of power and influence that eventually manifest themselves as conflicts.

It is not difficult to perceive the inter and intra-sectoral fragmentation and the bureaucratic nature of the management systems. Democratic life, social integration, quality, institutional efficacy and respect for cultural diversity are the main values affected.

There has been a negative perception of the creativity of peasant farmers, of those who are still immersed in rural life. We recognize that many of the social and productive needs of the poorest farmers were not satisfied by the prevailing free market model. It is necessary to reconfigure our strategic interests in the area of technological innovation and transfer, to make changes in terms of what the institutions involved have to offer and what rural society and productive organizations

demand, more at the territorial level than at the level of individual farms.

Creativity is always alive in the social fabric of the rural milieu. We must have confidence in the skills developed by *campesinos*, over generations, to adapt to change. Local knowledge exists, even though the actors of rural communities

are not conscious of their abilities. All practices that translate into cultural responses to contextual demands express the accumulated *know-how*. Territorialized rural communities will adopt sustainable development processes only if they can create and provoke the emergence of innovations with sufficient speed and adaptability. Local companies will remain in the markets only if they can develop knowledge and use technologies more quickly than their competitors, but within cooperation networks³. The challenges to be met are diverse and unexpected, and therefore local communities must be capable of providing creative, dynamic responses.



Photo CENTA

▶ *Local companies will remain in the markets only if they can develop knowledge and use technologies more quickly than their competitors, but within cooperation networks.*

Social innovation

In the context of a new political approach to the development of agriculture and rural life in the Americas, it is essential to pursue and re-invest in a new process of technological development and social innovation. It is necessary to adjust to the dynamics of a new era, to the new pace of scientific and technological change, to the contexts of open trade and economic crisis, to new production scenarios, to the threats of climate change and the depletion of natural resources, to the decline in sectoral investments and to the negative impacts of an “oil-dependent agriculture.” All this requires environments that facilitate mutual learning, communication and exchange in society, increased organizational capacity and active participation in public life.

3 Networks do not define objects but rather are a metaphor of the social sciences that enables us to visualize the plurality of processes and the set of relationships that are “woven” and that organize themselves through the will of the actors involved, thereby articulating structures that are usually dispersed.

Nowadays there is greater political awareness of the need to expand opportunities and access to knowledge and innovation for the traditionally excluded segments of the rural population. Democracy and the social movements are gradually creating the social conditions that seek to guarantee the right to inclusive, profitable and sustainable rural development. There is also awareness of the enormous social and ecological debt to be paid. This is a task fraught with conflict that requires new paradigms and approaches to deal with the complexity of the agricultural and territorial structures. It also requires systemic thinking that takes into account the different rationales and interests of a broad range of stakeholders, together with ethical values that prevent us from taking social and ecologically irresponsible decisions.

How can we respond to the technological demands of small farmers in the context of a free-market ideology that has virtually abandoned them to their own fate? By promoting social innovation and the application of *campesino* intelligence to complement the efforts of the State and the private sector, in order to develop a comprehensive solution. We are challenged to facilitate - politically and culturally - the emergence of dynamic social innovation at the grassroots level of society. It is possible that the capacity to adapt, adjust, recover and learn something new and useful through

By promoting social innovation and the application of campesino intelligence to complement the efforts of the State and the private sector, in order to develop a comprehensive solution.



Technological innovation, which is part of social innovation, is essentially a cognitive, individual and collective expression. Its multiplication and social transmission, its resonance in the territories, occurs through dialogue, shared learning and the attitude that we can almost always learn from another person or community.

dialogue and participation, is much more important than the demand to produce a new productive “material.”

Our societies need to activate democratic processes that help unblock relations that impede the creative flow: to use different sources of production and dissemination of knowledge with sensitivity and intelligence; to be respectful of the cognitive skills of rural communities; to consider the intercultural fabric as a social resource that encourages creativity. Because, “the more ecologically and ethnically diverse the processes, the more options they seem to have to withstand the ecological and social crises and, at the same time, be creative and innovative” (Villasante 2002).

Technological innovation, which is part of social innovation, is essentially a cognitive, individual and collective expression. Its multiplication and social transmission, its resonance in the territories, occurs through dialogue, shared learning and the attitude that we can almost always learn from another person or community.

The sustainable development of territories requires critical actors familiar with complex thought, multicultural dialogue, capable of influencing decision-making processes and producing a culture of citizenship. There is an urgent need to value the creativity of local knowledge, to systematize the accumulated experience and to recognize skills as manifestations of social intelligence (Schvarstein 2004).



It is urgent to build inter-institutional dedication and commitment and to imagine management models that can deal with complexity. We must gradually move away from the mechanistic, vertical, lineal, deductive, dependent paradigm.

The current situation of the global food production system and the uncertainty of climate change force us to define a new system of innovation, consistent with the development of a sustainable agriculture, which requires a new type of thinking - systemic, complementary, relational, multidimensional and ecological.



Photo CENTA

At regional level, many institutions are involved in technology innovation, research and transfer efforts. However,

most of these centers continue to cling to the notion of quantitative growth, with its emphasis on productive efficiency, and do not regard themselves as a network of complementarities, something that generates uncertainty and hierarchical relationships. It is therefore urgent to build inter-institutional dedication and commitment and to imagine management models that can deal with complexity. We must gradually move away from the mechanistic, vertical, lineal, deductive, dependent paradigm.

Developing creativity for social innovation in rural territories

There is a clear lack of coordination between sectors, programs and government bodies linked to technology development, “transfer” and innovation. The situation is very fragmented and efforts to communicate knowledge are very disconnected, dispersed, farm-oriented, confined to demonstration parcels or exiled to the research centers, almost impotent, due to the inflexible, simplistic and disjointed approaches used to address problems that are essentially interdependent, inter-sectoral, multidisciplinary.

Once again, we are challenged to connect different sectors, to contemplate the numerous links between the different dimensions of territorial reality, to develop inter-thematic approaches. Social and technological innovation for the development of rural life necessarily involves sustainable development proposals with a territorial approach.



It is also useful to know the actors that dominate and control, and discover the mechanisms they use to create blockages that stifle creativity and freedom.

This implies interaction between science and small-scale farmers, spaces for participation, access to information and a horizontal management model.

Faced with the fragmentation and discoordination of the sector's institutional framework, we need to examine the inter-institutional links in detail, but mainly, identify a key institutional actor capable of uniting the different organizations, activating networks and coordinating efforts to encourage the emergence of learning communities. The paradigm of agricultural and rural innovation must be re-directed toward the territories, in order to establish links and connections between and among different agents and stakeholders - public and private - and to open a dialogue between various types of knowledge. It is also useful to know the actors that dominate and control, and discover the mechanisms they use to create blockages that stifle creativity and freedom.

Strategic decisions aimed at promoting institutional change to strengthen technological innovation in the agricultural sector and rural territories depend, in good measure, on the scientific capital, mobilized talent, available capacities and the incentives existing within the institutional framework. However, such decisions mainly rely on the political will to promote changes in the social grassroots,

increase public spending and facilitate the flow of information and communications between research institutes, rural communities and territories. The components of the new system exist, but are fragmented, disarticulated and devalued. Such components serve no purpose unless they are organized into networks and can stimulate local creativity. It is necessary to work at all levels.

Similarly, adjustments in the management model are urgently needed in the short term to activate changes in the internal institutional contexts, set new priorities, respond to the demands of the "invisible" social segments and facilitate synergies that will enhance new efforts and new products.

The hope is that the communities themselves will be the leaders of innovation, through their social practices. However, our westernized society often has a negative perception of the creative potential of small-scale family farmers.



Much thought has been given to the question of how to encourage the development of endogenous social and technological innovation as an essential component of territorial development. The idea is that innovation can flourish - as in fact it does, on a daily basis in society - from its own grassroots. The hope is that the communities themselves will be the leaders of innovation, through their social practices. However, our westernized society often has a negative perception of the creative potential of small-scale family

farmers. This negation of “the other” is clearly manifested in discrimination against campesinos, indigenous people, black communities and women. Many development models are contaminated by the patriarchal system.

In order to foster changes in these perceptions, we must invent ways of actively organizing local interactions, conversations, sharing of good practices. In the context of territorial planning and the implementation of productive projects, we must create learning and problem-solving environments. We must release the intellectual contents that have remained confined by elitist perception that new knowledge only emanates from experts. We must identify the obstacles that hinder exchange, interaction and the emergence of an active interculturality, to promote greater creativity in society.

Social creativity transcends the limits of technological innovation and grows in the measure that ordinary citizens feel open, free, sensitive and aware of the risks and opportunities of the context. Imagine a social environment in which all communities within a territory interact in their socio-cultural context, a networked society whose social fabric expresses a kind of collective consciousness, capable of unifying its diversity. This framework of connected processes is consistent with and encourages the emergence of differentiated solutions.

For this reason, the proposed approach to technological innovation is a process based on a set of coordinated activities, events or components, aimed at producing a specific effect and sustaining

it over time. Constant dialogues promote social innovation and a “re-evolution” in emerging orders and structures (Bohm 2002).

Local creativity cannot be promoted and social innovation cannot flourish when there is a mechanical imposition of models, no matter how many “products” come out of the laboratories. Mediocrity is reproduced when freedoms are limited, when there are no opportunities for dialogue or learning, or informal farmer-to-farmer exchanges.

The political-ideological positions that permeate society block creative dialogue, reproduce disagreement and mistrust. We deal with intangible and complex aspects that cannot be registered by instrumental rationality. Field agents must be prepared to facilitate these encounters and elaborate a synthesis of best practices resulting from this plurality.

This is not only a matter of establishing a closed system of innovation that translates into a set of hierarchical elements directly or indirectly associated with the production of knowledge. Rather, it involves continuous processes of dialogue and mutual learning that produce solutions capable of spearheading new processes, of self-organization.

We can imagine the possibilities of creating continuous learning environments in territories where small-scale peasant agriculture predominates, where communities have the capacity to define their own agendas and organize research in a participatory manner – and above all, guarantee their own food security and obtain better



A technological innovation that does not consider issues such as gender perspective, the generation of employment, the need to redistribute incomes or the preservation of cultural identity, must be considered unsustainable, non-inclusive.



income levels, in environments that are open, interdisciplinary, intercultural, dialogical, participatory.

The demand for innovation among local communities composed of poor, multi-active farmers is complex and transcends the technological dimension. In other words, it is not only a problem of transferring validated technologies to small farmers to increase their productivity levels. It is also a matter of increasing the density and quality of the social fabric, supporting the process of associativity, facilitating the emergence of cluster economies, expanding and strengthening the value chains, democratically developing territorial scenarios for agricultural and rural development, which are sustainable, competitive and inclusive. Beyond the productive aspects, communities have

a wide range of common demands, particularly the development of new institutions.

The collective learning of a validated technology must also be a process of building social cohesion, of rescuing and valuing local agricultural knowledge, of care and consideration for the human networks present in the territory. A technological innovation that does not consider issues such as gender perspective, the generation of employment, the need to redistribute incomes or the preservation of cultural identity, must be considered unsustainable, non-inclusive. The social and political legitimacy of strategically defined scientific and technological activities will essentially depend on their practical attention to the needs and demands of the population, and particularly of the poorest groups.

Toward a new model of technological innovation in rural territories

There is general consensus that access to national and international markets depends increasingly on the capacity to compete, at all levels, in order to innovate, validate and disseminate technical progress, which is rapidly aggregated into the production system. This is a relative truth, naturalized by the economic, cultural and institutional circumstances of hegemonic thought.

The increased profitability of the productive sector has been interpreted as the direct result of the rational management of information and knowledge and of technological innovation that systematically creates greater competitive advantages. However, it is not totally correct to equate profitability with competitiveness. The first is an indicator of growth in a company or a chain; true competitiveness is not based on a win-lose system, but on synergy, complementarity, quality and harmony with the dynamics of the context.

In recent decades, hopes for the growth of the agricultural sector have mainly focused on policies that promote the competitive insertion of agriculture in the markets. The market has become the determining factor for the generation of knowledge and innovation. There is a tendency not to research anything that has no market prospects or is considered unlikely to prosper. Free trade has been seen as the most appropriate incentive to encourage business initiatives and develop the capacities of farmers. Open



Mercantilist thought constantly reminds us that without the monopoly of knowledge, supposedly, nobody would create anything. This perception led to an exclusive model of technological development, whose agendas were not aimed at resolving the social and production problems of small family-based farmers, or those with the least access to assets.

borders and deregulation have also been instrumental in providing agricultural producers with access to capital goods and technologies, and contributing to a change in traditional production patterns or practices.

The essential premise of the paradigm that underlies conventional approaches, perceives innovation as an act whereby farmers receive and apply the results of research. The more efficient we become –with the help of science and technology– the more prosperity and progress we can attain, and the more competitive the countryside will become. Technological innovation was not considered a process of collective creation, through the sharing of heterodox knowledge, or as a process-based phenomenon comprising diverse learning patterns capable of generating creative experience.

The capacities of the institutions involved in technology transfer have been limited, encapsulated in the old paradigms that mainly sought to change the attitudes of *campesinos* or farmers. The model stagnated, remaining focused on the transfer of validated information, on the adoption of innovations produced by scientists working in laboratories, on providing practical advice to peasant farmers or smallholders to improve their processes, advice on specific production




Foto CENTA

problems and, from time to time, joint analysis of the advantages of a particular material tested. Everything, except communication, shared learning, the creation of social monitoring spaces or the development of sustainable agriculture supported by associativity.

The results of scientific research have, for the most part, ceased to be public goods and are protected by intellectual property rights, patents, licenses, pay-for-access mechanisms. Mercantilist thought constantly reminds us that without the monopoly of knowledge, supposedly, nobody would create anything. This perception led to an exclusive model of technological development, whose agendas were not aimed at resolving the social and production problems of small family-based farmers, or those with the least access to assets. As a result, new and old problems have been compounded: food security, the problems of hunger, the rupture of the social fabric, low levels of productivity and the aging of the rural population, among others.

There is no doubt that increased productivity based on technological innovation is a factor that promotes competitiveness in business and territories. The current paradigm asserts that if we add other key variables to this equation - such as investment, access to basic infrastructure and services, business modernization, value chains, market intelligence, access to information etc., we would be in a better position to resolve the problems of poverty and social exclusion. However, this recipe is not viable at present, due to the rising cost of inputs and fuels, the lack of liquidity in the financial system and the generalized insecurity of land tenure, among other factors. The chains suffer from a lack of solidarity.

Thoughtful observation of rationally-constructed rural change and an evaluation of the application of this productivist equation confirm ambivalent impacts and produce a range of socially skewed outcomes. The benefits of scientific research are not distributed

 *Innovation will not be effectively adopted unless it includes some aspects of the pre-existing cultural fields. Part of the old heart must beat in the new heart that is implanted.*

equitably, which widens the internal and external gaps. The current agricultural and rural context reveals obvious contrasts, being configured as a hybrid sector that combines “marginal” agricultures and “competitive” agricultures.

The benefits and advantages of modernization efforts (green revolution, drip irrigation, biotechnology, transgenic crops, food security and food safety, among others) have been concentrated in the segment of modern business-oriented farmers, who constitute a dynamic, profitable and politically influential sector. Competitive markets have mainly favored medium-sized production units, linked to value chains with good market prospects. The techniques applied sought to ensure greater regularity and homogeneity in the supply and quality of agricultural products.

In rural territories deprived of advantages or in those incapable of successfully tackling the challenges of open markets and competitiveness, stagnation set in with serious social consequences. The sectoral modernization strategy applied in predominantly agricultural territories excluded large segments of small farmers. In general, this process turned its back on family-based peasant agriculture –on

the smallest and most vulnerable of the *campesinos*– who form a heterogeneous and variable collective in the different territories.

The social groups with the least assets were “intervened” politically using “one size fits-all” solutions, some of an assistential nature. Rural development was synonymous with programs to “combat” poverty, which targeted particular segments and products that were economically promising. The persistence of poverty and migration are probably the most painful expressions of the social failure of this “mis-development” model.

Although the public sector has responsibility for providing knowledge as a public good, much of this effort has been undertaken by the private sector which, in some countries, even defines the research and development agendas and strategic needs in this area. Supposedly, the dissemination of new knowledge among the agents in charge of innovation makes it possible to increase productivity, and therefore, competitiveness; through feedback, this changes the economic-productive context in which these agents operate.

However, the appropriation of any innovation presupposes, in addition to the traditional transfer mechanisms, new forms of social organization and the inclusion of technological, political and social components. Innovation will not be effectively adopted unless it includes some aspects of the pre-existing cultural fields. Part of the old heart must beat in the new heart that is implanted.

It is well known that the growth of agriculture in LAC in recent decades is largely the result of the expansion of the production frontiers, a process that devours land and releases carbon. We also know that in Latin America and the Caribbean (LAC) more than US\$10,000 million dollars are invested annually in science and technology, with around 96% being concentrated in Brazil, Mexico, Argentina, Venezuela and Cuba.

Technological innovation processes - their adaptation, dissemination and adoption - have traditionally been conceived according to reductionist notions, and rationales based on economic principles, but not necessarily on environmental and social ones. We cannot claim that investment in modern science and technology has translated into solutions that promote sustainable development and social inclusion.

“Interventions” carried out by extension workers in rural territories focus almost exclusively on the search for greater productivity in certain “commodities” or “chains,” from a mechanical vision of development. In general these do not apply methodologies of intercultural dialogue, and their rationality denies gender differences, fragments the production system and loses sight of the links with the environment.

The appropriate course of action is to bring the explicit knowledge resulting from research closer to the implicit knowledge of local actors, who participate in many ways, generating and disseminating knowledge and articulating the different learning processes. We need a socially-

aware understanding of the capabilities of science and technological innovation, and of the benefits of its inclusive and sustainable use, an essential factor for overcoming the complex and changing problems of local communities.

We must democratize the dissemination of scientific knowledge and expand local spheres of innovation. This means assessing the production segments that are excluded from the innovation process, without which the legitimacy of the investment in science and technology is weakened. The generation of endogenous knowledge provides leverage for sustainable rural development, strengthening good governance by becoming consolidated as a politically and socially valued activity.

