

INTERVIEW

Mr. José Ignacio Olascuaga
National Coordinator in
Uruguay of the MERCOSUR
Specialized Meeting on
Family Farming (REAF) and
MERCOSUR Pro tempore
Chairman

FAMILY FARMING
OBSERVATORY

Family Farming in Suriname

GOOD PRACTICES

- Farmer Field Schools in Peru
- Good Quality Bean Seeds in Nicaragua
- Associative Integration of Family Farm Dairy Producers
- Improving nutrition through Agro-Aquaculture Integration
- Designing Investment Projects for the Rural and Indigenous Forestry Sector

GENDER AND RURAL YOUTH

The Role of Women, Men and Youth in Family Farming

DID YOU KNOW?

Legislation for a National System for Comprehensive Rural Development in Guatemala
University Forum on Family Farming

CALENDAR OF EVENTS

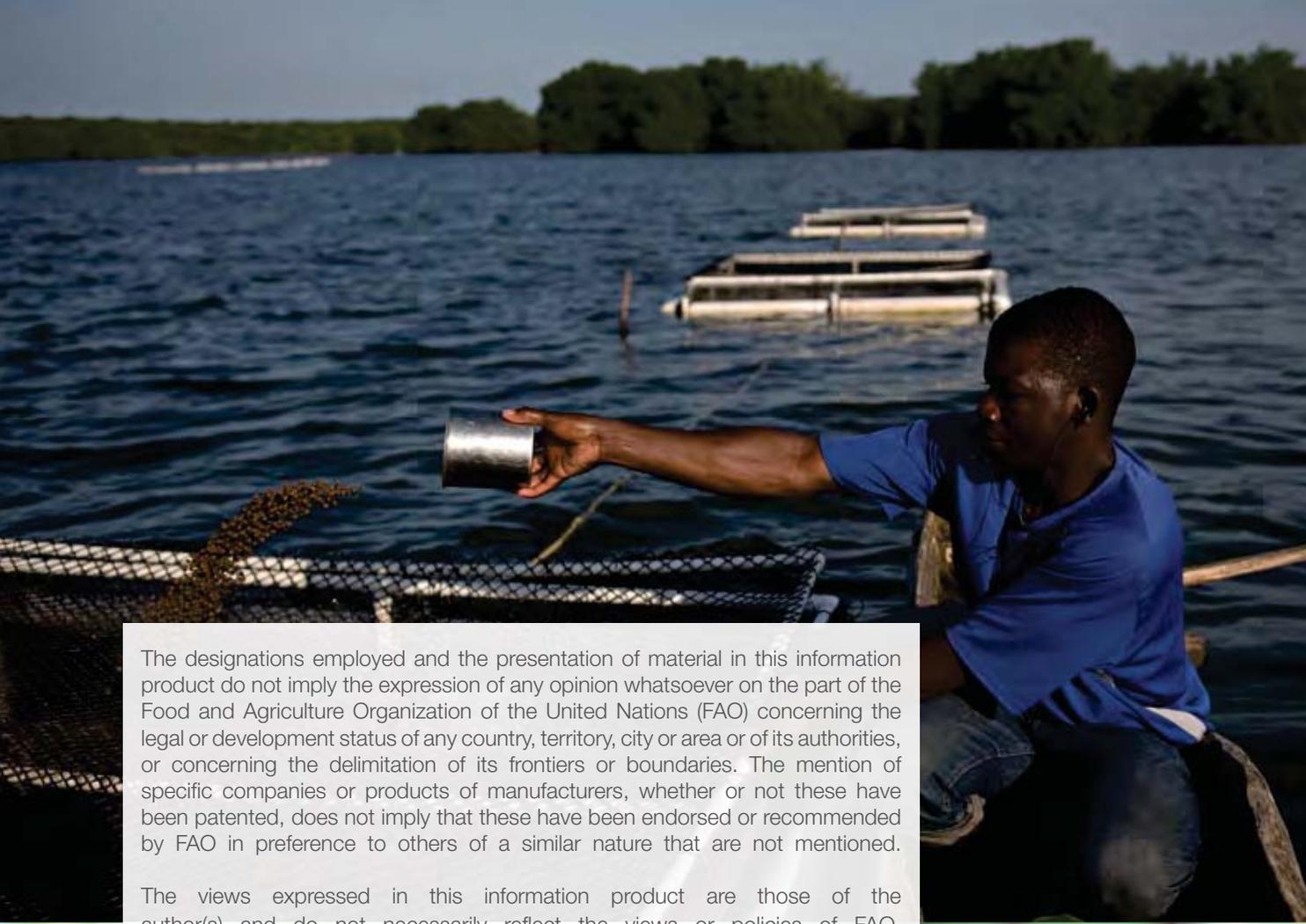
FAMILY FARMING NEWSLETTER

for Latin America and the Caribbean, January-March 2013



Quinua
2013 International Year





The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

© FAO 2013

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via www.fao.org/contact-us/licence-request or addressed to copyright@fao.org.

FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org.

Editor:

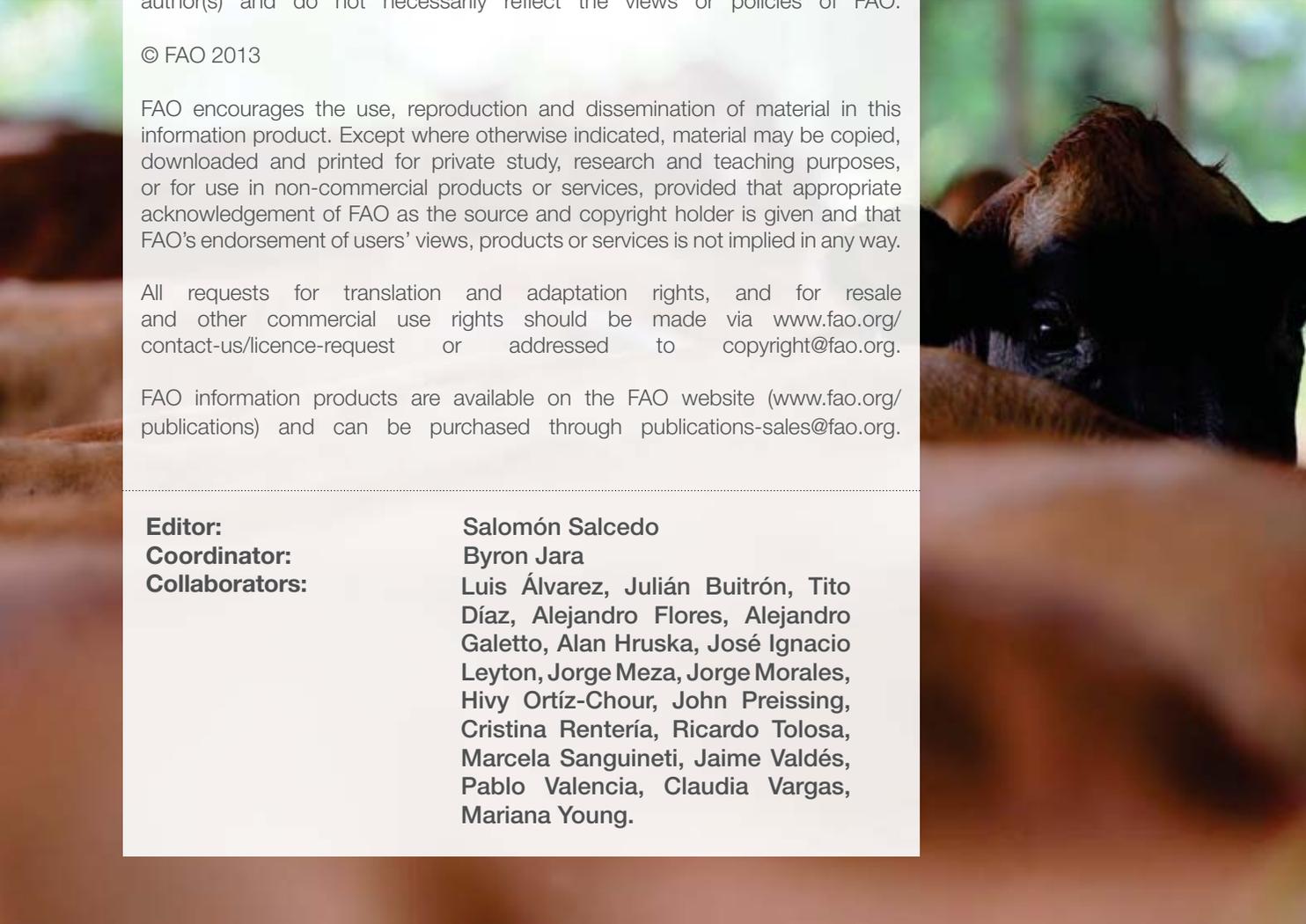
Coordinator:

Collaborators:

Salomón Salcedo

Byron Jara

Luis Álvarez, Julián Buitrón, Tito Díaz, Alejandro Flores, Alejandro Galetto, Alan Hruska, José Ignacio Leyton, Jorge Meza, Jorge Morales, Hivy Ortíz-Chour, John Preissing, Cristina Rentería, Ricardo Tolosa, Marcela Sanguineti, Jaime Valdés, Pablo Valencia, Claudia Vargas, Mariana Young.





Editorial

The year 2013 is of particular importance: it is the year we celebrate the International Year of Quinoa (IYQ), and we formally begin to prepare for the International Year of Family Farming (IYFF) in 2014. Quinoa and Family Farming go hand in hand: both can contribute substantially toward the fight against hunger. However, to tap their enormous potential, investments must be made.

The FAO Regional Office for Latin America and the Caribbean serves as Technical Secretariat of the IYQ 2013. The official world launching of the IYQ-2013 took place February 20 at the United Nations Headquarters in New York with the participation of the Plurinational State of Bolivia, which presides over the IYQ-2013 Coordinating Committee. Several issues were addressed at the event in relation to the contribution of quinoa to food security, nutrition, poverty eradication and biodiversity, and this crop's adaptability to climate change. Also discussed was the contribution of indigenous peoples and their ancestral knowledge in quinoa production and preservation for more than 7.000 years.

The IYFF-2014 World Consultative Committee has already been set up with the participation of 12 FAO member countries and representatives of IFAD, WFP and other UN agencies, the World Rural Forum, the European Union, and farmer and private sector organizations.

Institutional arrangements worldwide are thus underway and IYQ-2013 and IYFF-2014 will undoubtedly contribute towards raising awareness among governments and the general population of the importance and potential contribution of family farming in general and quinoa in particular. However, countries will need to work even harder.

In effect, the most recent edition of FAO's *The State of Food and Agriculture* indicates that government expenditure in agriculture has been greatly reduced in developing countries, particularly in Latin America and the Caribbean. Government spending on agriculture in the region fell from 6.9% of total disbursements in 1980 to 1.9% in 2007. This is in fact the lowest it has reached among all developing

countries in comparison to East Asia and the Pacific (6.5%) and South Asia (4.9%).

The greatest investments in agriculture have come from the farmers themselves. Governments, meanwhile, act as agents that either promote or drive away investments, either through their policies or as a result of the investment climate or the conditions they offer.

Family farmers and quinoa producers in particular can increase productive investments only if transaction costs are reduced. The high cost of these transactions is often the consequence of asymmetries in information or lack of infrastructure, all issues that fall within government jurisdiction. Producers will also invest more if agriculture and livestock research institutes and universities focus more on finding ways to increase production sustainably, combining the ancestral wisdom of family farmers with modern technology. There will also be greater private sector investment if financial services for the rural sector become more readily available and environmental and financial risk management mechanisms improve.

Thus, celebrating the International Year of Quinoa 2013 and preparing for the International Year of Family Farming 2014 involves much more than just holding international events. Concrete actions must be taken to encourage productive investments. The success and scope of the objectives of IYQ-2013 and IYFF-2014 will depend on the initiatives put into action in each country with the participation of all stakeholders, but where producers must lead the way.

Wishing you a happy and productive 2013!

Salomón Salcedo

Senior Policy Officer
Coordinator of the Family Farming Priority Group

Interview

Mr. José Ignacio Olascuaga

The following is a summarized version of an interview with Mr. José Ignacio Olascuaga, National Coordinator in Uruguay of the MERCOSUR Specialized Meeting on Family Farming (REAF) and MERCOSUR Pro tempore Chairman



Experts have indicated that in order for public policies to be successful civil society must be involved in their formulation and throughout the entire process. The REAF is a concrete example of this. How have you managed to keep the REAF functioning this way for the past 10 years? How does it operate?

Precisely, to ensure the success of public policies, they must be built on a process of dialogue among public and private sector stakeholders and REAF has been an example of this from the beginning, with civil society participating in the discussion and formulation of these policies.

The various bodies that comprise REAF integrate government representatives involved in public sector management and in policy generation and implementation, and representatives of civil society and family farming. Thus, given the way it has been organized in each MERCOSUR member country in national sections and technical workgroups or theme groups, the public and private sector are also represented. Not all MERCOSUR specialized meetings work this way. It is a distinct feature and is what makes the REAF different; it is what makes it possible, because of public/private involvement from the outset, to generate a process of dialogue, exchange of experiences and construction.

The dialogue process began by acknowledging and defining the concept of family farming, which in the 90's was somewhat ambiguous and could be interpreted in many ways. This definition was fine-tuned and a common definition was finally established for all REAF member countries. This has greatly helped in determining who the beneficiaries of these public policies are.

The REAF initially received substantial financial support from IFAD; now the governments themselves finance the initiative. How did this transition come about?

From the first year of existence and until 2011 the REAF operated with funding provided by the IFAD-MERCOSUR program. These contributions were very important since they covered REAF operational costs throughout that period. A fund known as the Family Farming Fund was later created within MERCOSUR following a decision by the Common Market Council, and all member countries eventually incorporated this fund into their legislation. The fund was implemented and entered into operation in late 2012 and will receive contributions from each Member State during 2013. This was created following a decision of MERCOSUR's higher bodies and is a reflection of the acknowledgement by governments and the upper echelons of MERCOSUR of REAF's achievements through all those years and the independence and sovereignty it has attained by raising its own funds, which will be supplemented with funds provided by FAO.

We are now entering a new cycle. In 2012, during the transitional administration, REAF continued to operate with funds provided by the States themselves; however, as of this year, with the full implementation of the Family Farming Fund, the Technical Secretariat will be restructured and an attempt will be made to transform REAF into a forum for more in-depth dialogue and construction of public policies, and also to strengthen an aspect that has been very important for REAF throughout the years, operating as a forum for Latin American integration, exchange and cooperation among participating States.



During this new stage, REAF and FAO will be cooperating even more. What are the expectations regarding this collaboration?