We need a socially-aware understanding of the capabilities of science and technological innovation, and of the benefits of its inclusive and sustainable use, an essential factor for overcoming the complex and changing problems of local communities.



New management model for technological and social innovation in response to local demand

The proposal for a new management model for technological innovation is rooted in the demands expressed by the inhabitants of local communities. In rural territories populated mainly by poor *campesinos* who farm on hillsides, and who have been historically excluded



from the structure of opportunities, the proposal aims to create the necessary capacities, environments, incentives and interactions that will enable these groups to define their social demands, including those related to technological innovation, visualizing potential territorial scenarios.

A holistic proposal that seeks to redefine the institutional framework of the innovation system must consider various components. Undoubtedly, it is necessary to strengthen the technological and scientific capacity of the national innovation system. Greater efforts must be made to reflect on the epistemological order that produces and reproduces the reductionist simplification and specialization. Communities must learn how to communicate their priority demands to the scientific community, in order to improve their practices and performance. Scientific knowledge must be responsive to the real problems faced by countries and territories. This presupposes a collective pedagogical effort, an exercise in critical thinking, in order to increase our ability to take stock of the specific needs and conditions in the territories.

The ability to innovate beats in the hearts of the people when there is an environment for discussion, awareness of the context, motivation and sensitivity. What do we do? Do we strengthen the national agricultural research institutes (NARI)? Do we support local research, awakening local talents and creativity? Do we maintain the old patterns, with their limitations and obstacles to social innovation, thereby increasing relations of dependence? Do we seek a greater symbolic equity in the communications between

researchers and rural organizations? The answer is not one approach or the other – it is essentially everything together. This implies strengthening social intelligence and developing competencies to process the complexity.

This management model presupposes the emergence of a new model of sustainable rural development, rooted in intersectoral methodologies with a territorial approach. In such contexts, society will be able to strengthen itself democratically to influence its own development. The technological dimension plays an essential role in efforts to achieve sustainable rural development, but this mainly takes the form of collective learning, new models of social management, sustainable use of natural resources, and of a sufficient production of healthy and nutritious foods, together with conservation of ecosystems, capacity building, contextualized technology transfer and the design of sustainable practices.

In this proposal, public institutions must play the role of facilitators, supporting processes to generate knowledge and providing technological assets in areas where the market is incapable of doing so. Different institutions, together with local governments, would have the role of encouraging farmers to develop and adopt new practices as well as inclusive,

Perceptions are the translations of images and social interests that are usually reflected in policies. Mistaken perceptions generally lead to mistaken policies.




sustainable organizational models. Demonstration is not only for organizations or farms, but for the entire territory. We must promote the emergence of unconscious forms of learning on the part of the territories themselves⁴.

Similarly, the authorities must become aware of public perceptions regarding the role of science, technology and innovation. Perceptions are the translations of images and social interests that are usually reflected in policies. Mistaken perceptions generally lead to mistaken policies. If we perceive that the deterioration of *campesinos'* living conditions is the result of a cultural determinism, the *campesino* will continue to be seen as a client, but not as a citizen.

At the same time, it is important to decentralize research, recover ancestral knowledge and formulate territorial projects that bring together scientists, teachers, extension workers, associations, political authorities, consumers and social movements, among others. It will

4 Steven Johnson (1992) argues that “Learning is one of the activities that we habitually associate with conscious knowledge, such as falling in love or crying at the loss of a relative. However, learning is a complex phenomenon that occurs simultaneously at various levels... But learning does not always depend on awareness. Our immunological system learns throughout our lives, building a vocabulary of antibodies that evolves in response to the threat of invasive microorganisms... We do not come into this world predisposed to combat the chickenpox virus; our bodies learn to do it along the way, without any specific training... The body learns unconsciously, and the same occurs with cities, because learning does not only involve being aware of information; it is also a question of storing information and knowing where to find it”.

 *Beyond the formal organizations, local stakeholders create a field of interactions in which joint learning, innovation and feedback can occur.*

be necessary to train a new generation of facilitators capable of developing leadership in the territory, opening up spaces for democratic dialogue and mechanisms for the coordination of different stakeholders and sectors. Territories must recover their planning capabilities, starting with the coordination of cantons and municipalities, involving civil society in decision-making on plans and projects that benefit everyone.

Innovation for the sustainable development of rural territories essentially has to do with developing people's abilities and skills to renew and improve the rural world in which they live. This occurs mainly through dialogue, in everyday conversations. The spaces for discussion –committees, councils, boards, clubs, meetings, festivals, and local forums–produce the necessary social and political reconstruction that makes it possible to activate social innovation processes, based on free communication. Beyond the formal organizations, local stakeholders create a field of interactions in which joint learning, innovation and feedback can occur.

The idea is to encourage local interactions so that these lead to new scales of learning and knowledge, allowing for the emergence of socially inclusive,

environmentally sustainable and at the same time dynamic innovations. The experience of learning changes people and the collective intelligence flourishes through increased contacts between agents and cognitive systems, which allows for the establishment of a learning and innovative organization. According to Assman (2002:160); “a learning organization is one in which the people involved attempt, at all levels, individually and collectively, to increase their capacity to achieve the results they seek.”

It is not just a question of farmers in a specific territory perceiving an idea as new and applying it to the productive sphere. The main idea is to socially encourage the emergence of new ideas in the rural territory, promoting discussion, mutual learning and shared testing, thereby facilitating creativity, with social and ecological awareness. The endogenous and sustainable construction of social change implies not only the emergence of new elements expressed in explicit dimensions of reality, but also - and simultaneously - the recovery of components or parts of local knowledge, of implicit dimensions, similar to the pre-existing ones.

In arguing that social innovation –beyond technological aspects–should be dynamic, we affirm the idea that we are confronted with a chaotic and unpredictable reality. In poor countries, the rural worlds and their agricultures operate within a broader context marked by instability. We are experiencing a period contrasted by very diverse and uncertain trajectories, which constantly redefine the relations between the endogenous and the exogenous and which promote the acceleration of changes.

The main idea is to socially encourage the emergence of new ideas in the rural territory, promoting discussion, mutual learning and shared testing, thereby facilitating creativity, with social and ecological awareness.



Thus, innovation is the result of conversations that link emotions, thought and will, an equation that leads us to imagine the new, to emotionally opt for change. This facilitates transformation, the leap forward, which requires local policies of a comprehensive and territorial nature to allow for the coordination of agents and actors.

For this it is necessary to integrate the local community and local businesses into the territorial context in which they are immersed. It is also necessary to integrate the different types of knowledge, not only those rooted in science, but also those based on local knowledge and empirical practices, in order to create trans-disciplinary domains.

We must know and understand how the innovations generated in the territories emerge and multiply. It is not so much a matter of finding incentives for creativity and social innovation, but rather of discovering the blockages that prevent the emergence of creative intelligence (Bohm and Peat 1988).



► It is also necessary to integrate the different types of knowledge, not only those rooted in science, but also those based on local knowledge and empirical practices, in order to create trans-disciplinary domains.



Photo CENTA

How do we activate that creative drive that leads to innovation? How do we unblock the institutional rigidities that prevent creativity from flourishing among local communities? How do we ensure that the collective attention focuses on the search for answers and generates new types of “know-how”? We have so much to learn and to observe in the relative reality that resides, essentially, in our

perceptive consciousness. Sustainable development will be the result of the sum of consciousnesses manifested in the social fabric, unconsciously. By increasing our capacity to “notice”, to be aware, we expand the possibilities of generating new realities, by synchronicity. By remaining enclosed in the same paradigm, it will be difficult for us all to become, little by little, creators.

Literature cited

Assmann, H. 2002. *Placer y ternura en la educación: hacia una sociedad aprendiente*. Madrid, ES, Narcea, S.A. p. 160.

Bohm, D. 2002. *Sobre la creatividad*. Barcelona, ES, Kairos.

_____; Peat, D. 1988. *Ciencia, orden y creatividad: las raíces creativas de la ciencia y la vida*. Barcelona, ES, Kairos.

Johnson, S. 1992. *Emergence: The connected lives of ants, brains, cities and software*. MX, Turner, Fondo de Cultura Económica. p. 92-93.

Schvarstein, L. 2004. *La inteligencia social de las organizaciones*. Buenos Aires, AR, Paidós (Tramas Sociales).

Touraine, A. 1998. *El concepto de desarrollo “revisited”*. E Sader (Ed). *Democracia sin exclusiones ni excluidos*. VE, New Society.

Villasante, TR. 2002. *Redes y alternativas: estrategias e estilos creativos na complexidade social*. BR, Vozes, Petrópolis. 129 p.

Résumé / Resumo / Resúmen

► **Innovations sociales et technologiques dans le nouveau modèle de développement dans les territoires ruraux**

Le présent article plaide en faveur de la nécessité de favoriser les innovations sociales dans les milieux ruraux, dans un cadre de participation et de solidarité, afin d'orienter des processus de diversification de la production, menés de concert avec des politiques d'inclusion sociale, notamment en ce qui concerne la conservation, la récupération et l'utilisation rationnelle des ressources naturelles. Il existe en Amérique latine une volonté politique croissante de mettre en œuvre, à partir des gouvernements centraux, des stratégies de développement rural qui permettent de « territorialiser » les politiques publiques, afin que les gouvernements locaux, de concert avec les acteurs sociaux, puissent démocratiquement définir leurs propres modèles de gestion et leurs priorités en matière de développement durable. Indéniablement, le potentiel et la plus grande richesse de tout pays résident dans son peuple. C'est pourquoi il est proposé de revaloriser les savoirs accumulés et de miser sur la créativité et le talent innovateur des peuples et sur l'accès aux connaissances, à partir des bases de la société et des collectivités locales établies dans les divers territoires. Cela suppose que soit mis en place un système inclusif de traitement des initiatives sociales.

► **Inovações sociais e tecnológicas no novo modelo de desenvolvimento dos territórios rurais**

Este artigo trata da necessidade de serem impulsionadas inovações sociais no mundo rural, sob um contexto de participação e solidariedade capaz de orientar processos de diversificação produtiva juntamente com políticas de inclusão social, como a conservação, a recuperação e o uso racional dos recursos naturais. Na América Latina há uma crescente vontade política para concretizar, a partir dos governos centrais, estratégias de desenvolvimento rural que permitam “territorializar” as políticas públicas de modo que os governos locais, junto aos atores sociais, democraticamente, possam definir seus próprios modelos de gestão e prioridades de desenvolvimento sustentável. Não há dúvida de que o potencial e a riqueza mais importante de qualquer país são o seu próprio povo. Por isso a proposta é revalorizar os saberes acumulados, apostar na criatividade e no talento inovador dos povos e no acesso ao conhecimento, a partir das bases da sociedade e das comunidades locais que habitam os diferentes territórios. Isto pressupõe estabelecer um sistema inclusivo de processamento das iniciativas sociais.

► **Innovaciones sociales y tecnológicas en el nuevo modelo de desarrollo en los territorios rurales**

El presente artículo propone la necesidad de impulsar innovaciones sociales en los mundos rurales, dentro de un marco de participación y solidaridad, capaces de orientar procesos de diversificación productiva de la mano con políticas de inclusión social, como la conservación, recuperación y uso racional de los recursos naturales. Existe en América Latina creciente voluntad política para concretar, desde los gobiernos centrales, estrategias de desarrollo rural que permitan “territorializar” las políticas públicas, para que los gobiernos locales, junto a los actores sociales, democráticamente, puedan definir sus propios modelos de gestión y sus prioridades de desarrollo sustentable. Con toda entereza, el potencial y la riqueza más importante de cualquier país lo constituye su propia gente. Por ello se plantea revalorar los saberes acumulados, apostar a la creatividad y el talento innovador de sus pueblos y el acceso al conocimiento, a partir de las bases de la sociedad y las comunidades locales asentadas en los diversos territorios. Esto supone establecer un sistema incluyente de procesamiento de las iniciativas sociales.


Agrifood chains: a tool for strengthening the institutional framework of the agricultural and rural sector¹

Miguel Garcia-Winder², Hernando Riveros³, Iciar Pavez⁴,
Daniel Rodriguez⁵, Frank Lam⁶, Joaquin Arias⁷, Danilo Herrera⁸

Abstract

This paper describes various experiences and approaches related to the creation of agrifood chains and suggests the need to develop a new institutional framework and forms of technical cooperation to strengthen the agricultural and rural sector. It is hoped that agrifood chains will serve as mechanisms for dialogue and as management tools to promote competitiveness and support decision-making, in line with the demands of IICA's Member States. With this in mind, this document defines the nature of the agrifood chains and describes the characteristics conferred by their economic and social actors, through the participation of all the links. It also describes the consensus-building bodies, specifically the "chain committees," as well as the functions and features of the "chain secretariat," which are essential to the success of the committees and the operation of the chains. This paper also considers the need to redefine the functions of the ministries of agriculture, so that these institutions serve as agents that connect the public - private sectors and civil society through agrifood chains, as an appropriate space for finding common ground and permanent solutions for the agricultural and rural sector.

- 1 This article forms part of a collection of documents prepared by the Areas of Agribusiness Competitiveness and Rural Agroindustry, currently in press.
- 2 Director of Agribusiness Competitiveness and of the Inter-American Program on Trade, Agribusiness and Food Safety, miguel.garcia@iica.int
- 3 Hemispheric Specialist in Rural Agroindustry, hernando.riveros@iica.int
- 4 Regional Specialist in Agribusiness, iciar.pavez@iica.int
- 5 Specialist in Agribusiness, daniel.rodriguez@iica.int
- 6 Specialist in Agribusiness with emphasis on Trade Processes, frank.lam@iica.int
- 7 Regional Specialist in Trade Policy and Negotiation, joaquin.arias@iica.int
- 8 Specialist in Trade Policy and Negotiation, danilo.herrera@iica.int



Key words: *agrifood chain, agricultural sector, rural sector, institutional strengthening, technical assistance, economic competition, decision-making, social participation.*

Introduction


Why write yet another article on agrifood chains given the rich tradition that the Inter-American Institute for Cooperation on Agriculture (IICA) has accumulated during nearly 15 years of work on this issue? Because there are lessons learned that can be replicated to improve IICA's technical cooperation services in this field. Furthermore, thanks to the activities implemented and the experience accumulated, new knowledge has been generated to meet the new challenges of using this approach, which should be recognized, discussed, evaluated and modified in order to make a greater impact on development.

The purpose of this document, then, is to present a brief description of these experiences and approaches and contribute to the knowledge base in order to enhance the dialogue and develop new forms of technical cooperation that respond to the demands of IICA's Member States in this field. It also supports the idea that the use of agrifood chains as policy and competitiveness tools serves to consolidate the institutional framework of the agricultural and rural sector.

Agrifood chain

The term “agrifood chain” has been used to express various concepts, ideas and

methodologies, making it difficult to find a simple definition. First of all, we must consider the context in which this concept is used. For example, from the socioeconomic point of view, the agrifood chain is a system that brings together economic and social stakeholders who participate in coordinated activities that add value to a particular good or service, from its production until it reaches the consumer. The chain includes providers of inputs and services as well as processing, industrialization, transportation, logistics and other support services, such as financing.



From the socioeconomic point of view, the agrifood chain is a system that brings together economic and social stakeholders who participate in coordinated activities that add value to a particular good or service, from its production until it reaches the consumer. The chain includes providers of inputs and services as well as processing, industrialization, transportation, logistics and other support services, such as financing.

This process of linkages and aggregation of value is neither lineal nor egalitarian, as in the concept of a “physical chain”. On the contrary, the arrangements between the different links of an agrifood chain more closely resemble a “web” of non-linear relationships that can be highly inequitable, where certain stakeholders with strong negotiation, management, economic or political power could



The agrifood chain may also be analyzed from an operational perspective, as an institutional arrangement for strategic planning, policy management, dialogue and consensus-building among stakeholders or as a social contract.



dominate and extend their influence over the weaker, less organized players who have less influence in the decision-making process. These relationships can also exist on numerous levels. In synthesis, from a socioeconomic point of view, the agrifood chain is not necessarily an equitable or lineal arrangement, and is one in which

the value of a product, good or service is often altered.

At the same time, from an analytical point of view, the agrifood chain may be interpreted as a way of understanding the relationships or links between the stakeholders of agriculture and the rural milieu - from the supply of inputs and primary production to the delivery of the product to the final consumer - where the relations established may be of a contractual or commercial nature.

The agrifood chain may also be analyzed from an operational perspective, as an institutional arrangement for strategic planning, policy management, dialogue and consensus-building among stakeholders or as a social contract where the government, the private sector and civil society establish short and long-term commitments for the comprehensive development of a particular agrifood chain.

Sometimes the term agrifood chain replaces other concepts used in the business world to improve competitiveness, such as “value chain”, “supply chain” and “clusters”. However, the concept of agrifood chain has important differences. For example, *supply chain* refers to a business strategy based on a system of organizations, people, technologies, activities, information and resources, making it possible to move a product from the supplier to the customer or consumer (data available at http://en.wikipedia.org/wiki/Supply_chain).

“Clusters”, meanwhile, are defined as a “geographic agglomeration of competing and related businesses, where there is

evidence of improved performance such as a growth and profitability” (Kuah 2002). The cluster concept and the chain concept are not mutually exclusive, since a *cluster* forms part of a chain.

Thus, the concept of agrifood chain can be used in a wide variety of circumstances, depending on the overall context that defines their scope and utility.

Agrifood chains as a management tool

Despite the difficulty of finding a single definition of agrifood chains, these systems have been used for a variety of purposes in the countries of the hemisphere. In some cases, they have been regarded as tools for analysis; in others, as mechanisms to facilitate dialogue and promote commitment among stakeholders and to define public policies to improve competitiveness. This confirms that their use depends on the higher goal that is pursued. Herrera (2004) considers that at IICA chains have basically been used in two major fields of action: a) to generate methodologies for the analysis of chains; and b) to support the creation of chain organizations and to monitor their management.

From a business point of view, chains can be used as a tool to regulate relations and arrangements between private organizations, improving the terms of transaction, the business results and relations among the stakeholders. In this sense, the agrifood chain has a clearly defined place in time and space, which responds to specific market conditions or processes.

The use of agrifood chains as tools to regulate relations among private stakeholders must be based on a common denominator: the search for greater transparency in business transactions and a balanced dialogue between the stakeholders involved in these processes. When agrifood chains are used in this context, and all the stakeholders are included, their use as a business tool facilitates the inclusion of smaller players in business transactions. This generates

The use of agrifood chains must be based on a common denominator: the search for greater transparency in business transactions and a balanced dialogue between the stakeholders involved in these processes.



opportunities to improve the incomes of the weakest links in the chain and encourages large commercial firms to implement policies of social and environmental responsibility. Thus, chains may be regarded as instruments for achieving greater equity and participation.

► *For this reason, both the public and private-sector links of the chains must be willing to share timely and transparent information, with the assurance and confidence that it will be used to improve their overall competitiveness and not to unilaterally favor some of the linkages.*

Agrifood chains have also been used as analysis tools in decision-making. The best examples are the so-called “production chain observatories”, particularly those implemented in some Andean countries. These observatories monitor previously selected indicators of performance and competitiveness, which are periodically and systematically updated and provide valuable inputs for decision-making in different areas of private business and public policy. This way of using agrifood chains requires formal commitments to ensure their sustainability, beyond personal or institutional interests.

Based on the experience of several of these observatories, sustainability is one of the aspects of greatest concern: successful observatories that had worked for several years ceased to operate once the interest of the manager or of the sponsoring institution disappeared, thereby losing the opportunity to implement long-term changes.

With regard to the financing of these observatories, what is needed is a team of professionals capable not only of understanding the problems associated with chains, but also of processing, managing and adding value to the information. Creating such teams is another crucial element, since without suitable trained personnel, the information will not contain the necessary value-added required for decision-making and timely analysis. Therefore, shared or co-financing mechanisms are required to operate these observatories.

Another problem to be addressed in creating and operating “chain observatories” or “competitiveness observatories” is the quality and timeliness of the information included. For this reason, both the public and private-sector links of the chains must be willing to share timely and transparent information, with the assurance and confidence that it will be used to improve their overall competitiveness and not to unilaterally favor some of the linkages.

Other applications stemming from the management of agrifood chains include the definition of public policies and improved coordination between national and local-territorial policies. However, it is essential to ensure that these applications are recognized as spaces for dialogue between public and private organizations. This is fundamental, since the main goal is to execute coordinated actions in order to strengthen the structure and operation of the chains themselves, improve their competitiveness and facilitate the application of policy instruments based on the particular conditions and circumstances of the social and economic context.

One consequence of using chains for public policymaking is the official recognition granted to these systems through some type of law or regulation that formalizes and regulates their operation. For example, in Colombia and Honduras, chains are now recognized by the official public policy mechanisms.

This way of viewing the chains opens up opportunities for joint action by public and private stakeholders, promoting a greater participation by all the links and a better appropriation of their efforts, commitments and results. Their use has permitted the consolidation of the institutional framework and has produced positive results in many countries and regions. To achieve this, two main mechanisms have been used: the definition of chains as targets of government policies and the creation of special units within the ministries of agriculture to monitor the agrifood chains.

With respect to the first case, various approaches may be found in the hemisphere, from those that define a specific chain (for example, the yellow corn chain), to those that design policies for a cluster of products or commodities within a single named chain (for example, the “fruit chain”, which includes all types of fruits). As a result, the countries have also developed different tools to give continuity to their arrangements and to apply their policies and incentives.

Despite the differences, some common features can be found. These are mainly related to efforts to promote dialogue between different stakeholders, not only those of the public sector, but particularly among private-sector actors, something

that requires the participation of primary producers, the processing industry, businesses and consumers, among others. Without such efforts, these spaces for dialogue and action would remain closed, and we would be faced with attempts by each of the links to protect their particular interests.

Agrifood chains have also been used to facilitate the market insertion of weaker stakeholders or links, and to enable small-scale producers to supply markets on more favorable terms. This work has mainly taken place at the territorial level, where a particular chain is selected, either because of its production levels or because of its particular characteristics.



Photo CENTA

The use of chains at the territorial level shows the potential of this instrument and underscores the importance of dialogue.

Subsequently, a process of consensus-building and dialogue is initiated between the producers and the other links of the chain, including service providers, but with an emphasis on industrial customers, in an effort to market the products of small farmers on terms that favorable for both parties. The use of chains at the territorial level shows the potential of this instrument and underscores the importance of dialogue. Successful examples of this type of intervention are found in Peru, where efforts have been made to integrate the yellow corn chain at the territorial level.

Agrifood chains have also been used to facilitate the market insertion of weaker stakeholders or links, and to enable small-scale producers to supply markets on more favorable terms.

This approach has also allowed for the use of agrifood chains as tools to establish strategic lines of action at national or regional level. For example, a study undertaken in 2007 in the Central American region assessed the bean and white corn chains (Red SICTA-IICA-COSUDE 2007) in the seven countries of the region, in order to identify constraints and weaknesses that affect their competitiveness and to analyze the development mechanisms applied in the region. This made it possible to identify the weaknesses and threats, as well as the strengths and opportunities in particular agrifood sectors. The study also compared the similarities and differences in agrifood chains in the different countries.

In synthesis, agrifood chains have been used for the following purposes:

- a. To establish legal provisions and laws that “officially” recognize chain organizations as mechanisms for dialogue, consensus-building and action.
- b. To create and consolidate governmental bodies that support and promote the establishment and operation of chain organizations.
- c. To form national or local councils and discussion committees, chain boards and similar types of organizations for the operation of the chains.
- d. To create “chain observatories” or “competitiveness observatories” as information tools that provide indicators of performance and competitiveness for specific chains, for business and policy decisions.
- e. To design and implement financial policy instruments specifically designed for application among stakeholders organized in chains.
- f. To formalize business arrangements among private-sector stakeholders, such as purchase-sale contracts, and to develop tools and services that increase productivity and competitiveness.

Keys to the successful management of agrifood chains

The experience accumulated by IICA shows that the key to successful management of agrifood chains lies in the establishment of discussion groups or committees with the participation of all the links comprising the chain. This has been achieved through the creation of “collegiate” bodies that analyze the problems, challenges and threats faced, reach agreements for action and generate proposals for solutions.

These consensus-building bodies have been given very diverse names, although the term “chain committee” is the most common. Their formation has been promoted from three spheres:

- a) Intervention by the public sector, particularly by decision of the Ministry of Agriculture.
- b) Efforts by different actors within the chains who recognize a problem and decide to work together to find a comprehensive solution.
- c) Mediation by cooperation organizations, which promote alternative and participatory approaches to the organization of stakeholders, usually with the aim of incorporating weaker producers in the chains.

The committees may operate at national or local level; however, in both cases, their success depends on the participation of



Photo CENTA


all the links comprising the chain and on a sustainable and organized discussion process. In the formation of committees, it is important to include all the links of the chain, with the public sector acting as one more link and serving as a catalyst for the organization. The committees must also be truly representative of, and independent from, the links in order to promote transparent dialogue and analysis.

The functioning of these chain committees depends in good measure on the activity of the “chain secretariat,” which becomes the central element for the operation of the chains, particularly during the initial start-up process. In theory, the person in charge of the secretariat would be appointed by the committees themselves and the position would be financed with resources contributed

by all the links that make up the chain. However, in practice - at least initially, and during the phases to establish and consolidate the chains - the “chain secretaries” are generally public-sector appointees, in general from the Ministry of Agriculture.

The chain secretary is expected to have the necessary technical capacity and moral leadership to bring all the links of the chain together around the negotiating table, particularly those whose economic or political importance gives them greater bargaining power. The chain secretary must follow up on the agreements, convene and convince the stakeholders, act with restraint and be capable of reaching consensus. These characteristics are vital to the success of the committees and the effective operation of the chains.


Other essential elements for the successful management of agrifood chains include the preparation a work plan and its effective monitoring, as well as the capacity to work with the public sector and propose ways of applying various agricultural policy instruments in the chains. In the case of the private sector, it is important to incorporate more dynamic links that accept their responsibility for the management process in order to achieve the competitiveness of the entire chain.

 *There is still much work to be done before we can achieve better levels of management.*

Challenges to improving the use of agrifood chains

Despite the progress made in using agrifood chains as management tools to promote competitiveness and implement public policy, there is still much work to be done before we can achieve better levels of management. The following actions are important:

- a) Strengthen the institutional aspects of the chains and their committees; although countries are making efforts to recognize production chains, these mechanisms must be improved, particularly as regards the incorporation of all the linkages into the discussion groups and the processes for the implementation and follow-up of agreements.
- b) Establish mechanisms to ensure that production chains and their institutionalization are considered as State policies, rather than as the policy of a particular period of government. There are many examples of countries where efforts to create agrifood chains and establish chain committees have received support during a specific government term. This reveals the lack of a macro-vision of chains as tools that can be used to permanently improve competitiveness and find long-term solutions.
- c) Devise strategies so that the Ministry of Agriculture is not solely responsible for managing the chains. Other ministries (such as those in charge of environmental, social and financial development) should

 *Agriculture must be seen with new eyes with the aim of creating new paradigms that will lead to a more harmonious social development, one that ensures that the present and future generations will have an ample supply of foods, fibers and fuels.*

be incorporated, along with all the links of the chain, regardless of their social capacity or their political and economic power.

- d) Promote greater equity in the relationships developed within the chains, this being understood not as the egalitarian distribution of profits or income, but rather as a guarantee that the weaker links of the chain have the same opportunities to negotiate their terms of transaction and terms of trade. In this effort, we must emphasize the use of socially responsible policies, given the nature of the risks, particularly those associated with production.
- e) Implement actions to improve the governance of the chains, given the profound inequalities existing between different stakeholders, which are manifested in focal points of political and economic power and in some way affect the scope of the discussions and decisions. This involves the application of rules to regulate these relations of power, guarantee competition and ensure transparency. It is essential to adopt policies that bridge the gaps between stakeholders and ensure that the least privileged have equal opportunities to access markets.

There are other policy measures which, although not circumscribed solely to production chains, form part of a major group of policies for the agrifood sector and could also contribute to the development of chains. Some of these policies are related to agricultural health and food safety, financing, trade and technological innovation. IICA has prepared several proposals on these issues (2005), which can serve as a guide in the definition of public policies applicable to agrifood chains.

The advantages of continuing the work of the chains

The complex global situation of today obliges us to reappraise all human activities. Agriculture must be seen with new eyes with the aim of creating new paradigms that will lead to a more harmonious social development, one that ensures that the present and future generations will have an ample supply of foods, fibers and fuels. Nowadays we face opportunities and challenges never seen before.

On the one hand, the impacts of the current crisis may eventually shape a world that is politically and economically very different to the existing one. Our society is more aware and more demanding, more open and integrated, with greater access to consumer goods and to information. There is a constant questioning of the established order and a sense of disillusionment and skepticism at all levels of society. All this offers an opportunity to promote dialogue and action, for which the agrifood chains provide an instrument of great utility.

► *Greater efforts are needed to create a new development model that strikes a balance between the market and the State, where people are placed at the center of the discussions.*

We also face the dilemma of defining new economic models. In recent years, it was believed that development could be achieved only through the market - with little or almost no intervention by the State - as a response to the failed results of the earlier model that gave precedence to the State over the market.

The truth is that both economic models owe a debt to society. Neither system has been capable of providing a sustainable and permanent response to development nor, much less, building a more equitable society, reducing the asymmetries

and poverty that chronically affect our countries. In this regard, greater efforts are needed to create a new development model that strikes a balance between the market and the State, where people are placed at the center of the discussions.

Similarly, the ministries of agriculture must redefine their functions, since their traditional role of focusing on production is clearly insufficient at present. The new institutional framework can only be developed through a permanent dialogue between the public - private sectors and



Photo CENTA

civil society, for which task agrifood chains are instruments of undeniable value.

Furthermore, this new institutional framework must emerge from a broader conception of agriculture and of rural territories. Here, agriculture can longer be regarded as a simple process of primary production, but rather as a comprehensive and integrated value added system, capable of generating the quantity and quality of products required for the harmonious coexistence of society, and whose activities take

place in defined social, economic and geographic spaces.

Agrifood chains are tools that can help us find new solutions, since their great virtue is their ability to bring together all stakeholders and provide a mechanism for improving competitiveness, while also promoting equity and environmental sustainability. Moreover, the chains offer a space for strengthening human relations in pursuit of shared and permanent solutions.

Literature cited

Herrera, D. 2004. *El IICA y las cadenas alimentarias: avances y tareas pendientes*. Discussion 3. San José, CR.

IICA (Inter-American Institute for Cooperation on Agriculture). 2005. *Policies for Rural Prosperity: Discussion Document*. San José, CR.

Kuah, ATH. 2002. Cluster Theory and Practice: Advantages for the small business locating in a vibrant cluster. *Marketing and Entrepreneurship* 4(3):206.

Red SICTA (Agricultural Innovation Network Project, Central American Agricultural Technology Integration System); IICA (Inter-American Institute for Cooperation on Agriculture); COSUDE (Swiss Agency for Development and Cooperation). 2007. *Mapping the white corn and bean agrifood chains in Central America*. Managua, NI.

Wikipedia. 2008. *Supply Chain*. Available at http://in.wikipedia.org/wiki/Supply_chain.

Résumé / Resumo / Resumen

Filières agroalimentaires : un instrument pour renforcer le système institutionnel du secteur agricole et rural

Le présent article décrit les expériences et les perspectives en matière de création de filières agroalimentaires et fait valoir la nécessité de mettre en place un nouveau système institutionnel et de nouvelles formes de coopération technique pour renforcer le secteur agricole et rural. Le but recherché est que les filières agroalimentaires constituent des mécanismes de dialogue et des instruments de gestion pour la compétitivité et la prise de décisions, conformément aux demandes des États membres de l'IICA. Pour cela, nous définissons la filière agroalimentaire et nous établissons les caractéristiques que lui confèrent ses acteurs économiques et sociaux, grâce à la participation de tous ses maillons. Nous définissons les organes de concertation, en particulier le « comité de filière », ainsi que les fonctions et caractéristiques du « secrétariat de filière ». Ces caractéristiques sont essentielles au succès des comités et au bon fonctionnement des filières. Nous faisons valoir également la nécessité de redéfinir les fonctions des ministères de l'agriculture en tant qu'agents d'interrelation entre les secteurs public et privé et la société civile, par le biais des filières agroalimentaires considérées comme un espace propice à la recherche de solutions communes et permanentes pour le secteur agricole et rural.

Cadeias agroalimentares: um instrumento para fortalecer a institucionalidade dos setores agrícola e rural

Aqui são descritas as experiências e os enfoques da formação de cadeias agroalimentares, apontando a necessidade de desenvolver uma nova institucionalidade e formas de cooperação técnica para o fortalecimento do setor agrícola e rural. Espera-se que as cadeias agroalimentares constituam mecanismos de diálogo e instrumentos de gestão para a competitividade e a tomada de decisões em consonância com as demandas dos Estados membros do IICA. Para isso define-se a cadeia agroalimentar com as características conferidas por seus atores econômicos e sociais mediante sua participação em todos os elos da cadeia. Definem-se os órgãos de concertação, especificamente o “comitê da cadeia”, e as funções e características da “secretaria da cadeia”. Essas características são fundamentais para o sucesso dos comitês e a operação das cadeias. Também é apontada a necessidade de redefinir as funções dos ministérios da Agricultura como agentes de inter-relação entre os setores público e privado e a sociedade civil por meio de cadeias agroalimentares como espaço propício para encontrar soluções comuns e permanentes para os setores agrícola e rural.

Cadenas agroalimentarias: un instrumento para fortalecer la institucionalidad del sector agrícola y rural

Se describen las experiencias y enfoques de la constitución de cadenas agroalimentarias y se plantea la necesidad de desarrollar una nueva institucionalidad y formas de cooperación técnica para el fortalecimiento del sector agrícola y rural. Se espera que las cadenas agroalimentarias se constituyan en mecanismos de diálogo e instrumentos de gestión para la competitividad y la toma de decisiones según las demandas de los Estados Miembros del IICA. Para ello se define la cadena agroalimentaria y se brindan las características que le confieren sus actores económicos y sociales, mediante la participación de todos sus eslabones. Se definen los órganos de concertación, específicamente el “comité de cadena” y las funciones y características de la “secretaría de cadena”. Estas características son fundamentales para el éxito de los comités y la operación de las cadenas. También se plantea la necesidad de redefinir las funciones de los ministerios de agricultura como agentes de interrelación entre los sectores público - privado y la sociedad civil, a través de cadenas agroalimentarias, como espacio propicio para hallar soluciones comunes y permanentes para el sector agrícola y rural.



The U.S. Farm Bill¹ and its impact on the WTO agricultural negotiations

Antonio Donizeti Beraldo²

Abstract

The U.S. Farm Bill enacted in mid-2008 for a five-year period could have a negative impact on the Doha Round of the WTO trade negotiations that got under way in 2001 and has yet to be concluded, mainly due to the difficulties involved in reaching a consensus on agricultural issues. The most recent U.S. Farm Bill retains most of the market-distorting programs contained in the previous act, some of which were condemned by the WTO dispute settlement bodies. It also introduces others, such as the ACRE program, regarded as even more distorting. The protectionist nature of the most recent law is incompatible with the ongoing negotiations of the Doha Round. It has made the conclusion of those negotiations more difficult and could exacerbate the trade disputes with countries that compete with the United States in international agricultural markets.

¹ The Food, Conservation, and Energy Act of 2008.