Our expectation is to continue strengthening the REAF and moving forward to make it a better forum for public-private debate and policy generation. Furthermore, with FAO's administrative and technical support and studies, REAF's various theme groups will receive the support they need. Finally, REAF's role as a forum that provides tremendous opportunities for exchange and cooperation among governments, civil society and other areas related to family farming must also be underscored.

Ecuador and Cuba participated in the last REAF. Are there projections for REAF to go beyond MERCOSUR?

This is something we have always considered. During the current pro tempore administration, we have invited Venezuela to become a full member. Also, given its increasing interest and cooperation in recent years, we hope to have Ecuador on board as well, together with Bolivia and Cuba. Chile has traditionally taken part in the meetings; therefore we will work towards its continued and greater participation. The possibility also exists for REAF to grow and to generate opportunities for greater cooperation and exchange with countries in Central America and Africa; in other words, South-South cooperation is also gaining strength at the REAF.

How does REAF propose to collaborate in the preparations for the International Year of Family Farming?

We have been participating in the preparations for the International Year of Family Farming from

the start. Committees are being set up in various countries to support and take effective action not only in member countries but in other parts of the world where *fora* like the REAF do not exist. We have become aware of the fact that there is interest in establishing similar entities in Europe, Africa and Central America, and we are more than willing to collaborate and pass on our experience so that those regions can also generate a forum such as ours because we understand how valuable and important they are for the development of family farming.

Any final words for our readers?

It's very important to remember that the REAF, since it is inception, has raised the issue of the relevance of family farming. Now, in 2013, it is no longer a novelty, but eight or ten years ago it was important to place the issue of family farming on the agenda, both from a social and an economic perspective, and how it contributes towards food sovereignty and food security. Family farming as a factor of territorial occupation and its overall relevance is no longer a widely debated issue, but until recent years it was a subject of debate and the reason the REAF was established in the first place. The REAF contributed a great deal towards bringing the issue of family farming into debate and bring to light its importance in our countries.

FAMILY FARMING OBSERVATORY

Family Farming in Suriname



Suriname is a country located in Northern South America. It has a territory of 163,820 square kilometers and farmland area extending to 63,989 hectares. The country's unique geographical features, which include an extensive coastal plain together with the humid equatorial climate throughout the country, favor the production of tropical crops, particularly tropical fruits and

vegetables. Agriculture employs 70% of the economically active population, involved largely in subsistence production, namely staple grains such as corn and rice. The last agricultural census in Suriname was conducted in 2008. A summary of the main findings of the census are presented in Table 1.

Summary of Findings of the Suriname Agricultural Census (2008)

	TOTAL SURINAME	COASTAL AREA AND GREATER PARAMARIBO	INTERIOR
Total number of people surveyed in households	33,783	24,202	9,581
Average number of household members	3.3	3.5	2.9
Total number of family/individual farms	10,189	6,841	3,348
Total number of households	108,576	86,345	22,231
Total number of farms	10,234	6,886	3,348
Total farmland area (hectares)	64,089.5	61,297.2	2,792.3
Total area of family/individual farms (hectares)	41,908.3	39,116.0	2,792.3
Average size of farms (hectares)	6.3	8.9	0.8
Average size of family/individual farms (hectares)	4.1	5.7	0.8
Average size of non-individual farms (hectares)	493	493	---
Female heads of household	3,537	1,169	2,368
Male heads of household	6,653	5,672	981
Average age of female heads of household	44.0	50.0	41.0
Average age of male heads of household	47.9	48.0	47.0
Number of plots	15,037	9,569	5,468
Average number of plots per farm	1.5	1.4	1.6

Source: 2008 Agriculture Census

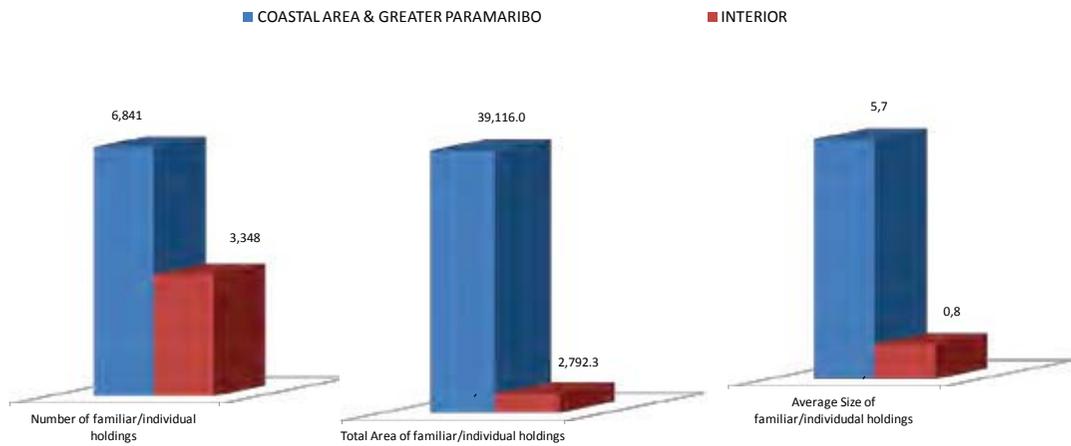
Table 1

Most of Suriname's farm production comes from family farms. Of the 10,234 farms in Suriname, 10,189, or 99%, are family farms. Family farms on average are 4.1 hectares in size, whereas non-family farms are an average 493 hectares in size. Another important fact is the number of women involved in farm production: 35% (3,537) of the 10,189 family farms are run by women.

With respect to land tenure in Suriname, a significant difference can be perceived between the coastal

and Greater Paramaribo regions and the interior. As can be seen in Figure 1, the number of farms in the interior of Suriname only represents 30% of the national total; however, the total area of these family farms in the interior only represents 6% of the national total, a clear indication that land is highly fragmented: the average size of each family farm is 0.8 hectares in the interior and 5.7 hectares in the rest of the country.

Family Farms in Suriname: Regional Comparison

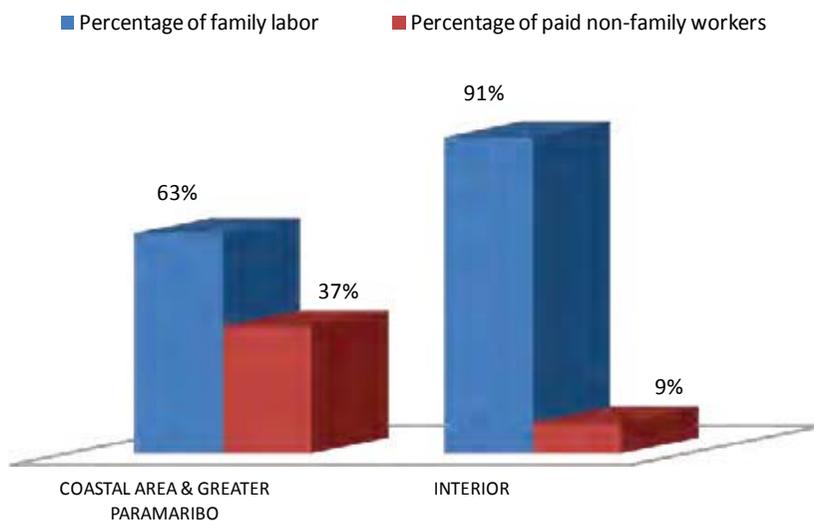


Source: 2008 Agricultural Census

Figure 1

A significant difference also exists in terms of the type of labor used on these farms. In family farms in the interior, 91% of laborers are members of the family, whereas in the other regions, family members represent 63% of the total farm labor force (see Figure 2).