² Regional Specialist in Policies and Trade, antonio.donizeti@iica.int

Key words: *Agricultural legislation, trade agreements, international agreements, subsidies, environment, agricultural policy, WTO, ACRE.*

Introduction

In June 2008, the United States Congress passed the Food, Conservation and Energy Act of 2008,³ popularly known as the Farm Bill. This new agricultural legislation replaced the Farm Security and Rural

Investment Act of 2002, which was in force from 2002-2007 and was extended through 2008 due to the inability of the United States Department of Agriculture (USDA) and the two houses of Congress (House of Representatives and Senate) to reach a consensus on the new bill.


The original bill that the USDA sent to Congress reduced the agricultural subsidies contained in the main income-guarantee programs of the previous act.

The lawmakers made major changes to the legislation, however, not only maintaining most of the existing support programs but even creating new ones.

The United States is one of the world's largest agricultural producers and exporters, so its agricultural support legislation, or Farm Bill, is always a source of concern. It has a direct impact not only on U.S. farmers but also on the agricultural producers and exporters of other actors in global agricultural markets. The new law will also have an impact on the multilateral trade negotiations, because the policies and programs it contains will influence the USA's positions in the WTO negotiations.



³ The new Farm Bill will be in effect for five years (2008-2012), allowing U.S. producers to plan their activities farther ahead.




In general, the new act maintains and expands the principal commodity programs contained in the previous bill.

The new bill comprises 15 chapters or titles, five more than the previous one, and calls for a budget allocation of US\$307 billion spread over the five years it will be in effect. The main lines of action include the programs related to nutrition, conservation, commodities, rural development, research, energy and rural insurance. Priorities will be set for the programs for food distribution, conservation and incentives for the use of renewable energy sources such as biofuels. In general, the new act maintains and expands the principal commodity programs contained in the previous bill.

Furthermore, the 2002-2007 Farm Bill was enacted at a time of low international agricultural prices and regarded as protectionist, due to the introduction of programs such as counter-cyclical payments that practically insulate farmers from price swings in international markets.

The 2002 bill marked a departure from previous legislation (the Federal Agriculture Improvement and Reform Act of 1996), with lawmakers endeavoring to establish an agricultural policy geared more to the market and reduce farmers' dependence on government subsidies. Consequently, the more recent bill marks a return to the spirit of earlier legislation. This is rather surprising, since it was enacted at a time when prices were high and the design of less market-distorting policies might have been expected.



Consequently, the more recent bill marks a return to the spirit of earlier legislation.

This is rather surprising, since it was enacted at a time when prices were high and the design of less market-distorting policies might have been expected.

The main programs contained in the 2008 Farm Bill


Before entering in to the details of the principal programs contained in the most recent U.S. Farm Bill, it is worth considering why it is important for a country to have a policy in place (enshrined in law) to orient and develop the agricultural sector. In this regard, three aspects of the U.S. agricultural policy stand out:

- a. All the programs have been enshrined in law and are multi-year initiatives (covering a five-year period). The fact that they enjoy the status of law makes it possible to forecast agricultural production with greater certainty; farming is, after all, beset by many risks. Rural producers are also able to plan farther ahead (the medium term).
- b. With regard to the agricultural institutional framework in the United States, all the programs approved in the act are administered by a single government agency, the USDA. This means they are implemented more consistently. The institutional frameworks of many Latin American countries are quite different and

programs that affect rural life are usually carried out by an assortment of agencies or ministries, often resulting in inconsistencies in the execution process.

- c. During the drafting of the legislation and its passage through Congress, wide-ranging democratic consultations took place with the various actors of rural life (commodity groups and rural, environmental and civil society organizations). These consultations were undertaken at the initiative of the Executive Branch (USDA), which drafted the original bill sent to Congress and monitored its passage through both houses (House of Representatives and Senate). In other words, the Farm Bill that passed into law was the fruit of a broad process of consensus-building involving different rural actors.

The process of discussing and enacting the Farm Bill was dominated by domestic issues, with the formal and informal commitments assumed with the WTO taking a back seat. This is a serious problem, since the United States is an important player in international agricultural markets and the impact of the country's farming legislation extends

 *Many Latin American countries are quite different and programs that affect rural life are usually carried out by an assortment of agencies or ministries, often resulting in inconsistencies in the execution process.*



The nutrition programs account for most of the budgetary resources allocated under the new bill (nearly 60%, or US\$209 billion).

beyond its national borders. Therefore, the country should also consider the external context when drafting its agricultural legislation.

There follows an analysis of the contents of the new legislation and the implications for the WTO negotiations. Table 1 compares the budget for three of the main programs included in the current act with the budget under the previous bill. The three programs concerned are nutrition, commodities and environmental conservation.

The nutrition programs account for most of the budgetary resources allocated under the new bill (nearly 60%, or US\$209 billion). These programs, the most important of which is the Food Stamp Program, make provision for the purchase and distribution of food for needy Americans. The amount approved was 17.3% more than the resources sanctioned in the 2002 bill (US\$178.2 billion). The most recent act was passed in election year, when Congress is more prone to endorse programs with greater social and political content.

Table 1. Spending under the 2002 bill and projections for the 2008 bill (in billions of US\$).

Bill	Food Stamps	Commodity programs	Environmental conservation
2008	209.0	34.7	25.4
2002	179.2	72.9	18.3
Difference	30.8	-38.3	7.1

Source: CBO (US Congressional Budget Office).

In terms of the impact on production and trade, the commodity programs are important because they have a direct effect on income and influence farmers' decisions as to what and how much they should plant.

The three subprograms included in the previous act were retained: direct payments, counter-cyclical payments and marketing loan assistance. In addition to these three, the new bill created a new, controversial program called Average Crop Revenue Election (ACRE). This is definitely the most contentious part of the new law and has implications for

the WTO trade negotiations, as will be explained below.

The direct payments introduced under the previous bill are fixed payments granted to farmers and are not linked to price or current production levels. The direct payments programs cost a total of US\$27.2 billion during the period 2002-2007, or 48% of all spending under the commodity program. The new law left direct payments at the same levels established in the previous bill. As these payments are not linked to price or production levels, they are regarded as less distorting and the WTO classifies them as "green box" programs.

Table 2. Direct payments and a comparison between the 2002 and 2008 Farm Bills.

Crop	2002 Farm Bill (US\$-bushel)	2008 Farm Bill (US\$-bushel)
Corn	0.28	Unchanged
Cotton	0.0667	Unchanged
Sorghum	0.35	Unchanged
Soybeans	0.44	Unchanged
Wheat	0.52	Unchanged
Oilseeds	0.008/pound	Unchanged
Peanuts	36.0/ton	Unchanged

Source: USDA 2008.

▶ *The new bill raises the target prices for counter-cyclical payments for wheat, sorghum, barley, oats, soybeans and oilseeds for the period 2010-2012, while the target price for corn will apply throughout the period that the law is in effect.*

The counter-cyclical payments are triggered when market prices fall below the target price established in the law. Unlike direct payments, these payments are linked to price levels and so have a major distorting effect that has even been questioned at the WTO. A case in point is the document on cotton presented by

Brazil to the WTO's dispute settlement bodies (DSBs).

The new bill raises the target prices for counter-cyclical payments for wheat, sorghum, barley, oats, soybeans and oilseeds for the period 2010-2012, while the target price for corn will apply throughout the period that the law is in effect. It is very difficult to estimate how much will be spent on counter-cyclical payments, since it depends on future fluctuations in prices, about which there is a great deal of uncertainty.

Table 3. Counter-cyclical payments and target prices.

Crop	2002 Farm Bill (US\$/bushel)	2008 Farm Bill (US\$/bushel)
Wheat	3.92	4.17 from 2010-12
Corn	2.36	2.63
Sorghum	2.57	2.63 from 2010-12
Barley	2.24	2.63 from 2010-12
Oats	1.44	1.79 from 2010-12
Upland cotton	0.7240/lb.	0.7125
Rice	0.1050/lb.	Unchanged
Soybeans	5.8	6.0 from 2010-12
Oilseeds	0.1010/lb.	0.1268 from 2010-12
Peanuts	495/ton	Unchanged

Source: USDA 2008.

However, if current prices and future projections are anything to go by, the new target prices are unlikely to trigger counter-cyclical payments. Although prices have

fallen from the record levels seen in the second half of 2008, they are still above the target prices. Future projections also suggest higher price levels (Table 4).

Table 4. Target prices and projected prices for the most important products (in United States dollars / bushel).

Crop	Target price	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Corn	2.63	3.80	3.60	3.50	3.50	3.55
Wheat	3.92 until 2009	5.00	4.65	4.50	4.50	4.50
	4.17 from 2010-2012					
Soybeans	5.80 until 2009	8.90	8.75	8.80	8.80	8.80
	6.00 from 2010-2012					

Source: USDA 2008.

With respect to loan rates, there are increases for wheat, barley, oats, oilseeds and quality wools. This program works as follows: the marketing loan program offers farmers the option of taking out a loan at harvest time based on the loan rate (US\$5.00/bushel for soybeans, for example), to enable them to market their produce when prices are higher during the commercial year.

For example, if a farmer sells his production for less than the loan rate (i.e., in the case of soybeans for less than US\$5.00/bushel), the amount he pays back is based on current prices and he pockets the difference as a marketing loan gain. If he does not take the loan, he may request payment of the difference between the current prices for his production and the loan rate. Known as a loan deficiency payment, the benefits are the same.

Although the benefits are the same regardless of the farmer's decision, the difference lies in his level of



capitalization. If he has sufficient capital, he may not bother taking out a marketing loan. On the other hand, if he has less capital, or has slid into debt, it may be in his interest to opt for a marketing loan, to cover his harvesting costs and

then wait for the best period of the commercial year to sell his production. However, as current prices are well above the loan rates, farmers are unlikely to make much use of the program in the years ahead.

Table 5. Marketing loans - Loan rate.

Crops	2002 Bill (US\$-bushel)	2008 Bill (US\$-bushel)
Wheat	2.75	2.94 for 2010-12
Corn	1.95	Unchanged
Sorghum	1.95	Unchanged
Barley	1.85	1.95
Oats	1.33	1.39 for 2010-12
Upland cotton	0.52/lb.	Unchanged
Rice	0.065/lb.	Unchanged
Soybeans	5.00	Unchanged
Oilseeds	0.0930/lb.	0.1009/lb.
Peanuts	355.0/ton	Unchanged
Quality wool	1.00/lb.	Unchanged
<i>Mohair wool</i>	4.20/lb.	Unchanged
Sugarcane	18.00 cent/lb.	18 cent/lb. in 2009, 18.25 in 2009
		18.50 in 2010 and 18.75 from 2011-12
Sugar beet	2.29 cent/lb.	Equal to 128.5% of the cane rate for 2009-12

Source: USDA 2008.

Another controversial aspect of the new bill is the gross income ceiling below which farmers qualify for payments under the programs. The 2002 bill was strongly criticized for establishing a very high gross income ceiling (equivalent to US\$2.5 million per farmer). Critics affirmed that large-scale producers benefited most from the payment of subsidies.

Therefore, the original bill sent by the Executive proposed reducing the ceiling to US\$200,000. The so-called commodity groups were even more opposed to this proposal.

Congress made changes to the Executive's bill, establishing eligibility ceilings of US\$750,000 in adjusted gross income (AGI)



The abovementioned commodity programs have the effect of insulating farmers from price swings below the guarantee levels established in the law.

for crops, US\$500,000 in AGI for non-agricultural products for counter-cyclical payments and loan deficiency payments, and US\$1 million in AGI for non-agricultural products under the conservation programs (USDA and FSA 2009). Though these ceilings are lower than the ones established in the previous bill, they are higher than the Executive had wanted.

Together, the abovementioned commodity programs have the effect of insulating farmers from price swings below the guarantee levels established in the law.

It should be noted that in the cotton dispute at the WTO, the arbitrators considered that the marketing loan program and counter-cyclical payments would lead to significantly lower prices in international markets, with serious negative consequences for countries that compete with the United States. Despite the WTO panel's recommendation, the 2008 Farm Bill ensures the programs will remain in place. Canada's preliminary consultations with the WTO's dispute settlement bodies suggest that the situation is likely to give rise to new disputes at the WTO.

As has already been noted, total projected spending under the 2008 Farm Bill is put at US\$307 billion, 68% of which

is earmarked for domestic food support programs. That would be an increase of almost US\$31 billion over the 2002 bill.

A total of US\$34.7 billion has been earmarked for the commodity programs for the period 2008-2012. It should be pointed out that these projections were made in June 2008, when international prices were very high, and probably need updating. Spending on conservation programs is expected to rise by US\$7.1 billion, an almost 40% increase over the 2002 bill.

Despite the WTO panel's recommendation, the 2008 Farm Bill ensures the programs will remain in place. That the situation is likely to give rise to new disputes at the WTO.

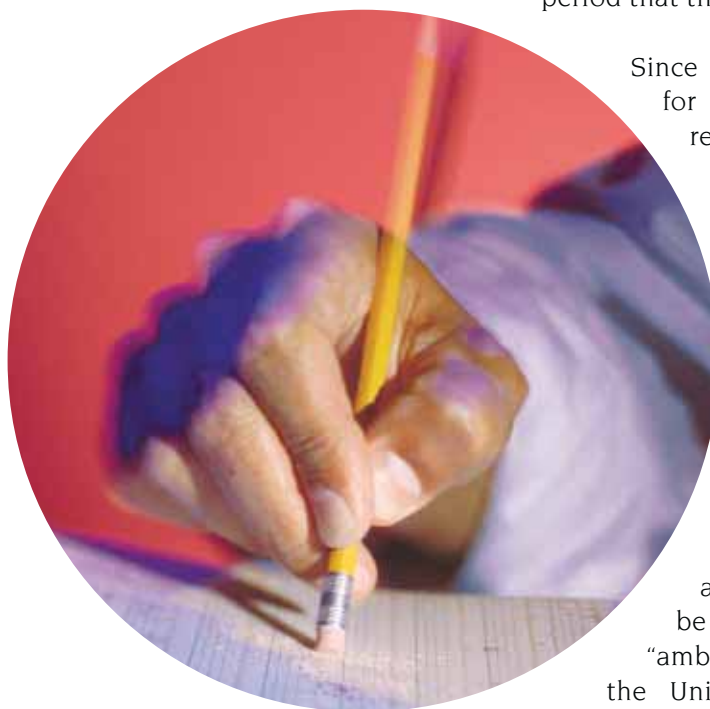


The new Average Crop Revenue Election (ACRE) Program and its possible impact on the WTO trade negotiations

The biggest new development as far as the commodity programs are concerned is, without a doubt, the introduction of the ACRE Program. Created as an alternative to traditional counter-cyclical payments, this program entered into effect in 2009. The original bill sent to Congress by the Executive proposed only a change in the methodology used to calculate counter-cyclical payments (they were to be calculated based not only on commodity prices but also on income (prices/yields)).



▶ *The lawmakers decided to leave the methodology for calculating counter-cyclical payments unchanged and introduced a new program based on the method originally proposed by the Executive.*



concerned, guarantee income based on the average state yield for the last five years and the average national price for the last two years. Farmers who choose to take part in this program will receive 20% less in direct payments and a 30% lower rate for marketing loans during the period that the law is in effect.

Since the average calculated for 2009 will be based on recent record price levels, a sharp fall in prices could lead to a significant increase in payments. Consequently, large numbers of farmers are expected to sign up for the new program, which will certainly increase the subsidies paid. If that happens, the United States could face problems at the WTO, as the ACRE program could be construed as providing “amber box” subsidies, which the United States had pledged to reduce.

However, the lawmakers decided to leave the methodology for calculating counter-cyclical payments unchanged and introduced a new program based on the method originally proposed by the Executive. The objective of the new methodology was to gradually link the subsidies to specific commodities, while guaranteeing farmers’ income. This, it was felt, would have less of a distorting effect on market prices.

Under the bill approved by Congress, the ACRE program will, for the commodities

The fall in prices since the second half of 2008 is likely to trigger payments under the ACRE program. The USDA itself has said that if large numbers of farmers sign up for the program (it estimates that nearly 90% will do so), support payments could top US\$18 billion in 2009.

The largest amount ever paid out in “amber box” cash subsidies was US\$16.8 billion (in 1999 and 2000), when international prices were very low. Although the annual consolidated amount of United States “amber box”



The new law also weakens the United States' negotiating position, since it covers the period 2008-2012, when, in theory, the negotiations of the Doha Round should be concluded.

cash payments at the WTO is US\$19.1 billion, during the negotiations of the Doha Round the country had pledged to reduce that figure to US\$8-9 billion. Clearly, the provisions of the new law, especially the spending levels envisaged for the ACRE program, are quite incompatible with what was being negotiated at the WTO.

Some analysts believe the United States' position of leadership in the ongoing Doha Round was seriously undermined by the inclusion of this new program in the 2008 bill, which could delay the negotiations even further. The new law also weakens the United States' negotiating position, since it covers the period 2008-2012, when, in theory, the



The fact that this legislation ensures U.S. farmers will receive prices for their produce that are not linked to world prices means that any adjustments due to imbalances in supply and demand will directly affect the producers of countries that do not have a network to protect them from global price swings.

negotiations of the Doha Round should be concluded.

Thus, the new U.S. Farm Bill has created another obstacle to the conclusion of the Doha Round, since it contains programs that are not consistent with the most recent drafts of the new agricultural agreement of the Doha Round.

The developing countries are undoubtedly the ones most affected by the new act, especially countries that compete with the United States in international markets. The fact that this legislation ensures U.S. farmers will receive prices for their produce that are not linked to world prices means that any adjustments due to imbalances in supply and demand will directly affect the producers of countries that do not have a network to protect them from global price swings.

Other chapters of the 2008 Farm Bill

With regard to access to the U.S. market for foreign products, the new law maintains the same quotas for imports of sugar and ethanol, ruling out any possibility of major Latin American producers increasing their exports to the U.S. Since these restrictions also figured in the previous law, the status quo is maintained in terms of access to the U.S. market for products of interest to the region.

One of the priorities of the chapter on energy concerns the funds allocated to encourage diversification of the raw



materials used to produce agroenergy. The amount of US\$1.1 billion was allocated for biofuels produced from sources other than feed grains, especially to spur the production of second-generation biofuels

from biomass. This issue is important, since the use of staple crops such as corn for biofuel production could decline in the long run and their impact on prices would be reduced, as occurred in recent years.