Workers by type and geographical region



Source: 2008 Agricultural Census

Figure 2



Agriculture accounted for 7.2% of total value-added in 2011, which clearly indicates that this is an important sector of Suriname's economy. Furthermore, and as is evident in the above data, agricultural production in Suriname is carried out mainly on family farms. This is why there is no institutional structure specifically for family farming as is the case in other neighboring South American countries. However, unlike other former European colonies in the Caribbean, the country has a solid institutional structure in place for agriculture in the form of a Ministry of Agriculture, Livestock and Fisheries. The Ministry's initiatives and agricultural support programs include capacity-building programs for producers in all sectors (agriculture, livestock and fisheries), and training programs specifically for youth and women since they are a major contributing factor to rural livelihoods.

Find out more:

Ministry of Agriculture, Livestock and Fisheries:
<http://fao.org/alc/u/ec>

Statistical and census data: <http://fao.org/alc/u/co>

Useful publications: <http://fao.org/alc/u/xv>

Good practices

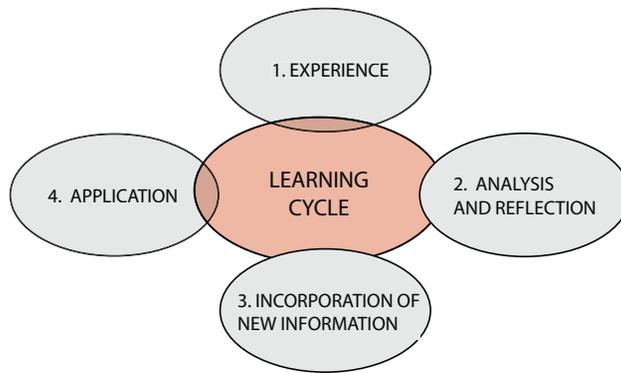
A few experiences of institutional integration of Farmer Field School methodology in Peru



Peru has extensive experience in Farmer Field School (FFS) methodology in extension activities at different institutional levels: national, regional and local. In 1997, following the adoption of this methodology by the International Potato Center (CIP), FAO began to use this methodology in its field programs as well. More than 1,000 farmer field schools have been set up in the past 10 years in projects to promote productive enterprises and local-level technical capacity building and development. One of the greatest achievements has been to put FFS's on the map at a regional and local level and institutional promotion in agriculture sector advocacy policies.

The educational cycle of farmer field schools is based on a learning-through-experience training program. This cycle draws on natural human behavior disaggregated into stages, where experiences are analyzed and transformed into knowledge that can be applied throughout life¹. The interaction of these stages or moments in an adult's learning cycle can be illustrated as follows:

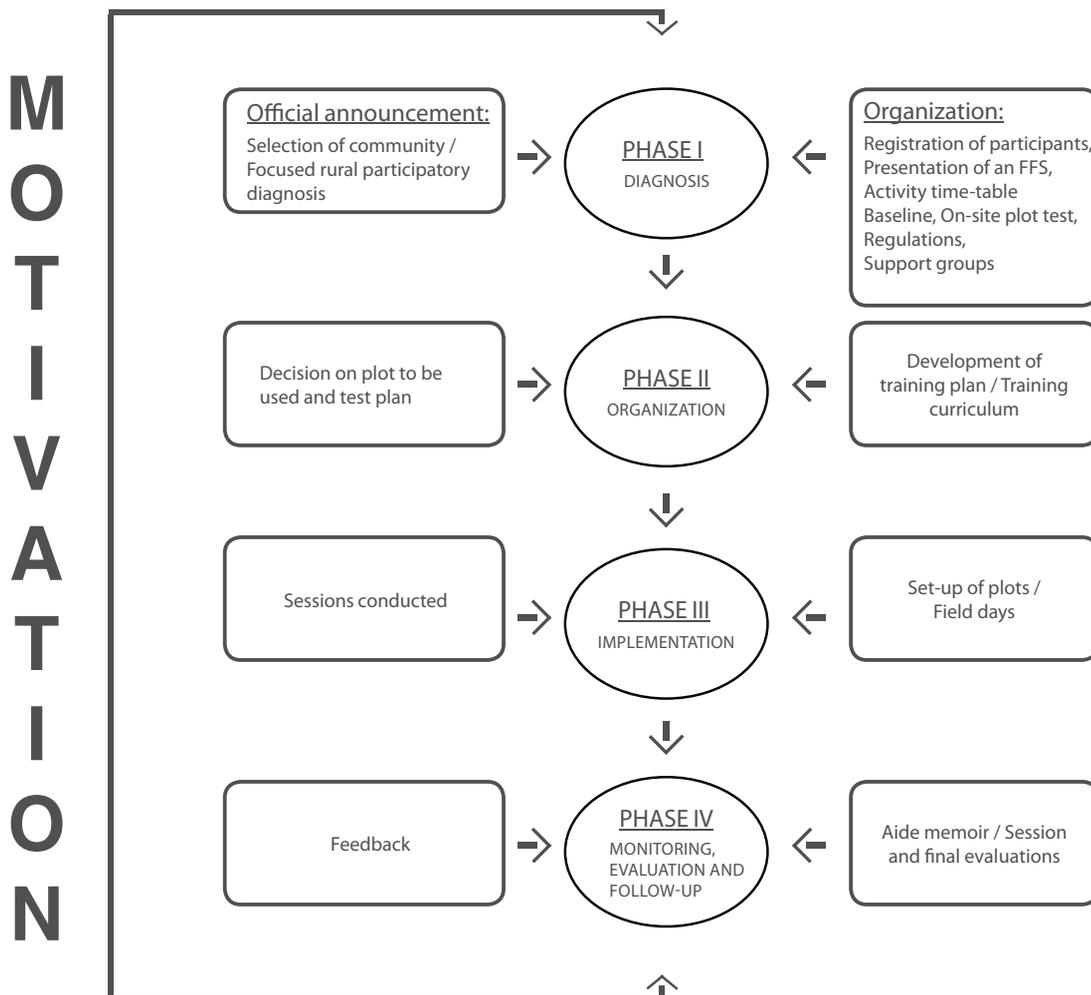
¹ Extracted from *Sistematización de la Experiencia de Desarrollo de Capacidades mediante la Implementación de la Metodología de Escuelas de Campo de Agricultores*. UNJP/PER/049/SPA, 2012.



Source: Training Handbook for Facilitators. UNJP/PER/049/SPA, 2012.

Thus, FFS's are designed to be carried out during a harvest season or breeding cycle. Some 20 to 25 farmers take part in each FFS. The average number of sessions is 14 to 16, i.e., two sessions per month, which include the initial coordination, preparation and a field day, the final evaluation and follow-up visits.

The following graph shows the FFS implementation phases and development of activities:



Source: Training Handbook for Facilitators. UNJP/PER/049/SPA, 2012.

Some of the main institutional achievements of Peru's farmer field schools were:

- FFS methodology was incorporated into local productive development projects and in the operational/institutional plans of the Agriculture Ministry's Agro Rural development program and National Animal Health Service (SENASA), both of which are decentralized agencies.
- Over 500 technical extension workers received training as FFS facilitators, among them more than 30 technical experts from NGO's and civil society organizations such as Acción contra el Hambre (Action against hunger) and Cáritas.
- Institutionalization of FFS methodology following the approval of regional technical assistance by laws in agricultural extension. A recent example of this was the approval of the bylaws by the regional governments of Huancavelica and Ayacucho, and the adoption of this methodology in regional food security strategies in the Amazon region of Loreto.
- FFS methodology was incorporated into the curriculum of the Faculty of Agronomy of the Universidad Nacional Agraria de La Molina (Lima), the Universidad José María Arguedas de Apurímac, and the Universidad Nacional de la Amazonía Peruana de Loreto.
- Four regional networks of FFS facilitators were created and legally registered in the Apurímac, Ayacucho, Huancavelica and Loreto regions.

Some of the key factors for this success were:

- The motivation of local governments and of technical staff trained as facilitators. This is a key factor in achieving positive results and for the adoption of this participatory methodology in agriculture and livestock extension activities. Municipalities and local governments have as a result been able to strengthen their capacities, value their role as legitimate promoters of rural development in their regions and improve the relationship between institutions and the population.
- The strengthened capacity of institutions that provide agricultural extension services prompted the adoption of this methodology in their activities (Agro Rural, local level government agencies, NGO's).

Lessons learned from this experience include:

1. The implementation of FFS's requires the solid support of local government leaders committed to

fulfilling an agenda of local participatory development and to carrying out actions of participatory and coordinated technological transfer.

2. Community participation must be promoted in discussions surrounding local government budgets in order to implement productive projects based on FFS methodology and ensure the sustainability of productive enterprises.



Peru First Lady, Nadine Heredia, takes part of a field day of FFS, San Miguel district, Ayacucho Region, 2012.

Find out more:

<http://fao.org/alc/u/ws>

<http://fao.org/alc/u/lb>

<http://fao.org/alc/u/vb>

<http://fao.org/alc/u/t9>



FELIX

NELYDA

CLEBER

PROYECTO
CULTIVOS
ANDINOS
PROYECTO REGIONAL
CULTIVOS ANDINOS

Good practices

Good Quality Bean Seeds Produced by Family Farmers in Nicaragua



Phaseolus vulgaris, or the common bean, is the primary family farm crop in Central America. More than 85% of this grain is produced by small-scale farmers throughout Central America and almost all these families consume beans —their primary source of protein— on a daily basis. Good quality seeds are needed to increase yield, avoid diseases, lower production costs and improve food security.

It is within this context that the government of Nicaragua, with the support of the Food and Agriculture Organization of the United Nations (FAO), is fostering the formation of small-scale producer groups and enterprises for the production of seeds for family farming by providing assistance to 5,500 families that produce staple grain seed in the country. These initiatives are being carried out within the framework of FAO's regional Seeds for Development Project, funded by the Spanish Agency for International Cooperation (AECID) and executed by the Nicaraguan Institute of Agricultural Technology INTA-MAGFOR.

One of these seed cooperative enterprises, the *Unión de Cooperativas Semilleristas de Jinotega de Nicaragua* (UCOSEM), provided good quality certified bean, corn and rice seeds to 26 Nicaraguan municipalities in 2012. By using these seeds adapted to their production systems and diet, the farmers were able to increase their yield by 40%, much more than what was expected. In addition, they were able to export 8,000 quintals of certified bean seed to the Bolivarian Republic of Venezuela. The enterprise has a total of 380 members organized in seven cooperatives from four municipalities in the department of Jinotega, located in the dry tropical region.

Benefits for Participants

- Improved food and nutrition security at the household and community level.
- Greater negotiating capacity of actors.

- Higher bean crop yield (40%) as a result of the use of good quality seed.
- Greater income for producers.
- Seed processing equipment provided to seed producing companies.
- Capacity-building in production, business management and marketing.
- Public sector strengthened to provide basic seed production and seed certification services to small-scale producers.
- Linkages with other producers and national and regional seed projects.

Concrete Results

The experience led to effective linkages of family farming producer enterprises and the public sector responsible for producing registered staple grain seed and for quality control of seeds produced by these enterprises.

As of December 2012, 4,108 metric tons of good quality seeds were produced in Central America, 87% of which were beans, planted in sufficient quantities to fulfill the nutritional needs of 296,000 families in the region.

Lessons Learned

- **The mere use of good quality seeds increases bean productivity by more than 40%.** Good quality seeds meet scientific standards and the minimum requirements set out in Central American technical regulations for the production and sale of certified staple grain and soya seeds. Furthermore, good quality seeds must reflect the preferences and fulfill the needs of small-scale producers, be suitable for their farming systems and agro-ecological conditions.
- **The formation of rural seed companies with family farm producers is key to the sustainable production and use of good quality seeds.** Companies that receive support from the project must have solid organizational foundations to ensure that all its members participate under equal conditions in the company's decision-making process. For this to occur, producers must receive training in organizational and business management skills to better determine the responsibilities of each member and generate capital building processes to improve the company's negotiating capacity and sustainability.

- **Public sector support to small-scale producer enterprises is essential.** The project strengthens the capacity of public and private institutions for the seed producing sector's long term development. The seed market can be developed through rural enterprise-public sector partnerships with small-scale producers insofar as the following three aspects are addressed: genetic material is provided, seeds undergo quality control, and technical assistance is offered to convert seeds into an input for productivity and of supply and demand in family farming.

- **A system of bottom-up participatory planning and monitoring in these enterprises is fundamental.** Technical assistance with technology provided to address the real needs of producers facilitates the appropriation of processes by the members of these enterprises. This planning is not only part of the project but must be used as a tool to monitor the enterprise internally to ensure its proper operation and sustainable growth.

- **Participatory technological innovation is a good method for increasing productivity and developing the seed market.** This methodology consists of teamwork where technical experts act as facilitators and farmers, who are the users of the technology to be innovated, are the protagonists of these actions. This methodology involves agronomical, financial and social analyses of the seeds that will be produced to satisfy the nutritional needs and eating patterns of the population.

Find out more:

<http://fao.org/alc/u/i6>

<http://fao.org/alc/u/0r>

Good practices

Successful Experiences in Associative Integration of Family Farm Dairy Producers: Three Case Studies in Nicaragua, Ecuador and Paraguay



In almost every country of Latin America and the Caribbean, family farm dairy production contributes significantly to food and nutrition security, the development of rural territories and the economy of small-scale producers. FAO conducted three case studies in 2012 on successful experiences in associative integration of family farm dairy producers in Paraguay, Nicaragua and Ecuador. The following is a summary of these experiences:

Activities

Nicaragua: *The Cooperativa Multisectorial Nicacentro R.L.*, located in Matagalpa, in Nicaragua's central region, was formed in 2005 in response to producer demands in the region. The cooperative was created with the support of a Swedish government international cooperation project implemented by the government of Nicaragua. The organizational model varies somewhat from the traditional cooperative model of dairy industrialization. In this case it only gathers, chills and sells the milk at the maximum price possible, forming what is known as a "bargaining cooperative". In addition, the cooperative has formed a small supply center and also promotes the adoption of modern animal health management practices among members.

Ecuador: Groups of small-scale dairy producers from Ecuador's highland region, particularly the area closest to the Cayambe Volcano, have organized themselves into associations with the support of AGSO (*Asociación de Ganaderos de la Sierra y el Oriente*) with a private company (El Ordeño). AGSO, one of the largest agricultural and livestock producer organizations in Ecuador, developed a strategy to oppose liberalization policies and dairy product imports during the 90s, implicitly creating an alliance with small-scale dairy producer organizations. Another aspect of AGSO's initiatives during that period was the development of a new vision on

technological changes in dairy production based on grazing models similar to those used in New Zealand that are more compatible with the resources available to farmers in Ecuador (labor intensive, limited capital, and production using clover and *rye-grass* pastures adapted to high altitudes). This vision brought about a radical shift away from the prevailing capital-intensive models of the northern hemisphere.