Literature consulted

CBO (US Congressional Budget Office). Economic database. USA. Available at www.cbo.org

Dabson, B. 2007. Proposed Publication on National Policies on Agriculture in the Americas, Section II:5 United States - The 2007 Farm Bill. Rural Policy Research Institute.

Gifford, M; Montemayor, R. 2008. An Overview Assessment of the Revised Draft WTO Modalities for Agriculture. ICTSD.

ICTSD (International Centre for Trade and Sustainable Development). 2008. WTO News US Farm Bill Could Complicate Negotiations. News and Analysis, May.

Llana Pérez, C. 2008. *La nueva Ley Agrícola de los Estados Unidos y su consistencia con las disciplinas de la OMC*. Revista del CEL.

USDA (United States Department of Agriculture). 2008. Farm Bill Side-By-Side, Title I: Commodity Programs. Washington, D.C.

_____; FSA (Farm Service Agency). USDA enacts changes to payment limitations, income qualifications, and implements direct attribution programs. Available at <http://www.fsa.usda.gov/FS>

Résumé / Resumo / Resumen

► La Loi agricole des États-Unis et ses répercussions sur les négociations agricoles au sein de l'OMC

La Loi agricole des États Unis (*Farm Bill*), adoptée au milieu de l'année 2008 et en vigueur pendant les cinq prochaines années, pourrait avoir des conséquences négatives sur les négociations commerciales du cycle de Doha de l'OMC qui ont été lancées en 2001 et qui n'ont pas encore abouti, en raison principalement des difficultés rencontrées pour arriver à une position commune sur le chapitre agricole. La nouvelle loi maintient la majeure partie des programmes considérés comme faussant le marché qui existaient dans la législation précédente, dont certains ont été condamnés par l'organe de règlement des différends de l'OMC. Cette loi introduit également d'autres programmes, comme le programme ACRE dont l'effet de distorsion serait encore plus important. Le caractère protectionniste de la nouvelle loi peut être qualifié d'incompatible avec les négociations en cours dans le cadre du cycle de Doha de l'OMC, ce qui a empêché la conclusion de ce cycle, et il pourrait en outre accroître les différends commerciaux avec les pays en concurrence avec les États-Unis sur les marchés agricoles internationaux.

► A Lei Agrícola dos Estados Unidos e seu impacto nas negociações agrícolas da OMC

A Lei Agrícola dos Estados Unidos (*Farm Bill*), aprovada em meados de 2008 e com cinco anos de vigência, poderia ter impacto negativo nas negociações comerciais da Rodada de Doha, da OMC, lançada em 2001 e que até o momento não foi concluída em face, principalmente, das dificuldades de se chegar a um consenso no capítulo Agricultura. A nova lei mantém a maior parte dos programas considerados "distorcedores" do mercado, existentes na legislação anterior, alguns deles, inclusive, condenados no órgão responsável pela solução de controvérsias da OMC. Também introduz outros, como o programa ACRE, considerado ainda mais "distorcedor". A natureza protecionista da nova lei pode ser considerada incompatível em relação às negociações que vinham sendo realizadas na Rodada de Doha, o que prejudicou sua conclusão e poderia, além disso, acirrar as disputas comerciais com países competidores dos Estados Unidos nos mercados agrícolas internacionais.

► La Ley Agrícola de los Estados Unidos y sus impactos en las negociaciones agrícolas de la OMC

La Ley Agrícola de los Estados Unidos (*Farm Bill*), aprobada a mediados del 2008 y con validez para los próximos cinco años, podría impactar fuertemente las negociaciones comerciales de la Ronda Doha de la OMC lanzada en el 2001 y que hasta hoy no ha sido concluida, debido principalmente a las dificultades de lograr un consenso en su capítulo agrícola. La nueva ley mantiene la mayor parte de los programas de mercado considerados incompatibles en la legislación anterior, algunos de ellos condenados en el órgano de soluciones de controversias de la OMC. También introduce otros, como el programa ACRE. El carácter proteccionista de la nueva ley puede ser calificado incompatible en relación con las negociaciones que se venían gestionando en la Ronda Doha de la OMC, lo que ha perjudicado su conclusión y podría, además, incrementar las disputas comerciales con países competidores de Estados Unidos en los mercados internacionales agrícolas.



Photo IICA Uruguay

Rural tourism in Uruguay: a growing trend

Maren Mackinnon¹, Alejandra Bentancur², Adrián Sánchez³

Abstract

Uruguay is a country with numerous competitive advantages afforded by its natural landscapes and cultural heritage, and has been promoted around the world mainly as a “sun and sand” destination. However, with the impetus of the citizens themselves, rural tourism is becoming a “growing trend” and efforts are now under way to professionalize and position this sector as a major tourism product. This article examines the sector’s legal and institutional framework as well as the main activities encompassed by the concept of rural tourism for the relevant authorities. It also describes the providers of rural tourism services and, finally, offers a brief description of the current status of and outlook for rural tourism in Uruguay.

1 President of the Federation of Rural Youth – FRJ, marenmg@gmail.com. The full report “Rural Tourism in Uruguay” (2009) is available from the virtual library at the web site of the IICA Office in Uruguay (<http://www.iica.org.uy>).

2 National Specialist in Agribusiness, alejandra.bentancur@iica.int

3 Intern in Uruguay, jasan2020@hotmail.com

Key words: *rural tourism, agro-tourism, ecotourism, nature tourism.*

Introduction

Uruguay covers an area of 176,215 sq. km with endless natural landscapes: green pastures, gently undulating countryside, forests and pristine white sand beaches. It also has an important hydrographic network of rivers, streams, marshes, wetlands and lakes that provide a refuge for more than 450 species of birds, sea turtles, whales and seals. With its natural attractions and its efforts to preserve the environment, Uruguay is committed to being a “natural country”.

Legal and institutional framework

Law no. 14 335 published in 1975 (known as Decree-Law by Law no. 15 738) declares tourism to be a major factor of economic and social development and an activity of public interest. Tourism is understood as a group of activities stemming from the temporary and voluntary displacement of individuals or groups of people away from their usual place of residence, for leisure purposes. The law defines tourists as individuals or groups who are subjects of that displacement, and anyone who offers tourism services to tourists is considered to be a provider of tourism services.

Although the provision, exploitation and development of activities and

Tourism is understood as a group of activities stemming from the temporary and voluntary displacement of individuals or groups of people away from their usual place of residence, for leisure purposes.

services classified as *tourism* is generally considered a private business activity, the State may take charge of these for reasons of public order, or when the government considers the need to promote or develop tourism activities and services that private individuals cannot or will not assume.

The aforementioned law mentions public, national and provincial institutions as contributors to the development of tourism, and coordinates their actions with the competent institutions. According to Law no. 17 243, the Ministry of Tourism and Sports (MINTURD) is responsible, among other things, for advising the Executive Branch and proposing national policies on the matters under its authority.

The provincial governments or Intendencias also have their own tourism offices. Each of Uruguay's 19 intendencias has a tourism office - with varying degrees of internal hierarchy, autonomy⁴ and dynamism - responsible for promoting and developing local tourism activities.

⁴ In some cases, the Tourism Offices in the provinces are attached to the departments of the environment or planning.



Foto IICA Uruguay

In addition, Uruguay has established a National Development Plan for Rural Tourism and Ecotourism and has a National Tourism Council (CONATUR). The Plan is being implemented in the context of a loan agreement signed between MINTURD and the Inter-American Development Bank (IDB) for the execution of the program “Improving the competitiveness of strategic tourist destinations.” This is the first IDB loan obtained by Uruguay for the development of tourism.

In 1974, CONATUR was created by Law no. 14 335, with the overall objective of contributing to the design of medium and long-term sustainable development policies for the tourism sector. This body is headed by MINTURD and includes representatives of the national government, decentralized institutions, the National Congress of Intendants, the Tourism Commission of the Chamber of Intendants, the Tourism Commission of the Chamber of Representatives, the Uruguayan Chamber of Tourism, delegates of the Inter-union Workers’ Plenary (PIT) and the National Convention of

Workers (CNT), education representatives, members of the private tourism sector, provincial corporations and individual tourism operators.

In 2008, Decree no. 267/008 was published, which defined “providers of rural tourism services “ as physical or juridical persons who offer tourism services, with or without lodgings, in agricultural, livestock, forest or agroindustrial establishments or in rural areas with a preserved natural environment. All such providers must be registered in MINTURD’s Registry of Tourism Operators.

Main activities

In Uruguay the concept of rural tourism encompasses “everything found in the rural milieu and linked to agricultural activities.”⁵ The main purpose of this business activity is to improve the income of farms and rural establishments. Many rural communities in Uruguay are promoting this type of tourism to complement or supplement agricultural incomes.

5 Words of Ing. Antonio D’Ambrosio, Director of Rural Tourism and Ecotourism of the Ministry of Tourism and Sports (MTD) of Uruguay.

Decree no. 371/002 of 25/09/2002, defines rural tourism as a new form of tourism characterized by:

- Activities that take place outside urban centers.
- Services provided in a personalized manner.
- Activities that generally take place outdoors.
- Varied use of natural and cultural resources, facilities, lodgings and services, typical of the rural milieu.
- Contributes to local development and to the diversification and competitiveness of tourism.

The following agricultural activities are included in the concept of rural tourism:

- Active participation in, or simple observation of, production processes:** from routine work on farms and ranches (*estancias*), such as milking animals, taking care of livestock, harvesting crops etc.) to special activities carried out only at certain times of the year (cattle branding, herding, hunting expeditions, etc.).
- Horseback riding** around the farm or longer cross-country journeys on horseback with overnight stays in camps. These rides may be of varying duration, depending on the distance covered, and may last from a few hours to several days. Uruguay has large expanses of gently undulating natural pasturelands.

Many rural communities in Uruguay are promoting this type of tourism to complement or supplement agricultural incomes.

- Birdwatching** is one of the most popular activities among conservationists and nature lovers. Because of its latitudinal position between Ecuador and the extreme south of South America, Uruguay is visited by migratory species from the entire American continent. The country's name comes from the Guaraní language and means "River of the Painted Birds".
- Water sports.** Activities include fishing, swimming, recreational activities for children, canoe or boat trips, and others. Uruguay is a freshwater paradise teeming with life.

Other activities that may be included in the concept of rural tourism are: geology (indigenous settlements), the gaucho tradition (anthropology), immigrant colonies (San Javier), cycle tourism, gastronomic tourism (focusing particularly on national agrifood products), and harvesting different kinds of mushrooms. All these activities enrich the traditional "asado" (grilled meat) –horseback tourism," allowing visitors to become better acquainted with the country's varied history, culture, customs and traditions through a direct experience of rural life. The tourist learns first-hand about the local gastronomy, handicrafts, production methods and even lifestyles.

According to the Secretariat of the Uruguayan Rural Tourism Society (SUTUR),



“tourists want to live like the people in the countryside: getting up early and performing the same tasks.” The concept embraces “all forms of tourism that take place in the rural milieu,” and includes activities such as guided walks, hiking on trails, mountain biking, canoeing and educational trips, as well as so-called adventure tourism.

Status of and outlook for rural tourism in Uruguay

Efforts are under way to professionalize and position rural tourism in Uruguay. The idea is to promote this sector as a complement to other options such as “sun and sand” tourism, in which the Ministry of Tourism and Sports has invested large sums in publicity and information campaigns.

To professionalize the rural tourism sector, SUTUR created the Sustainable Rural Tourism Quality Program, with the aim of improving the quality of services provided. However, its execution had not been possible until this year, due to a lack of funds. In terms of training, various institutions have developed courses and training activities in this field, but on an independent basis and not necessarily with the appropriate human resources. Although

Efforts are under way to professionalize and position rural tourism in Uruguay. The idea is to promote this sector as a complement to other options such as “sun and sand” tourism, in which the Ministry of Tourism and Sports has invested large sums in publicity and information campaigns.

CONATUR established a Work Group on Training, the Ministry of Education and Culture is not a member of this body. As regards training opportunities, numerous technical courses are available, together with degree and postgraduate studies in general Tourism. However, there are very few courses specializing in rural tourism.

In other countries, rural tourism is a leading activity and is of strategic interest to governments as a means of keeping the population settled in rural areas, conserving the countryside’s cultural and natural heritage, its identity and traditions, and as a development opportunity for rural women and young people.

In Uruguay, by contrast, rural tourism has not been viewed as a priority by the authorities or even by certain operators.

In Uruguay, rural tourism has come from the demand and tastes of the citizens themselves and not as a result of a government program designed for that specific purpose.

This is due, in part, to a lack of information and to the fact that this sector is considered new and informal. Instead, the growing interest in this type of tourism has come from the demand and tastes of the citizens themselves and not as a result of a government program designed for that specific purpose. Proof of this is that rural tourism does not receive the tax benefits enjoyed by other sectors such as the hotel industry.

Studies estimate that rural tourism generates, on average, around three additional jobs in each rural tourism enterprise - this in a sector that has still not achieved continuity and stability in terms of the annual flow of visitors. Paradoxically, this sector is not affected by the strong seasonal variations suffered by other types of tourism (e.g. "sun and sand") and remains attractive to visitors throughout the year.

Although there are no policies specifically aimed at developing rural tourism, there is recognition that this sector has been somewhat neglected. For this reason, it is necessary to provide a real stimulus and include it in the promotional efforts of the "Uruguay Natural" policy. Also, there is no official up-to-date and comprehensive study on rural tourism. The last report dates back to 1997.

As noted previously, Uruguay has no official standard definition of rural tourism and its component activities. In addition, the country has no detailed national statistics on the number of visitors and their destinations, or on the various activities they engage in, or on the level of customer satisfaction. This situation leaves the sector without reliable

Uruguay has many competitive advantages to offer both foreign and regional tourists: peace and quiet, varied landscapes and an abundance of natural resources, accessible distances, roads and trails that are mostly passable, and a population that is hospitable by nature.



information concerning its current status and its development in recent years.


Furthermore, it was not until 2008 that Rural Tourism Service Providers were required to register with the Ministry of Tourism and Sports. Although some operators are known to engage in this activity without being registered, this measure has at least made it possible to gauge the scale of rural tourism existing officially in the country.

Uruguay has many competitive advantages to offer both foreign and regional tourists: peace and quiet, varied landscapes and an abundance of natural resources, accessible distances, roads and trails that are mostly passable, and a population that is hospitable by nature. Rural tourism could also be promoted more intensively in the domestic market as a vacation option.

Although Uruguay is one of the region's leaders in the development of technology and communications services, in the interior of the country there are still places with little or no access to these resources. Moreover, these tools are not used to their full potential, due mainly to a lack of training.

Another of the most striking features of the sector is its institutional fragmentation. Despite the fact that the Ministry of Tourism and Sports and the Intendencias are responsible for this area of development,



 *It is necessary to coordinate public and private efforts in very diverse areas to offer tourists a high quality service: information and hospitality, conservation and care of natural resources, security, good roads and trails and computer and telecommunications services in the country's interior, among others.*

there has been little coordination between these institutions and varying levels of commitment.

At the same time, there is no mechanism to link the environmental policies of the Ministries of Housing, Land Planning and Environment and of Livestock, Agriculture and Fisheries to tourism, other than through an annual event organized jointly by these institutions.

A process is currently under way to incorporate the nature reserves of the National System of Protected Areas (SNAP) into the activities of the Ministry of Tourism and Sports, and the authorities are working on regulating environmental impacts in the SNAP areas.

With respect to the private sector, when the concept of rural tourism is mentioned, some operators immediately associate this with tourism products offered by farms or rural establishments, overlooking adventure tourism and gastronomic routes (among others). At present, we find situations such as the fact that SUTUR – the leading rural tourism association at national level - has no joint projects with NGOs or with the Uruguayan Chamber of Tourism.

However, on a more positive note, integration is being promoted through the annual Meetings on Rural Tourism and Protected Areas. In 2007, the Fifth National Meeting on Ecotourism and

Rural Tourism and the Fourth National Congress on Protected Natural Areas were organized with the aim of analyzing the current status, progress and prospects for protected areas, ecotourism and rural tourism activities. A number of actions were proposed for improving the links between protected areas and for enhancing the country's conservation and development policies. These events provided a space for sharing and discussing scientific research projects, the management of protected areas and their zones of influence, and for disseminating development experiences and introducing new rural tourism and ecotourism products. This year the Sixth Meeting on Ecotourism and Rural Tourism and the Fifth Congress on Protected Areas will take place. The institutions involved are currently organizing these events.

Lessons learned

- a. Although tourism development generally begins with a governmental policy or support program, rural tourism in Uruguay emerged from the initiatives and efforts of the Uruguayans themselves, through an association of interests.
- b. All efforts require direction; therefore, work is currently under way on the National Sustainable Tourism Plan 2009 - 2020.



Photo IICA Uruguay

- c. All agents that provide tourism services require professional training. Uruguay has the motivation to achieve this goal, as well as a clear commitment to quality.
- d. It is necessary to coordinate public and private efforts in very diverse areas to offer tourists a high quality service: information and hospitality, conservation and care of natural resources, security, good roads and trails and computer and telecommunications services in the country's interior, among others.
- e. Up-to-date statistics on rural tourism are needed to measure its scale and impacts on agriculture and rural life.