Paraguay: Dairy producer cooperatives in Paraguay account for 84% of dairy production and sales in the country. These cooperatives work closely with the *Federation of Production Cooperatives (FECOPROD)* and the Paraguayan Chamber of Dairy Industries (CAPAINLAC). Cooperatives not only receive and pay for their members' milk but also provide basic services such as infrastructure, social and financial services, and marketing for retail outlets. In addition, they are often the only milk buyers in the region, thus ensuring the loyalty of producers. Not only do these dairy cooperatives pay producers well, they are also in the midst of a process of investing and expansion.

Results of Each Strategy

Nicaragua: *Development of a network of milk collection centers.*

The development of a network of collection centers instead of constructing an industrial plant was the strategy used given the cooperative's limited human and material resources. This strategy made it possible to circumvent the contingencies brought about by a highly competitive and constantly changing market by selling the milk produced by its members in an organized manner and strengthening a network of services while undergoing several successful institutional changeovers.

Ecuador: *Creation of associative groups to negotiate public contracts and enter other market niches.*

The country's relatively stable market has provided

the ideal conditions for the development of a network of associations. The network of rural producers has grown and currently consists of 3,400 members organized in 45 groups located primarily in the Andean provinces. The network produces 85,000 liters of milk per day (about 25 liters/day per producer) that is sent to the collection centers. The milk is then sold to the El Ordeño dairy company, which processes a total of 120,000 liters per day (the rest comes from members of AGSO). El Ordeño inaugurated a new dairy plant in March 2012 for producing UHT milk as an alternative to gain access to the retail market and increase its capacity to place greater volumes of milk in the market without affecting prices.

Paraguay: *Creation of cooperatives (to provide tangible benefits to their members) as a means to exert greater negotiating power.*

The growth of dairy cooperatives in Paraguay has been a consequence of the good profitability levels achieved. This has been the result of companies developing a marketing strategy based primarily on sales to retail outlets and the development of their own system of distribution, thus avoiding the supermarket retail channels, which in Paraguay are highly monopolistic. These cooperatives have not created separate brand names for supermarkets and instead have opted to explore the possibility of developing a common brand name that will help them bolster their negotiating power with retail distributors.

There are other factors that explain the “success” of dairy cooperatives in Paraguay. One of them is the government’s school milk program that is supplied with some 25 million liters/year (5% of the total industrialized production) of domestically-produced milk, most of which is provided by these cooperatives.

Lessons Learned

- **Specific strategies are needed and adequate (differentiated) public policies must be in place to support family farming dairy producers,** including incentives to promote associative models to increase their contribution to the economy of small-scale producers, the development of the territories and the food security of much of the population.
- **Coordination with both domestic and export markets can be a key component in a sustainable development strategy** for these producers. Thus, a vision emerges that incorporates family farm production into “agribusiness”, especially when carried out within the framework of associative strategies.
- From an organizational perspective of associative strategies, the case of Nicacentro is an example

of how a cooperative created for negotiating purposes, created within the context of a network of milk collection centers and whose main objective is to sell milk produced by its members, has made it possible to overcome the initial barriers associated with a lack of capital and management capabilities.

- Also related to organizational design, the case of Ecuador demonstrates that **associative integration goes beyond the classic cooperative model and that vertical integration can be managed differently from how traditional industrial cooperatives are run**, as is the case in Paraguay, which provides evidence that under certain cultural and institutional conditions, the cooperative model can compete successfully with private companies.
- **A business strategy is essential in any associative enterprise.** Experience shows that in the case of family dairy farming, be it as a consequence of producer demands or the intrinsic nature of the transactions, there are strong incentives to explore alternative models of integration with the market either through partnerships with industrial companies or investments in processing facilities for the cooperative itself.
- **The organizational capacity and human resources of organizations not involved in family farm production can provide the support needed for family farms to grow,** as has been evident in Ecuador and Paraguay, where small-scale farmers are being incorporated into their productive schemes, allowing them to sell the possible surplus in the market and integrating them into the commercial economy.
- These three cases underscore the **importance of partnerships and hybrid forms of organization,** which is of great interest to governments, producer organizations and also international cooperation agencies.

Find out more:

<http://fao.org/alc/u/g7>

Good practices

Improving Nutrition through Agro-Aquaculture Integration



The Municipality of Maxcanú in the state of Yucatán, México, has a large and highly marginalized Mayan community with signs of moderate levels of infant malnutrition. There are several hostels for Mayan children in Maxcanú under the administration of the National Commission for the Development of Indigenous Peoples (CNDPI). School-age children stay at these hostels on weekdays and are provided meals and basic health services. They attend a public school in the morning and extracurricular activities in the afternoon where they learn about agricultural production systems; knowledge they later share with their communities when they return on weekends.

With the objective of improving community nutrition by including fish in the children's diet and by increasing livestock production in the communities, the Agro-Aquaculture Program of the Universidad Marista de Mérida, México, in coordination with the CNDPI, developed a project aimed at incorporating

tilapia farming into traditional agriculture and livestock systems used within the communities and the hostels in particular.

Using the self-management community intervention approach and the active participation at the hostels of bilingual teachers (Mayan-Spanish), parents and students, technical assistance was provided to recover idle water-storage tanks for production, for basic training in fish farming and for improving their diet. All of this was possible through participatory research-action. The program involved skills training and monitoring throughout the production cycles. Fowl (ducks), fish (tilapia), horticulture (beans, squash, lettuce, tomatoes, hot peppers) and fruit trees (papaya) were introduced in a model at a scale that could be replicated in backyards.

Production supplies were initially purchased jointly by the commission, the university and beneficiary families (180 in total). The pilot project initially involved two hostels.

Results

Prior to the intervention, fish was not consumed at the hostels or in the communities, and average vegetable and animal protein production was a maximum of 446 and 65 kg. per year per family, respectively (see Table 1), an amount below what families in the region need, according to the State Health Department. The introduction of aquaculture using an integrated model made it possible to:

- Introduce balance in the diet of more than 300 children, significantly reducing malnutrition in rural communities where the project was being executed. Fish consumption increased at the hostels to two meals per week by the end of the second year of the project.
- Increase the availability of bio-fertilizers produced in fish and poultry farms for vegetable and fruit

production.

- The amount of vegetables produced increased more than 400% on average per family, and the availability of animal protein grew to more than 660 kg per integrated system per year (poultry+fish), which means they now have enough food and a surplus for sale.
- The hostels began employing the food exchange system for surplus products and to distribute food to parents.
- The recovery of idle facilities for production.
- By the end of the second year, the units were completely self-sufficient.

Quantitative Indicators of the Impact of Aquaculture and its Integration into Traditional Agricultural and Livestock Systems

Indicator	Baseline	18 months after implementation	
		Without the integration of Agro- Aquaculture *	Agro-Aquaculture system
Fish consumption	0	No changes	Twice a week
Family livestock production	20-65 kg/year	20-65 kg/year	315-463 kg
Family crop production	270-446 kg/year	325-460 kg/year	890-1650 kg

*Traditional systems include seasonal single-crop farming of corn and one or more related legumes, as well as poultry farming.

Lessons Learned

- The productive integration of aquaculture into farming systems is a strategy that can be easily adopted by poorer communities as a means to sustainably increase their food production.
- Aquaculture continues to be a non-traditional technology in many rural communities, however, if introduced with the participation and consensus of the beneficiary community and is incorporated into traditional agricultural and livestock production systems, it can become an efficient alternative for producing good quality animal protein in rural areas.
- Cultural and language barriers in community intervention processes can only be overcome when the receiving community has control over and participates in what is being provided by the external agent.
- When those who receive this knowledge comprehend the benefits of a transferred technology, they make it their own and disseminate it, thus multiplying its benefits.

Find out more:

<http://fao.org/alc/u/7f>

Good practices

Designing Investment Projects for the Rural and Indigenous Forestry Sector



Introduction

The 2012-2020 Rural and Indigenous Forestry Plan (PFCel), approved in Chile in January 2011, establishes guidelines for forestry policies for rural family farming (RFF) as well as programs and proposals for specific forestry investment projects. The plan focuses on: i) agro-forestry systems, ii) diversification of species for the reforestation of small-scale production plots, iii) giving value to forest environmental services, and iv) development of forestry enterprises for RFF.

Following the approval of the PFCel, FAO received a request from the Agriculture Ministry, specifically the National Forestry Corporation (CONAF) and the Agriculture and Livestock Development Institute (INDAP), for technical assistance to develop investment and training projects for their staff, leaders and agencies associated with rural and indigenous groups organized under the *Movimiento Unitario Campesino y Etnias de Chile* (MUCECH).

The PFCel identified six specific lines of action for projects that could be used as examples for developing partnerships between the State, the private sector and rural organizations. With the support of FAO/TCP/CHI/3301 project, three viable productive projects were identified and funding leveraged to put these initiatives into action.

Activities

Hazelnut Project: implemented in the Las Mellizas indigenous community in La Unión, in the southern Los Ríos region, comprising 15,000 hectares and where most of the degraded or underutilized land is under the control of Huilliche communities. The objective of the project was to find innovative ways to develop forestry enterprises, working with the community in identifying a productive niche to develop in harmony with local customs and suited to the region's ecological conditions. With the support of FAO specialists and of INDAP and CONAF, ecological, technical and financial feasibility studies

were conducted, which identified *Corylus avellana* (hazelnut) as the species that could guarantee profits for the community given its period of production and the product's established markets in Chile and overseas. The process began with an analysis of the investment needed to plant 18 hectares, identifying the risks associated primarily involving irrigation, market accessibility and also to cover the supplies necessary to respond to market demand, provide technical assistance during and after planting especially during the first year when it is most vulnerable, and establish a project ownership model for the Mapuche indigenous community. During the process of socialization in the area, regional and national partners were identified, specifically Chile's Economic Development Agency (CORFO) and the Office of the Secretary-General of the Presidency, which were presented the project and later invited the community to apply for funding through CORFO's local entrepreneurship program (PEL). A grant of USD\$ 90,000 was awarded for the development of a demonstration unit in the community. CONAF provided technical assistance to guarantee the quality of the plantation, as well as support in the risk analysis. INDAP provided resources for setting up irrigations systems and by the end of the year 18 ha of hazelnuts had been planted on land belonging to 15 members of the Las Mellizas community.

Chestnut Project: carried out in El Carmen, in the Bio Bío region, where the chestnut variety *Castanea sativa* has been traditionally and extensively produced and marketed in informal sales circuits with no added value at a local level. El Carmen, also located in Chile's south, produces over 50% of this type of chestnut, which is grown and harvested in family plots. The fruit is normally collected after it has fallen to the ground, a task carried out primarily by women, and is sold to intermediaries who then sell it to larger companies that process and export it or sell it locally. The project focused on increasing profits, improving plot management and adding value through fruit sizing, facilitating commercial partnerships with larger companies under more fair and formal conditions. A proposal was prepared to apply for various government grants aimed at small businesses through agencies such as INDAP and the Solidarity and Social Investment Fund (FOSIS). The project's social and productive counterparts are the 35 families organized in the Association of Small-Scale Chestnut Producers of El Carmen. The project also works in coordination with the Municipality of El Carmen, which has been an important actor throughout the entire process. Finally, within the framework of the initiative, a total of USD\$ 140,000 in grants was leveraged from FOSIS and INDAP as well as from other counterparts to invest in equipment, technical assistance, training and assurance of sales channels, all of which will guarantee the technical, commercial and financial sustainability of

the project. The idea is to expand the model to the entire chestnut production area from Bio Bío to the Los Lagos region, as well as bolster plantations of the Spanish chestnut variety, which can be sold at higher prices.

Mushroom Project: located in the coastal area of the Maule region in Chile's center-south region, the project aims to develop and formalize harvesting of the wild mushroom *Boletus* species that grows under the radiata pine variety planted extensively in the region. These mushrooms are gathered by farmer families and rural inhabitants who scour the forests in search of the mushrooms that are later sold to intermediaries under precarious conditions. The product is finally bought by larger enterprises linked to *agribusiness* companies that process and export it. The objective of the project is to formalize the relationship with the large companies that own the forests, add value to the initial gathering and processing process and improve marketing conditions through formal channels. With the technical support of project staff and regional agents of the Local Development and Advisory Program (PRODESAL) run by municipalities with the support of INDAP, as well as gatherer families and representatives of forestry companies, the activity was analyzed and the productive and commercial chain was developed. This made it possible to identify technical intervention and marketing improvement needs. At the institutional level, the project was executed by the municipalities and PRODESAL in conjunction with INDAP, which acts as a funding and advisory agency, the regional MUCECH agency and the Arauco forestry company. The farmers involved in the project are organized and their relationship with the project is essentially as users of the PRODESAL program. Finally, resources were leveraged from INDAP's Productive Partnerships Program and FAO's TELEFOOD program, together with private sector co-funding, which totaled USD\$ 180,000, to be used to improve the initial processing of the product, adding value on the basis of the product's safety and security in the development of this activity, technical and marketing advice, together with the creation of formal marketing channels. Private companies that own the plantations will benefit from this process, promoting safe and regulated access to their forests, thus improving the relationship with the surrounding community, which will now see increased income.

Results

The main results of the three projects:

- 1) Demonstrated the feasibility of investment projects in rural communities, facilitating strategic partnerships among these communities that

have the best knowledge of their surroundings, and government technical and local development agencies, municipalities and the private sector.

- 2) Provided examples of how traditional gathering practices for non-wood forest products (NWFP) carried out by rural communities can become important sources of income if the capacity exists to satisfy market demand in terms of quality and quantity, and clear negotiating mechanisms with companies and means of distributing the benefits amongst the gatherers are in place, together with adequate technical monitoring.
- 3) Provided evidence that little knowledge exists among rural development institutions regarding the role of NWFPs in the AFCeI, which need to be strengthened and documented to demonstrate how these types of resources can become important sources of income.

Key Lessons Learned

Prioritization: The project proposal specifies the potential of six investment projects. A prioritization matrix was prepared with technical, social and financial criteria, identifying three initiatives where results would be assured given the budget and effective timeframe of the project. This allowed consultants to use their time and technical knowledge in areas beyond the scope of the project, which centered solely on identifying and designing investments projects.

Current Practices: The project focused on existing practices in the community as well as on automation and added value, quality control and organization.

Risk Analysis: It is important to conduct a risk analysis in which social criteria take precedence. If this approach is followed, beneficiaries will not put their livelihoods at risk or get into debt. Environmental aspects and financial feasibility were also taken into consideration.