Literature consulted and cited

Curbelo Balda, A. 2004. *Análisis del turismo en Uruguay con enfoque territorial y sostenible*. Available at <http://www.iica.org.uy/data/documentos/85050.pdf>

Eco Regionales, 2008. *El turismo rural será incorporado a las políticas nacionales del Uruguay natural*. UY, Sept. 25. <http://www.ecosregionales.net/?edicion=1318¬icia=8228>

PACC (Competitiveness Program for Clusters and Production Chains); DIPRODE (Directorate of Development Projects); OPP (Office of Planning and Budget). Form for the presentation of proposals, general information. Rural tourism cluster. Available at http://www.diprode.opp.gub.uy/pacc/Inicio/Documentos_PACC/Propuestas_3_llamado/Postulacion_Tourism_rural.pdf

Résumé / Resumo / Resumen



Tourisme rural en Uruguay : une réalité en croissance

L'Uruguay possède des avantages concurrentiels, fruits de son patrimoine naturel et culturel qui ont été vantés dans le monde entier, principalement sous le thème « soleil et plage ». À l'initiative des Uruguayens eux-mêmes, le tourisme rural a vu naître un processus de professionnalisation et de positionnement en tant qu'offre touristique, pour devenir ce que l'on a appelé « une réalité en croissance ». Dans le présent article, nous décrivons le cadre légal et institutionnel du secteur et les principales activités qu'englobe cette notion pour les autorités concernées. Nous établissons également les caractéristiques des fournisseurs de services touristiques ruraux et, enfin, nous présentons une brève description de la situation et des perspectives du tourisme rural en Uruguay.



Turismo rural no Uruguai: uma realidade em crescimento

O Uruguai possui vantagens competitivas, produto de seu patrimônio natural e cultural, as quais vêm sendo promovidas em todo o mundo, principalmente quando o tema é “sol e praia”. A partir do estímulo dos próprios cidadãos, o turismo rural iniciou um processo de profissionalização e posicionamento como oferta turística e converteu-se no que é visto como “uma realidade em crescimento”. Este artigo identifica o quadro jurídico e institucional do setor e as principais atividades inseridas nesse conceito que cabem às autoridades em questão. Também caracteriza os prestadores de serviços turísticos rurais e, finalmente, apresenta uma breve descrição da situação e perspectivas do turismo rural no Uruguai.



Turismo rural en Uruguay: una realidad en crecimiento

Uruguay posee ventajas competitivas producto de su patrimonio natural y cultural que han sido promocionadas por el mundo, principalmente con referencia a “sol y playa”. A partir del impulso de los propios ciudadanos, el turismo rural ha iniciado un proceso de profesionalización y posicionamiento como oferta turística y se ha convertido en lo que se ha denominado “una realidad en crecimiento”. En el presente artículo se identifican el marco legal e institucional del sector y las principales actividades que se engloban en dicho concepto para las autoridades referentes. También se caracterizan los prestadores de servicios turísticos rurales y, por último, se hace una breve descripción de la situación y perspectivas del turismo rural en Uruguay.



Foto CENTA

From flood relief to food and nutrition security to income generation in Kwamalasamutu, Suriname

John King¹, Andrew Baker², Cromwell Crawford³, Brahma Ramssoedit⁴

Inter-thematic

Abstract

The devastating effects of severe weather patterns occasioned by climate change, frequently present opportunities for enhancing food and nutrition security in affected communities. Flooding in several hinterland communities in Suriname in 2008 presented such an opportunity. Kwamalasamutu one of the largest Amerindian communities in Southern Suriname close to the border with Brazil was severely affected. Farms were flooded and food security of the community was threatened.

A joint project of relief, rehabilitation and food and nutrition security was conducted by the IICA in Suriname and the Suriname Red Cross. The experience included in this document resulted in enhanced food security of the community and income generation for participating farmers.

¹ John King, Project Coordinator, john.king@iica.int

² Andrew Baker, Peace Corps Volunteer, andrewbaker@gmail.com

³ Cromwell Crawford, Representative, cromwell.crawford@iica.int

⁴ Brahma Ramssoedit, Field Assistant, brahma.ramssoedit@iica.int

Key words: *Food Security, Nutrition, Rural Development, Rural Communities, Sustainability, Flooding, Income, Suriname.*

Introduction

In August 2008, unusually heavy rains inundated several communities in the Eastern and Southern regions of Suriname, Tapanahoni, Lawa, Upper Marowijne and Coeroeni river basins, including such villages as Godo olo, Dritabiki and Kwamalasamutu. Early assessments indicated that over 3000 households were affected including over 250 in Kwamalasamutu. As the water receded it became clear that farms were severely damaged and many crops on which the villagers depended for their basic food and nutrition needs were destroyed. Cassava, their main staple, sweet potatoes, banana, passion fruit and colocasia crops were all devastated. Most of the cassava rotted in the ground.

for farm rehabilitation and sustainability food security in the affected communities. Kwamalasamutu was severely affected and required special attention. In that sense, IICA was invited to partner with them to carry out the farm rehabilitation and food security activities.



Foto CENTA

▶ *As the water receded it became clear that farms were severely damaged and many crops on which the villagers depended for their basic food and nutrition needs were destroyed.*

Kwamalasamutu

The Suriname Red Cross (SRC) carried out a campaign to bring immediate relief to the households by delivering food packages and other supplies. In carrying out the relief efforts the SRC recognized the need

Kwamalasamutu was identified for intervention. It is an Amerindian village with an approximate population of 900 inhabitants located in the south of Suriname near the border with Brazil

on the Sipaliwini River. It is the most central and important Amerindian village in Suriname, not only because it is the interior's largest village, but also because it is home to the Granman, the Paramount Chief of the Trio Tribe, an Amerindian people in Suriname, Brazil and Guyana. While the Village is of central importance due to its size as well as cultural, religious and political significance, there is still a lack of infrastructural, social and technical development, which is attributed mainly to its isolated location.

The village can only be reached by airplane (approximately two hours) or boat (approximately a week and a half travel from the capital, Paramaribo, depending on rains). Due to the difficulty of travel, the transport of modern goods, tools and technology is very difficult and expensive. In addition, the isolation of the village has had a negative impact on the economic development and income generating opportunities of the community; with the village all but cut off from the major coastal markets.

Kwamalasamutu is also disadvantaged in regards to issues of food security and has been severely affected by the changing weather patterns and increased rains in the region. The community is vulnerable to food security problems due to its isolation but more importantly because of its dependency on cassava as a staple crop and lack of agricultural diversification.

The change in weather patterns and increased rains have caused many of the cassava plots to become oversaturated

and the roots to rot and die before the crops can be harvested.

Another problem that occurs every two to three years is infestation by leaf cutter ants (also known as Acoushi ants). The ants are attracted to cassava and the traditional plots of the Amerindians and can ruin entire seasons, leaving the village with little to no food.

Recently the food security situation has become so severe that the government and other organizations, including the Red Cross have flown in food to support the community.

Food security initiative

The SRC partnered with IICA and together the two institutions conducted assessments in the Sipalawini Districts. Following the assessment the SRC and IICA agreed to jointly conduct a relief, rehabilitation and food and nutrition security programme in affected communities.

The programme of activities designed by IICA and SRC for Kwamalasamutu was developed using the Agro-Matrix as its philosophical guide.

Following the assessment the SRC and IICA agreed to jointly conduct a relief, rehabilitation and food and nutrition security programme in affected communities.



The AGRO-Matrix				
Systemic Concept	Rural Territories	Agricultural Production-Trade Chains	National and International Context	Strategic objectives
Sustainable development approach				
Production - Trade	I. Promoting competitive rural enterprises	II. Integrating chains and strengthening their competitiveness	III. Promoting an environment conducive to competitive agriculture	→ Competitiveness
Ecological - Environmental	IV. Being environmentally responsible in the rural areas	V. From farm to table: promoting integrated environmental management	VI. Participating in building an institutional environmental framework	→ Sustainability
Sociocultural - human	VII. Quality of life in rural communities: creating know-how and opportunity	VIII. Advancing learning and expertise in the chain	IX. Promoting policies to create capabilities and opportunities for the rural communities	→ Equity
Political - institutional	X. Strengthening public and private sector participation and coordinated action between them in the territories	XI. Strengthening dialogue and commitments among actors in the chain	XII. Promoting national policies and regional and hemispheric cooperation for agriculture and rural life	→ Governance
Strategic objectives	Rural Prosperity ~ Food Security ~ International Positioning			Overarching goal Sustainable development of agriculture and rural milieu

Source: Ministerial Agreements (2005).

Some of the aspects considered and findings during the programme were:

- **Assessment:** in preparing the intervention programme, the teams conducted assessments of the economic, ecological, socio-cultural and governance aspects of the community. Detailed assessments of the agricultural production system were carried out. The number of farms, location of farms, cultivation methods utilized, types of crops cultivated and the use and disposal of produce were examined.
- **Socio-Economic:** following discussions with community leaders, potential participants and other stakeholders, it was determined that there was

significant level of poverty in the community. This was due in part to irregular or non-existent employment opportunities. There was some income derived from the operation of tourist lodge which was funded by an external agency and operated by the community. A significant segment of the community depends on government social development pay-outs.

Following discussions with community leaders, potential participants and other stakeholders, it was determined that there was significant level of poverty in the community. This was due in part to irregular or non-existent employment opportunities.

- **Ecological:** slash and burn production technique is predominant in the community. However it was not very successful since community members returned too early to previously used plots.
- **Social Infrastructure:** there is a primary school in the community; however the education level of the community members is regarded as low. There is a health clinic operated by the Medical Mission (Medizeps), a foundation made up of religious organizations. The clinic provided vitamins tablets to the community as dietary supplements.
- **Governance:** it was determined that the principal players in the chain of the community were the government, Amazon Conservation Team (ACT), which conducts assessment on medicinal plants in the community and other NGO's also played minor roles in the community.
- **Food Security:** it was found that the community was facing severe food security problems. This was due to flooding, pests of and diseases affecting the main staple – cassava, poor soil quality, inefficiency of the slash and burn technique, population density in relation to hunting and poor diet due to lack of variety.

Following the assessments a Rehabilitation and Enhanced Food and Nutrition Security Project was designed. The major objective of the project were to provide immediate relief to villages affected by the floods, this done by the delivery of packages and other essential domestic supplies by the SRC.

The second objective was to design and implement in collaboration with the community a sustainable food and nutrition security programme. This programme included the following elements:

- a. Improving access by all community members to an adequate, affordable nutrition diet.
- b. Supporting a stable base of family farms that use sustainable production practices that emphasize local input.
- c. Generating production and marketing practices that create direct and beneficial links between producers and consumers.

Activities carried out in the programme included:

- establishment of a demonstration plot;
- relocation of some farms to higher ground;
- assessment of current farming practices;
- acquisition of planting material;
- identification of farmers to participate in the programme;
- training of farmers in such areas as preparation of:
 - plots,
 - planting,
 - crop care,
 - pest management using local botanical products,
 - drainage and irrigation,
 - collecting and storing planting materials,
 - new planting techniques e.g. mounds for cassava.

Additional sessions were conducted in the preparation of vegetables for consumption, since vegetable was not a usual part of the diet of the community. In addition a new staple crop rice has been introduced to add variety to the diet.

Eighteen farmers including young women participated in the program which included production of such traditional crops as cassava, sweet potato, string beans, sopropo, carilla and the introduction of cabbage, tomatoes, egg plant and amsoi.

► *Additional sessions were conducted in the preparation of vegetables for consumption, since vegetable was not a usual part of the diet of the community. In addition a new staple crop rice has been introduced to add variety to the diet.*



Photo IICA Suriname

Results

The programme realized a significant level of success. Some farmers moved their plots to higher ground. New planting material were distributed and utilized and participating farmers were trained in improved planting techniques which they utilized and disseminated to other community members. More community members are utilizing vegetables in their daily diets. Community

members and teachers were trained in preparing vegetables for consumption. There was general acceptance of this addition to the diet. Teachers recognized improvement in attendance, attention span and performance of the pupils. Community members retained planting materials which was not previously done, and replanted vegetable crops.

An element of agrotourism has been introduced with farmers marketing excess produce to nearby tourist lodges and to visitors to the community.

The Granman and community members including health workers and teachers are all loud in their praise for the project since it is not only improving the nutrition of community members, but also enhances the income of participating farmers.

The project is not only improving the nutrition of community members, but also enhances the income of participating farmers.




Photo IICA Suriname

Lessons learnt

The main lesson learnt is that even the most desperate situation can be relieved if intervention agencies and communities work collaboratively on finding solutions, including:

- Climate change has a major impact on food security and seasonal calendar needs to be reviewed and revised in order to improve quality livelihood.

 *The main lesson learnt is that even the most desperate situation can be relieved if intervention agencies and communities work collaboratively on finding solutions.*

- Much satisfaction is realized when communities can generate their own food supply.
- There is a need to diversifying of staple production.
- There is need for on-going support from national institutions to communities after projects are concluded to keep pace of new technology.

The introduced staple crop-rice has shown promise and this would be expanded knowing more new farmers have shown interest and have begun to cultivate plots. Participating farmers have expressed willingness to expand their plots and this will be encouraged. The inclusion of the school in the community serves the need to develop more participatory plans.

The task is not finished, further work will be undertaken to develop organic pesticides to manage leaf cutting ants (*Atta sp.*) and other pests and work will be done in support of harvesting post harvest management and marketing of crops.

Literature consulted

FAO (Food and Agriculture Organization of the United Nations). 2007. Agricultural trade policy and food security in the Caribbean. Ed. JR Deep Ford. IT, Roma, Crescenzo dell'Aquila y Piero Conforti.

IICA (Inter-American Institute for Cooperation on Agriculture). 2007. Agro Plan 2003-2015 for Agriculture and Rural Life in the Americas. Hemispheric Ministerial Agreements. San José, CR, IICA.

_____. 2009a. Directorate of Operations and Regional Integration, Institutional Guidelines on Food Security, St. Kitts and Nevis.

_____. 2009b. IICA Strategy for Technical Cooperation in Food Security. Regional Meeting on food security. St. Kitts and Nevis, Directorate of Technical Leadership and Knowledge Management.

International Federation of Red Cross and Red Crescent Societies. 2006. Vulnerability and Capacity Assessment – Lessons learnt and recommendations. Ginebra.

_____. 2008. Suriname Flood Emergency Appeal. Gordon, RM. 2009. Enhancement of Food Security in the Caribbean through Increased Domestic supply and consumption of Domestically Produced Food.

Nahar, T. 2009. Suriname Red Cross (SRC) collaboration with IICA. Accountability Seminar. Paramaribo, IICA.

Résumé / Resumo / Resumen

► Du secours aux victimes des inondations à la sécurité alimentaire et nutritionnelle et à la création de revenus

Les effets dévastateurs des violents phénomènes atmosphériques provoqués par le changement climatique apportent souvent des occasions d'améliorer la sécurité alimentaire et nutritionnelle dans les collectivités touchées. Les inondations survenues dans plusieurs collectivités de l'arrière-pays au Suriname en 2008 ont fourni une telle occasion. Le village de Kwamalasamutu, l'une des plus grandes collectivités amérindiennes du sud du Suriname, près de la frontière avec le Brésil, a été gravement touchée. Les fermes ont été inondées et la sécurité alimentaire de la collectivité a alors été menacée.

Un projet conjoint de secours, de remise en état et de sécurité alimentaire et nutritionnelle a été mené par l'IICA au Suriname et la Croix-Rouge du Suriname. L'expérience décrite dans le présent document a conduit à une amélioration de la sécurité alimentaire de la collectivité et à la création de revenus pour les agriculteurs participants.

► Do auxílio humanitário à segurança alimentar e a geração de rendimentos

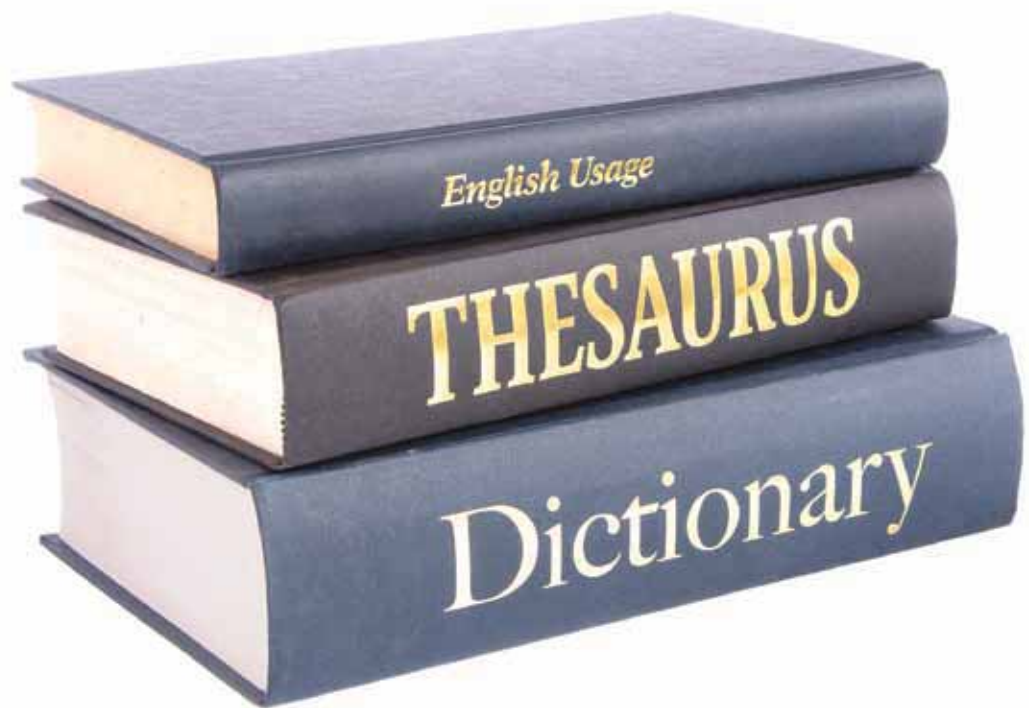
Os efeitos devastadores dos severos tipos de clima ocasionados pelas mudanças climáticas frequentemente ensejamos oportunidades para fortalecer a segurança alimentar e nutricional nas comunidades afetadas. Em 2008, as enchentes ocorridas em diversas comunidades do interior do Suriname apresentaram esse tipo de oportunidade. Kwamalasamutu, uma das maiores comunidades indígenas ao Sul do país, próxima à fronteira com o Brasil, foi seriamente afetada. Fazendas foram alagadas, e a segurança alimentar da comunidade viu-se ameaçada.