Coordination of participating institutions: A technical committee was formed with representatives of agencies involved directly in the project -CONAF, INDAP and MUCECH- under the coordination FAO. The committee met regularly to receive progress reports on challenges and achievements of the project. Important decisions (budget, contracts, expenses) were made with the participation of all stakeholders, thus ensuring the transparency of the process.

Partnerships: Partnerships among technical assistance organizations, development agencies, second-level rural and indigenous organizations, and the private sector are viable if the role of each stakeholder is clear and trust exists among them. In this scenario, government agencies guarantee fair negotiations between small-scale producers and large companies, and also provide funding for new business development.

Visibility: NWFP's are produced, gathered and sold under precarious conditions and, as a result, remain invisible, mainly because the communities carry out this activity in an isolated and informal manner, producing small amounts without added value or quality control, all of which limit access to markets. When these groups join forces they can apply for government development grants.

Technical Support: One of the problems communities face is that they often lack the necessary knowledge to adequately apply for funding or prepare project proposals. For this TCP, the consultants prepared the proposals, however, second-level institution and technical agency partnerships could fill this void.

Find out more:

<http://fao.org/alc/u/gw>



GENDER AND RURAL YOUTH

The Role of Women, Men and Youth in Family Farming



There are still a few academics who maintain that there is a fixed element in Family Farming: the amount of work it requires. This depends on the size of the family, where factors such as land and capital must be adjusted to adapt to this fixed element. The livelihood of these families depends primarily on the work that men, women and youth carry out on the

farm, which together with paid labor from outside of the community and other elements contribute towards the family's income.

The work of each member of the family is therefore crucial. Gender specific activities are determined by the roles that the rural society considers as either

masculine or feminine. Men normally spend more time on farm activities, crop and equipment maintenance, animal herding, the purchase of supplies and sale of farm products. Consequently, they are normally considered the head of the household.

However, this situation has changed in recent years as a result of men leaving their communities and lands (temporarily or indefinitely) in search of employment, leaving the women to take charge of the family. According to FAOSTAT, these women account for two-thirds of the world's livestock producers; they are in charge of backyard animals (usually poultry) and, with growing frequency, animal herding; they also tend vegetable gardens and grow medicinal plants. Child-bearing and domestic chores (often referred to as reproductive activities) are also carried out by women, namely house cleaning and washing clothes, food preparation and the care of children and the elderly. Whenever possible, they also enter the labor market. If this workload is calculated in work hours, a woman's workdays, including those of younger women, are nothing less than onerous.

Youth support family farming as well and generally carry out gender-specific activities as well. Young women help their mothers in production and caregiving tasks, whereas young men help with or take charge of some of the activities left undone by the absent father. In both cases, they also seek paid employment to contribute toward the family's income without abandoning the domestic chores or other tasks at the farm.

Taking the above-mentioned aspects into consideration can help understand the productive and decision-making strategies in family farms, and design better projects and programs. For this, FAO, with the collaboration of the International Labor Organization (ILO), the World Bank and the United Nations Development Program (UNDP) has developed a methodology known as the Socioeconomic and Gender Analysis (SEAGA).

SEAGA is an approach that incorporates a gender perspective in projects, documents and programs aimed at rural areas to give greater prominence to the different types of contribution each member of the family makes to farm activities. The gender perspective makes it possible to recognize that not only men but women and youth are actors of development in rural areas and that they must all have equal access to resources, decision-making and its benefits.

FAO has divided the rural reality into three levels of intervention: micro (in the communities), intermediate (in institutions/organizations) and macro (public policies), and has prepared three handbooks, one for each level.

At the micro level, the SEAGA Field Handbook provides tools for technical experts in the field to analyze and understand the communities. These tools allow them to take into consideration the socially-established obligations of both men and women (their gender roles) and thus improve the interventions, fostering local participation.

SEAGA's Intermediate Handbook is designed to provide assistance in the evaluation of mechanisms in various institutions/organizations. It establishes that, by including the gender perspective, the performance of organizations can be improved by ensuring the full participation of both women and men, taking into consideration their potential and capacities.

With SEAGA's Macro Handbook, decision-makers at the highest level can generate agricultural and macroeconomic policies through a conceptual and methodological framework for planning participatory development.

Thus, the SEAGA methodology seeks to recognize the everyday work and participation of men, women and youth in a range of agricultural and livestock activities. Family farming, key to understanding the development of rural territories, is also covered in the SEAGA technical handbooks, which provide strategies on water management, microfinance, livestock and emergency and rehabilitation programs. In this way, FAO focuses its intervention on family farms as a means to increase productivity.

Find out more:

SEAGA homepage: <http://fao.org/alc/u/9c>



CALENDAR OF EVENTS

January

- 05 - 12** 27th National Goat Festival, 18th Provincial Lamb Festival, Centro de Investigación y Desarrollo Tecnológico para la Pequeña Agricultura Familiar (CIPAF), Instituto Nacional de Tecnología Agropecuaria (INTA), Mendoza, Argentina.
- 26 - 27** International Conference: *Soberanía Alimentaria y cuidado de las semillas criollas* (Food sovereignty and care of native seeds), Navarro, Argentina.
- 29** Meeting of the World Consultative Committee (WCC) for the International Year of Family Farming 2014. FAO Headquarters, Rome, Italy.

February

- 05 - 26** Webinar: Agroforestry for Food Security and Climate Change, organized by the Mitigation of Climate Change in Agriculture (MICCA) program.
<http://fao.org/alc/u/v3>
- 20** World launching of the International Year of Quinoa 2013. United Nations Headquarters, New York, USA.

March

- 02** Conference on Quinoa, Salon International de l'Agriculture. Paris, France.
- 04** Webinar: *Retos de la agricultura y la alimentación en el siglo XXI* (20th century agricultural and nutritional challenges), organized by the Universidad Politécnica de Valencia, Valencia, Spain.
- 04** Inauguration of the International Diploma Course: *Experto en Agricultura Familiar en el marco del Derecho Humano a la alimentación* (Expert on Family Farming within the framework of the human right to food), organized by Centro Internacional de Estudios Interdisciplinarios, Huancayo, Peru.
- 06** Launching of the literary competition "*Relatos de Quinoa*" (Quinoa stories), organized by REDI. Madrid, Spain.
- 19** Seminar on Quinoa, organized by Corporación de Fomento de la Producción. Santiago, Chile.



DID YOU KNOW?

Legislation for a National System for Comprehensive Rural Development in Guatemala

A legislative proposal for comprehensive rural development was presented before the Guatemalan Congress by a group of rural indigenous and social organizations in conjunction with the *Sistema Nacional de Diálogo Permanente* (National System for Permanent Dialogue). This initiative is an instrument for rural development based on a wide-ranging, comprehensive and sustainable approach that will serve to improve the livelihoods of families that depend on farm activities for their subsistence. The initiative, known as Bill 4084, contains ten rural sector policies that propose greater and more effective coordination in the use of resources invested by the State.

Source: <http://fao.org/alc/u/n8>

University Forum on Family Farming

The *Foro de Universidades para la Agricultura Familiar* comprises representatives of most national universities in the provinces of Buenos Aires, Córdoba, Entre Ríos, Santa Fe and the Autonomous City of Buenos Aires. The purpose of this forum is to share information and studies related to family farming as well as expand the family farming research and technological innovation network, thus contributing to the formulation of specific policies for this sector.

Source: <http://fao.org/alc/u/w6>

Contact us
RLC-Agricultura-Familiar@fao.org
www.rlc.fao.org