Um projeto conjunto para mitigação, recuperação e segurança alimentar e nutricional foi realizado pelo Escritório do IICA e pela Cruz Vermelha no Suriname. A experiência relatada neste documento resultou no aumento da segurança alimentar na comunidade e na geração de renda para os pequenos produtores participantes.

► Del auxilio humanitario a la seguridad alimentaria y la generación de ingresos

Con frecuencia, los efectos devastadores de los patrones meteorológicos severos ocasionados por el cambio climático ofrecen oportunidades para mejorar la seguridad alimentaria y nutricional de las comunidades afectadas por dichos fenómenos. Un ejemplo de ello fueron las inundaciones acaecidas en varias comunidades del interior de Surinam durante el 2008. Kwamalasamutu, una de las comunidades amerindias más grandes del sur de ese país, ubicada cerca de la frontera con Brasil, la cual resultó gravemente afectada. La seguridad alimentaria de dicha comunidad se vio amenazada debido a que las fincas se inundaron.

La Oficina del IICA en Surinam y la Cruz Roja de este país realizaron un proyecto conjunto de auxilio, rehabilitación y seguridad alimentaria y nutricional. La experiencia que se describe en este documento mejoró la seguridad alimentaria de la comunidad y generó ingresos a los agricultores participantes.



You say "palta," I say "aguacate" and they say "avocado"

Diversity in agricultural terminology of the Americas*

Lori Finch¹ and Melanie Gardner²

Abstract

A thesaurus is an instrument for controlling words which serves to organize terms and to express relationships among concepts. For decades, information specialists have relied on thesauri to help with the standardization of terminology in information retrieval systems. This article discusses the importance of and need for a joint effort to develop an English/Spanish thesaurus and glossary which reflects the local variations in language found throughout the Americas in the area of agriculture. In 2006, the National Agricultural Library (NAL) of the United States and the Orton Memorial Library (OML) of the Inter-American Institute for Cooperation on Agriculture (IICA) began working together on this effort, and in May 2007 published a bilingual thesaurus. To date, the partners have launched a WIKI, identified an initial workflow and are learning how to work across distances and time zones to create a tool which enhances access to agricultural information across the Americas.

¹ Thesaurus Coordinator, USDA National Agricultural Library, lori.finch@ars.usda.gov

² AgNIC Coordinator, USDA National Agricultural Library, melanie.gardner@ars.usda.gov

* We wish to express our gratitude to the comments made by Priscilla Cascante from IICA.

Key words: *Thesauri, terminology, agriculture, Latin America, Caribbean.*

Introduction

Scientists and researchers have struggled with the implications of making their research data and results freely and publicly available through the open access service. The feasibility and availability of information depends on the pervading social, economic, political, contextual and cultural environment. Nevertheless, the amount of scientific information now freely available through open access has substantially increased over the last decade. Alperin, Fischman and Willinsky (2008) note that this trend has been shared by scholars in Latin America and the Caribbean (LAC).

Scientists are making great strides in delivering scientific data and results using the Information and Communication Technologies (ICT) infrastructure. At present, agricultural research offered through open access is now easily disseminated to those trying to solve real problems in the field, such as plant disease diagnosis and control methods.

It is not enough, however, to have more information available via ICT tools if this complicates the search for specific data. With more information available on the Web, it will be more difficult for the researcher, educator, student or scientist to find the data that is needed if he/she does not have the tools required to perform the search. Although open access and the technology to send data to cell phones

At present, agricultural research offered through open access is now easily disseminated to those trying to solve real problems in the field, such as plant disease diagnosis and control methods.



facilitate the dissemination of scientific information to those connected to the system, it does not solve the problem of the complexity of language and that of effective retrieval of information.

The agricultural information derived from the different linguistic variations used by speakers in the Americas also reflects their culture, their need to market and their survival mechanisms.



The complexity of language:

The complexity of language, due to the many variations of Spanish spoken in the Americas, creates a multilingual scenario that must be considered in creating agricultural thesauri, as the following example shows:

Patron: "Hello, I am looking for articles on fungal diseases of palta."
Librarian: "Palta?"
Patron: "Persea americana."
Librarian: "Oh, yes! Aguacate! Fungal diseases of aguacate. Now I understand."

It is no wonder therefore that the avocado grower in Peru or Chile, who uses the word "palta" for the fruit of the *Persea americana*, does not recognize the term "aguacate," which is used in Central America. It is common for native speakers of Spanish from different regions to not understand the words used outside their own.

From this point of view, the agricultural information derived from the different linguistic variations used by speakers in the Americas also reflects their culture, their need to market and their survival mechanisms.

Considering that the major languages spoken in the Americas are English and Spanish, and that Spanish is the fastest growing language used in the United States in agriculture, there is a need for a standardized bilingual tool that will enable users to use information effectively in adding to and exchanging knowledge in the Americas.

IICA and the NAL have recognized this need and have partnered to develop a bilingual tool that includes as many varieties of the Spanish spoken in the Americas as possible. This resource, entitled *Tesaurus Agrícola*, has been available online since May 2007 and contains over 70,000 terms related to agriculture and ancillary disciplines.

Facts about NAL Agricultural Thesaurus

- Bilingual Spanish/English
- Emphasizing LAC local terms
- Contains over 70,000 terms
- Scientific and common names of organisms
- Definitions of technical terms available in an additional glossary
- In depth coverage of agriculture and biological concepts
- Special features for indexers such as Enzyme Classification numbers and International Committee on the Taxonomy of Viruses (ICTV) codes
- Collaboration of IICA, BCO, and USDA
- Free file download of XML, PDF, SKOS, MARC formats at the web site, http://agclass.nal.usda.gov/agt_es.shtml
- Updated annually every January since 2002
- Available on the Internet 24 hours a day and seven days a week, with a backup mirror site at Michigan State University


A thesaurus is a tool for controlling words which serves to organize terms and to express relationships among concepts. For decades, information specialists have relied on thesauri to help with the standardization of terminology in information retrieval systems (Gilchrist, Lancaster, Lancaster and Warner).

In addition, the thesaurus acts as a controlled vocabulary in which each term represents one concept. The thesaurus serves as the indexing language for an information retrieval system where it is the set of terms used to express the subject content of items in the information retrieval system. For example:

Title of article: “Control of fungal diseases in avocado cultivars grown in the Chanchamayo Valley”

Subject terms from the controlled vocabulary that describe the subject content of the article:

Subject: *Persea americana*
Subject: avocado
Subject: fungal diseases
Subject: cultivar
Subject: Peru
Subject: disease control

 *A thesaurus is a tool for controlling words which serves to organize terms and to express relationships among concepts.*

The process of assigning subject terms to items is called indexing. Subject indexing adds value to an information retrieval system so that items are more easily found.

Some of the terminology used in agriculture is a specialized jargon which may not always be clearly understood by speakers outside that field. In the case of some technical jargon, such as biological nomenclature, there are authoritative lists of valid scientific names. This standardization is helpful for communication, such as in the example above. The librarian understood *Persea americana*, which is the scientific name that has been standardized. In the example, the concept of “fungal diseases” can also be expressed several ways, such as:

- *Enfermedades fungosas*
- *Enfermedades micóticas de plantas*
- *Enfermedades por hongos*

To be most effective in finding research papers on this topic, the user would need to use all three phrases in order to find all the relevant information on this topic. Information retrieval systems that use a standard controlled vocabulary such as a thesaurus will make it easier for the searcher to find information since one phrase will be used consistently for the concept of fungal diseases.

The thesaurus offers much more than merely standardization of terms. The thesaurus serves as a way to organize the terms so that “like terms” are together. For example, you will find *alcachofas*, *brócoli*, *coliflor*, *pepinos*, *cebollas*, *tomates* listed together under “*verduras*”.

► Information retrieval systems that use a standard controlled vocabulary such as a thesaurus will make it easier for the searcher to find information.

[See Figure 1] The person searching for information on verduras does not need to recall all verduras as the thesaurus provides a list of them.

Buscar el término	0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	Categorías
<input type="text"/> <input type="button" value="Buscar"/>	<p>verduras</p> <p>Definición Cualquier parte de una planta que es ingerida comúnmente por los humanos como alimento, pero que no es considerada culinariamente como fruta, nuez, hierba, especia o grano.</p> <p>English vegetables</p> <p>Términos Específicos aceitunas aguacate alcachofas alubias verdes apio berenjenas brócoli brotes de bambú brotes de granos calabazas cardo cebollas coles de Bruselas coliflor fruta de pan fruta del pobre gajos de espárragos gombo hinojo hongos comestibles maíz dextrinoso pepinos pimientos puerros ruibarbo tomates tubérculos comestibles vegetales de hoja verde zapallos</p> <p>Términos Genéricos productos a base de hortalizas</p> <p>Términos Relacionados cultivos vegetales jardines de verduras jugos de hortalizas</p>	<p>Cambiar de Display Mostrar la Jerarquía . = Términos Específicos : = Términos Genéricos</p> <p>Busque su término AGRICOLA Artículos AGRICOLA Libros Google Académico</p>
<p>Opciones de la búsqueda</p> <p>Lengua español / Spanish</p> <p>Método de búsqueda Términos que incluyen..</p> <p>Número de términos desplegados 100</p>		

Figure 1. Excerpt from Tesauro Agrícola demonstrating that like terms are grouped into hierarchies.

The thesaurus also brings together terms which are synonyms. Palta and aguacate are examples of regional equivalents for the same concept. In a controlled vocabulary, one term is the preferred term; that is, the one that is chosen to be assigned for subject description of items in an information system. If we say, “palta USE aguacate,” we are instructing those describing items to use the term aguacate.

Another type of synonymy that is handled in the thesaurus is spelling variants, as shown by the example *turfgrasses* or *turf grasses* [See Figure 2]. These are common in the English language, and are particularly prevalent in the differences between American and British English, such as *oestrogens* and *estrogens*. In the thesaurus, one is chosen as the preferred term and the other is designated as a cross reference.



Figure 2. Excerpt from Tesouro Agrícola demonstrating spelling variants in English.

The thesaurus is not a static document, but rather a dynamic resource which must keep in step with agricultural discoveries and technical progress. The NAL and IICA, through the staff at the

Orton Memorial Library (OML), are collaboratively expanding the vocabulary to better accommodate the needs of Latin America. However, there is an urgent need to have experts from across

► *The thesaurus is not a static document, but rather a dynamic resource which must keep in step with agricultural discoveries and technical progress.*

LAC to contribute their regional dialect to this resource so that this knowledge can be shared.

It is essential that all countries contribute so that their research can be found by others and reused to the benefit of all.

IICA and the NAL recognize the need to work together to ensure that this vocabulary tool will be of use in more effectively indexing agricultural literature and provide for improved retrieval of data on tropical and temperate agriculture for agriculturists throughout the Americas.

Adding information to the thesaurus is necessary, but also the review of existing information by language and agricultural subject experts is needed. Since language contains homographs, it is easy for a translator to misunderstand the concept at hand and provide an incorrect translation. For example, seeing the English term “bits” does not convey the meaning behind the term. The translator would need to consult the hierarchy and other notes associated with the term to provide the correct translation.

The original translation of the Tesauro Agrícola was done by a group from Chile. The translator provides translations that are common to that region, but may not represent all the regional varieties in LAC. Review by experts from different countries of LAC is needed so that there is equal and complete representation of regional dialects.



◀ *Maintaining a thesaurus involves subject experts in agriculture, but also specialists in lexicography, and those involved in his process also need to learn about the principles of thesaurus construction.*

In 2008, IICA and NAL began using a collaborative WIKI in order to facilitate thesaurus development and maintenance. The WIKI is a new Web 2.0 tool that makes the collaborative development of knowledge on topics of common interest possible. It is a space for “experts” to provide feedback on agricultural terminology, with a view to reviewing and updating the agricultural thesaurus produced by the NAL. The

WIKI serves as a “white board” where participants can propose new terms for the thesaurus, correct errors in the thesaurus, suggest definitions for terms, and post translations. The proposals discussed over the WIKI will be included in the 2010 edition of the thesaurus. During its first year of use, the WIKI has been useful for establishing workflows, maintaining the thesaurus and allowing the participation of other agricultural subject experts in LAC.

Maintaining a thesaurus involves subject experts in agriculture, but also specialists in lexicography, and those involved in his process also need to learn about the principles of thesaurus construction. General guidelines are established by International Organization for Standardization (ISO) for such construction.

Specific guidelines and principles for construction of the *Tesaurus Agrícola* are established by the NAL with the aid of their IICA partners. Principles and rules need to be established so that there is consistency throughout the thesaurus. For example, rules are established for the treatment of abbreviations, acronyms, symbols, punctuation, capitalization, scientific names, common names, geographic terms, term form and disambiguation of homographs.

The process of the selection of terms is critical and must also follow an established norm. Terms must represent concepts that are well accepted in the discipline. One can find evidence of this acceptance by searching existing literature, such as Agri2000, AGRICOLA or Google Scholar, and determine its frequency of use.

Another method of finding suitable terms is to examine search query logs of users, called user warrant. A term can be justified to be added to the thesaurus if it is frequently searched by users of an information system. Indexers, or those who apply the controlled vocabulary, are excellent sources of new terms. New terms and concepts that are being generated in a discipline are seen by the indexers as they apply the controlled vocabulary. It is advisable to consult with indexers, or analyze the uncontrolled subject terms assigned by indexers, to find candidate terms for inclusion in the thesaurus. The importance of knowing the rules established for constructing thesauri whose structure and content are consistent cannot be underestimated.

Challenges:

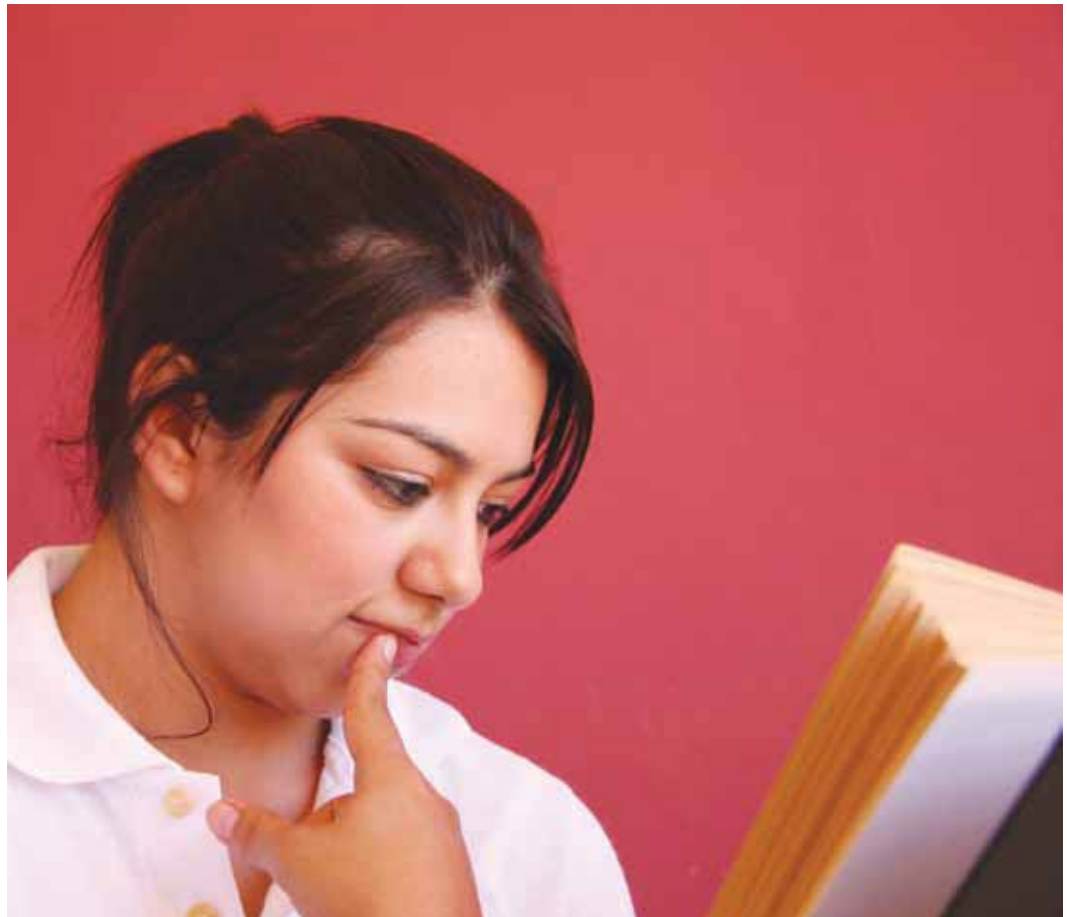
The NAL and IICA will rely on the expertise and leadership of its staff to expand the project to include a wide variety of experts from the LAC. Currently, the OML and the NAL are working to find the best ways to be efficient in their processing of proposals for new terms and changes to the vocabulary. In addition, they are evaluating technologies such as the WIKI to determine their usefulness as an appropriate technology for collaboration on such a geographically distributed project. It is possible that there are other technologies that are needed, especially for the training of participants on the mechanics of thesaurus maintenance. The NAL and the OML are engaged in analyzing which areas in the thesaurus need further development and are identifying

and seeking experts needed for a favorable outcome.

The challenge and opportunity for the future of the expansion and development of the *Tesouro Agrícola* is imminent. The human resources and intellect needed to do this work is not found in one organization or in one particular country of LAC. Collectively, there is an abundance of knowledge, talent and specialized agricultural expertise in the Americas. It is hoped that the interest in the success of this project, which can

benefit many, will be as strong as the commitment shown by some individuals and organizations in LAC.

We hope that this discourse has inspired some to truly appreciate that the complexity of language is real and deserves our time and attention. It challenges us to cultivate it and form it into a tool that will serve the agricultural information systems of the Americas. This tool will contribute to understanding whether you are the agriculturalist growing avocado in Peru, Guatemala or the United States.



Literature consulted

Ager, S. n.d. Latin American Spanish or Spanish for Latin America. Omniglot. Available at http://www.omniglot.com/language/articles/latin_american_spanish.htm

Alperin, JP; Fischman, GE; Willinsky J. 2008. Open Access and Scholarly Publishing in Latin America: Ten flavours and a few reflections. *Liinc em Revista* 4(2): 172-185. Available at <http://www.ibict.br/liinc>.

Chan, LM; Richmond, PA; Svenonius, E. 1985. *Theory of Subject Analysis: A Sourcebook*. Littleton, Colorado, US, Libraries Unlimited, Inc. 415 pp.

Chamis Yanosko, A. 1991. *Vocabulary Control and Search Strategies in Online Searching*. *New Directions in Information Management* no. 27:121. New York, US, Greenwood Press.

Gilchrist, A. 1971. *The Thesaurus in Retrieval*. Londres, Aslib, 183 pp.

International Standards Organization. *Documentation - Guidelines for the establishment and development of monolingual thesauri*. ISO 2788-1986. 32 pp.

_____. *Documentation – Guidelines for the establishment and development of multilingual thesauri*. 61 pp.

Lancaster, FW. 1986. *Vocabulary Control for Information Retrieval*. Arlington, Virginia, US, Information Resources Press. 270 pp.

_____; Warner AJ. 1993. *Information Retrieval Today*. Information Resources Press, 341 pp.

_____. 1998. *Indexing and Abstracting in Theory and Practice*. Champaign, Illinois, US, University of Illinois. 412 pp.

Onsrud, H. 2004. *Overview of Open-Access and Public-Commons Initiatives in the United States*. *Proceedings of an International Symposium on Open Access and the Public Domain in Digital Data and Information for Science* hosted by the Board on International Scientific Organizations.

Suber, P. 2007. *Open Access Overview: Focusing on open access to peer-reviewed research articles and their preprints*. Available at <http://www.earlham.edu/~peters/fos/overview.htm>

Wellisch, HH. 1991. *Indexing from A to Z*. Bronx, New York: HW Wilson Company. 461 pp.

Résumé / Resumo / Resumen

► « Pour désigner l'avocat, vous dites 'palta', je dis 'aguacate' et d'autres, 'avocado' » : La diversité dans la terminologie agricole des Amériques

Un thésaurus est un répertoire structuré qui sert à organiser des termes et à établir des relations entre des notions. Depuis des décennies, les spécialistes de l'information s'appuient sur des *thesauri* pour normaliser la terminologie des systèmes d'extraction d'information. Dans le présent article, nous examinons les fondements et la nécessité du nouveau partenariat qui s'est donné pour tâche d'établir un thésaurus et un glossaire anglais/espagnol rendant compte des variantes locales utilisées dans les pays d'Amérique latine et des Caraïbes. La *National Agricultural Library* (NAL), l'Institut interaméricain de coopération pour l'agriculture (IICA) et la Bibliothèque commémorative Orton (BCO) ont commencé à travailler de concert dans ce but en 2006. Un thésaurus bilingue a été publié en mai 2007. À ce jour, les partenaires ont lancé un WIKI et défini un ordonnancement des tâches, et ils apprennent à travailler à travers les distances et les fuseaux horaires pour créer un outil qui facilite l'accès à l'information agricole dans toutes les Amériques.

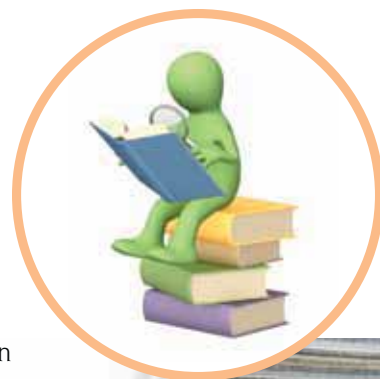
► Você diz palta, eu digo abacate e eles dizem avocado: Diversidade na terminologia agrícola das Américas

Tesouro é um vocabulário estruturado que serve para organizar termos e expressar relações entre conceitos. Especialistas em informação há décadas têm recorrido aos tesouros para ajudá-los na padronização da terminologia nos sistemas de recuperação da informação. Este artigo discute as bases e a necessidade desse novo esforço conjunto para desenvolver um tesouro e um glossário inglês/espanhol que reflita as variações locais representadas em toda a América Latina e o Caribe. A *National Agricultural Library* (NAL) dos Estados Unidos, o Instituto Interamericano de Cooperação para a Agricultura (IICA) e a Biblioteca Conmemorativa Orton (BCO) iniciaram em 2006 uma parceria nesse sentido, havendo sido lançado um tesouro bilíngue em maio de 2007. Recentemente, esses parceiros lançaram um WIKI, identificaram um programa de trabalho inicial e estão aprendendo a lidar com as distâncias e os fusos horários para criar uma ferramenta que intensifique o acesso à informação em agricultura nas Américas.

► "Usted dice "palta", yo digo "aguacate" y ellos dicen "avocado": Diversidad en la terminología agrícola de las Américas

Un tesouro es un instrumento de control de palabras que se utiliza para organizar términos y expresar relaciones entre conceptos. Durante décadas, especialistas de la información han dependido de los tesouros para contribuir a estandarizar la terminología en sistemas de recuperación de datos. En este artículo se discute la importancia y la necesidad de realizar un esfuerzo conjunto para elaborar un tesouro y glosario inglés/español que refleje las variaciones locales del lenguaje utilizadas en los países de ALcen materia agrícola. En el 2006, la Biblioteca Agrícola Nacional de los Estados Unidos (NAL) y la Biblioteca Conmemorativa Orton (BCO) del IICA empezaron a trabajar conjuntamente en ese esfuerzo y, en mayo del 2007, publicaron un tesouro bilingüe. Hasta la fecha, dichas instituciones han lanzado un WIKI, han identificado un flujo de trabajo inicial y están aprendiendo a trabajar a través de las distancias y los husos horarios para crear una herramienta que aumente el acceso a la información agrícola a lo largo y ancho de las Américas.

Guidelines for contributing to COMUN/CA



COMUN/CA, the technical magazine of the Inter-American Institute for Cooperation on Agriculture (IICA), publishes original works on agriculture and rural life to serve as inputs for decision makers and to help others form opinions on issues related to these fields.

Contributions to COMUN/CA may be:

- **Articles:** texts containing analyses, deliberations and conclusions on academic or professional topics; written in simple style and clear language.
- **Experiences:** descriptions of activities carried out by IICA units or by a Member State that has received cooperation from the Institute, which, if disseminated, may contribute to a clearer understanding of the innovative work under way in the region, to the solution of problems or to the tapping of opportunities for action in other regions or countries.
- **Briefs:** short articles on results of ongoing research which are relevant and deserving of dissemination to a broader audience.

General guidelines

- a. The magazine is published quarterly in English and Spanish.
- b. Manuscripts, with their respective abstract and keywords, may be written in Spanish, English, French or Portuguese. The publishers will have the abstract and keywords translated into all the official languages of the Institute, for inclusion in the magazine published.
- c. The original works will be evaluated by specialists in the corresponding fields. Any suggestions they make will be reviewed by the publishers and the contributors and every attempt will be made to ensure objectivity. The identity of the specialists and contributors will not be revealed.
- d. Preferably, contributors to COMUN/CA will be IICA staff members. Works by outside contributors may be submitted, however, subject to prior approval by the Director of the respective thematic area.
- e. Inasmuch as manuscripts undergo a rigorous review process, contributors often are asked to provide additional information or clarification.
- f. Manuscripts published in the magazine may be full or partial reprints, subject to prior approval by the publishers and provided the original source of the publication is cited.
- g. The views expressed in the manuscripts are those of the contributors.
- h. Our readership comprises decision makers in the fields of agricultural and rural development, as well as specialists and researchers in both fields.

- i. COMUN//CA and the Editorial Board reserve the right to decline those manuscripts that do not comply with the established guidelines.
- j. Once a work is accepted for publication, it may not be published in any other communications media without prior authorization from IICA.

Requirements for submitting manuscripts

- **Format.** Articles are to be submitted in electronic format, using a recognized word processing program; 2-inch upper, lower, left and right margins; Times New Roman 12 font size; single space between lines and double space between paragraphs, no indents.
- **Length.** Considering our readership, it is recommended that manuscripts not exceed five pages. Briefs may be shorter.
- **Figures, diagrams and tables.** They must fit in the margins mentioned above and be legible. All figures, diagrams and tables must be properly numbered and the source of each identified (author, year and page, for example: IICA 2009:23). This information must be included and filled out in the bibliography. All text included in figures, diagrams and or tables must be in a format that may be edited, preferably using the word processing program in which they were prepared.
- **Photographs.** If a contributor wishes to include a photograph, he/she must obtain permission to use same, and it must have a resolution of at least 300 dpi.
- **Information on author:** full name, place of employment, and e-mail address.
- **Keywords:** from five to seven using controlled vocabulary.
- **Abstract:** not to exceed 500 words.
- **Notes:** use footnotes rather than endnotes.
- **Bibliography:** The bibliography is to be prepared in accordance with IICA technical standards which may be consulted at: <http://www.iica.int/Esp/organizacion/LTGC/Documentacion/BibliotecaVenezuela/Documents/Redacción-Referencias-Bibliográficas.htm> .

Manuscripts are to be submitted to the respective IICA Director of Area or to the Directorate of Technical Leadership and Knowledge Management, for submission to the publishers and review by the Editorial Board. For more information please write to comuniica@iica.int.

We recommend that you look over one or two COMUN//CA articles to get an idea of the style to use. The magazine is available at: www.iica.int/comuniica.



New IICA publications available from the Library at Headquarters

The following is a list of the most recent publications received by the Venezuela Library at Headquarters, available in both printed and digital formats. The address of IICA's Digital Library is <http://orton.catie.ac.cr/bibliotecadigital>

Agriculture - employment and work

Emprego e trabalho na agricultura brasileira (2009)

In recent decades, both the productive structure and Brazilian society as a whole have undergone major economic and political transformations. Numerous studies have been carried out on the effects of those transformations on the urban job market and the redefinition of the rural space and the expansion of so-called “non-agricultural rural occupations.” However, there has been no broader analysis of work and employment in the agricultural sector. This book is designed to fill that gap with a collection of 17 unpublished texts, grouped under three headings: the regional dimension, labor relations, and regulations and conflicts.

<http://webiica.iica.ac.cr/bibliotecas/RepIICA/B1551p/B1551p.pdf>



Agriculture in Latin America and the Caribbean - outlook

Situación y desempeño de la agricultura en ALC desde la perspectiva tecnológica: Informe de 2008 (2009)

This document was used as the base document for the Fifth International Meeting of FORAGRO, held in Montevideo in 2008. It contains the analysis carried out for that year of the challenges in relation to technological and institutional innovation in a context characterized by volatile food prices and growing demand for technologies to tackle the effects of climate change. It also underlines the need to take better advantage of the growing political will to promote technological services for agriculture.

<http://webiica.iica.ac.cr/bibliotecas/repIICA/B1031e/B1031e.PDF>

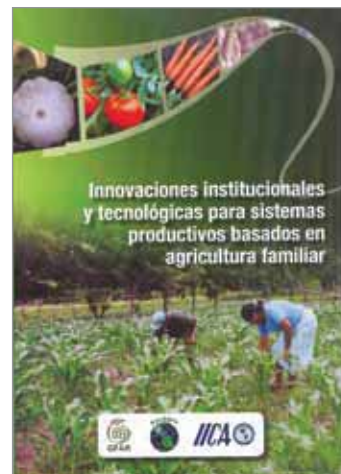


Family agriculture - innovation and technology

Innovaciones institucionales y tecnológicas para sistemas productivos basados en agricultura familiar (2009)

This document is the result of a joint effort involving FORAGRO, IICA and GFAR. Its main objective is to establish the state of the art of technological innovation in the context of family agriculture. It focuses on the main needs of that subsector in terms of technology, policies and institutional arrangements.

<http://webiica.iica.ac.cr/bibliotecas/RepIICA/B1030e/B1030e.pdf>



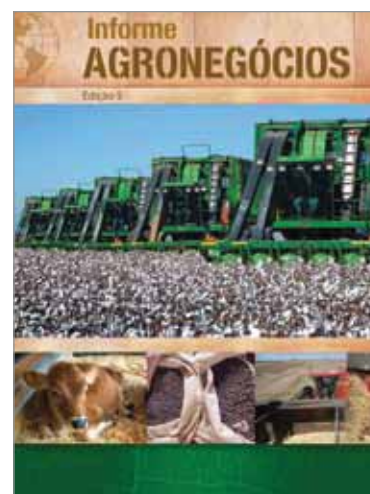
Agribusiness

Informe agronegócios: edição 5

This report is part of a series of semiannual documents produced by the IICA Office in Brazil on the subject of agribusiness. Its basic objectives are to:

- Disseminate experiences, knowledge and the results of the debates and discussions on the state of the art of the policies that have arisen out of the development of agroindustry and the interventions of public and private actors.
- Create a mechanism for the exchange of information, knowledge and experiences that could be useful for decision-making in the public policy arena, such as the contributions to the debate, the design of proposals and new programs and projects for rural development and agroindustry.
- Visualize and compare the different economic situations at the national level (regions of Brazil) and regional level (MERCOSUR).

<http://webiica.iica.ac.cr/bibliotecas/repica/B0851p/B0851p.PDF>



Agribusiness - Clusters

Clustering for competitiveness in agriculture: pre-feasibility studies for selected agribusiness clusters in the Caribbean (2009)

This document formed part of the IICA/CTA Project entitled Support to the Caribbean Regional Agricultural Policy Network (CaRAPN) in 2006, managed by IICA's Trade Policies and Negotiations Program in the Caribbean.

The document promotes the development of agribusiness clusters. Clusters have had a positive impact on productivity, competitiveness, and the creation of new enterprises and their subsequent expansion. Globalization has ushered in a new scenario of production and coordination among the different countries.



<http://webiica.iica.ac.cr/bibliotecas/repica/B0841i/B0841i.pdf>

International Trade

Propuesta de estrategia para el desarrollo de la exportación de productos agropecuarios para beneficiarse de los acuerdos de libre comercio (2009)

The purpose of the proposal is to facilitate the development of agricultural exports so that Panama can benefit from the free trade agreements. The document integrates various efforts to inform public and private actors in the agricultural sector of the opportunities offered by the trade agreements. The document is a compilation of technical and practical experiences, the result of meetings, consultations and one-on-one interviews with actors of the agrifood chains and public sector institutions involved in the issue, and technical personnel of MIDA's different national directorates. It includes the contributions and expertise of IICA regional specialists in trade negotiations, agribusiness and agricultural health and food safety (AHFS).



<http://webiica.iica.ac.cr/bibliotecas/RepIICA/B0875e/B0875e.pdf>

Rural development - agroenergy

Agroenergia e desenvolvimento de comunidades rurais isoladas

This publication is volume 7 of the Sustainable Rural Development series published by the IICA/SRD Forum. The book focuses on agroenergy and the development of isolated rural communities. It is divided into two parts: the first examines the potential of agriculture and rural territories for producing bioenergy, and the possible social and environmental impact. The second part presents the global context, including actions in the area of agroenergy, as well as a discussion of the national policies and commercial technologies available. It concludes with a series of recommendations for the sustainable production of energy in isolated areas.

<http://webiica.iica.ac.cr/bibliotecas/RepIICA/B0849p/B0849p.pdf>



Fruit production - Panama

La fruticultura en Panamá: su potencial socioeconómico e iniciativas para su desarrollo (2009)

This document includes the proposals of producers' organizations, representatives of agroindustry, merchants, agro-exporters and other actors in this agrifood chain, who participated in a series of workshops in David, Divisa and Las Tablas, Panama, with a view to identifying the problems of the fruit-growing industry and the actions that should be taken at the national level.

The document is divided into three parts: a) the current situation of fruit growing in Panama; b) the possibilities for development; and, c) a proposed action plan to promote the sector.

<http://webiica.iica.ac.cr/bibliotecas/RepIICA/B0760e/B0760e.pdf>



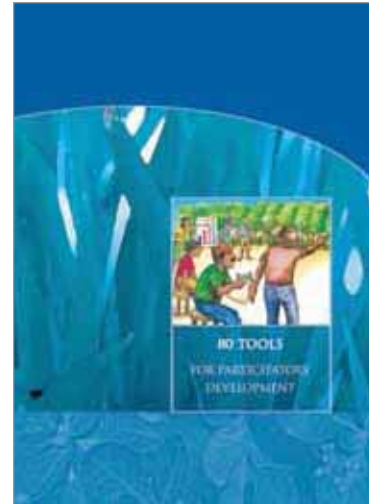
Participation processes - tools

80 herramientas para el desarrollo participativo (2009, 8 ed.)

The document provides a set of tools presented in a simple format (diagrams, illustrations) and precise language, which makes it easy to use in participatory and work-related processes.

It contains general techniques for dialogue, observation and group dynamics; participatory assessments of social and general aspects of the community, natural resource management, production systems, animal production, gender, communication and extension; analysis of problems and solutions; and planning, monitoring and participatory evaluation.

<http://webiica.iica.ac.cr/bibliotecas/RepIICA/B0850e/B0850e.pdf>



Agricultural health and food safety - Sanitary and phytosanitary measures

Manual de aplicación. Instrumento desempeño, visión y estrategia (DVE) para los servicios nacionales de sanidad agropecuaria e inocuidad de alimentos (SAIA) y medidas sanitarias y fitosanitarias (MSF) (2009)

As part of the process of modernizing its technical cooperation with innovative tools, IICA developed an instrument to help modernize national agricultural health and food safety (AHFS) services and national sanitary and phytosanitary (SPS) systems. This document is a model tool that the Member States can use to adapt their national AHFS and SPS services and systems, and develop the capabilities required to meet the challenges posed by globalization successfully.

<http://webiica.iica.ac.cr/bibliotecas/RepIICA/B0814e/B0814e.pdf>





IMARK

www.imarkgroup.org



مجموعة موارد إدارة
المعلومات "إمارك"

信息管理资源包

Information
Management
Resource Kit

Kit de ressources
pour la gestion
de l'information

Repertorio de recursos
para la gestión de
información