INTERVIEW
Juan Corvalán Huerta, President of the National Family Farming Association in Chile

SPOTLIGHT ON FAMILY FARMING
Family Farming in Haiti

GOOD PRACTICES
Sustainable Modernization of Traditional Agriculture in Mexico
- Good practices as a strategy of recovery of degraded pasture land in forests of the Brazilian Amazon with palm oil crops
- Successful cases of agro-environmental policy: Brazil's National Plan for the Promotion of Socio-Biodiversity Product Chains (PNPSB)
- Small-scale and limited resource aquaculture in Latin America and the Caribbean: An integral public policy approach

GENDER AND RURAL YOUTH
Chile: Education and Training Program for Rural Women

THE INTERNATIONAL YEAR OF FAMILY FARMING (IYFF): A PERSPECTIVE FROM THE FIELD
- Meeting of family farming organisations from five continents in Abu Dhabi
- Family Farming Meeting with senior officials from the Community of Latin American and Caribbean States
- Declaration of the 51st Paris International Agricultural Show
- Rural leaders in Paraguay
- FAO and Brazil help farmers in Costa Rica
- Integration of farmers into global markets
- Policies to support family farming in the Andean Parliament
- National Committee of Costa Rica for IYFF
- National Committee of Paraguay for IYFF

CALENDAR OF EVENTS for Latin America and the Caribbean, January - March 2014

ISSN 2312-1564

© FAO/Alberto Conti
The start of this year leads us to consider what was achieved in 2013 and what should be done in 2014

The celebration of the International Year of Quinoa (IYQ) in 2013 generated more research, investment, programs and projects, all with the aim of creating the conditions for the golden grain of the Andes to be produced in countries of the five continents and integrated into the diet of the most vulnerable population. Quinoa is not only a highly nutritious food, but its cultivation can also help to fight poverty around the world. However, while we owe our appreciation to the Andean peoples for showing humanity how to preserve, prepare and share food of high nutritional value, there is still much to do to make quinoa available to those who suffer from hunger worldwide.

Just as Andean farmers have known how to preserve and improve quinoa for thousands of years, family farmers around the world have passed on their knowledge and skills from generation to generation, preserving and improving many of the practices and technologies that ensure agricultural sustainability. And so, as we celebrate the International Year of Family Farming 2014, there is much to learn about sustainable practices from the families of small and medium-sized producers, including indigenous peoples, traditional communities, fishermen, shepherds and many others, who in Latin America represent 81% of agricultural holdings.

Several countries have declared Family Farming to be a matter of national interest, and there are various programs at the regional level. However, other countries should also promote inclusive public policies aimed at family farmers. The actions to be taken during this year should be closely linked to these objectives: 1) support the development of agricultural, environmental and social policies conducive to sustainable family farming; 2) increase knowledge, communication and public awareness; 3) achieve a better understanding of the needs of family farming, including its potential and limitations, and ensure technical support; and 4) create synergies for sustainability.

Although the UN has designated FAO as coordinator of the IYFF 2014 activities, initiatives in line with global objectives should be presented within each country. If the IYQ 2013 was about preserving and promoting the knowledge and practices of the Andean peoples regarding the cultivation of quinoa with the purpose of improving the diet of millions of people, the IYFF 2014 should highlight the role of family farmers around the world and their potential to contribute to the eradication of hunger, poverty reduction and the conservation of natural resources, which are essential elements of a sustainable future.

As usual, we begin the year with a lot of work to do.

José Graziano da Silva
Director General
United Nations Food and Agriculture Organization (FAO)
You represent UNAF. What is the raison d’être of this organization? What are its goals?

The National Family Farmers’ Association is a trade association formed on December 29, 2009. It initially combined three national organisations and a regional federation. In the context of our participation in REAF-MERCOSUR, we were discussing Chile’s need for a more specialized and better structured organization devoted exclusively to addressing the interests, problems and demands of Chilean family farmers, and the UNAF emerged as a trade body in response to this need.

The association was also seen as a way to overcome the problem of organisational weakness facing family farming in Chile. Statistics show that there are between 210,000 and 220,000 family farm units in the country. Being realistic, I’d say that not more than 10% of these units are part of any organisation. So there is a challenge, which is firstly to ensure that the members of the association are represented, but also to generate an expansion of the organisational capability of family farming.

We have offices in eight of Chile’s regions from the Coquimbo Region in the north to the Lakes Region in the south. Although the association was created with four affiliated organizations, our goal is that between January and April this year there will be 20. Today we are working to empower local organisations at the grassroots level, from the community up, including associations of small producers, agricultural committees or unions of small producers. Family farming cooperatives can also join UNAF.

What would you say are the main achievements of UNAF?

In our four years of existence we have forged an alliance with IFAD-MERCOSUR, and we also have a relationship with REAF-MERCOSUR. In 2011, supported by IFAD and with the collaboration of INDAP (Chile’s Institute for Agricultural Development), we collected information about 200 small–scale producers from UNAF, randomly choosing farmers in each region to learn about their production, finances and marketing. One of the problems facing family farmers in our country is that they usually buy expensive inputs and receive very low prices for their production making it very difficult for them to save. So we collected information in order to generate proposals to tackle the problem of commercialization and propose policies to help farmers achieve better market access. Based on the information from this study, in 2012 we toured the country visiting rural cooperatives that had received support from INDAP. We visited 57 cooperatives and closely observed their daily reality. We found there are some that are doing very well; then there are others that show moderate development and progress; and, finally, there are cooperatives that are legally non-existent, have no business activity, or were newly created.

In 2013, we held the first international farmers’ cooperatives meeting in Valdivia, which was attended by a representative from each of the cooperatives we visited. More than 100 leaders and representatives of other organisations of UNAF attended. So those are the two most important things we have done in the history of UNAF – the market study of our members and, most importantly, finding out what is happening today with the 57 or 60 cooperatives that exist in the country.

What are the main challenges facing family farmers in Chile?

In this global village, with an economic model where the emphasis is on private property, and consumerism and individualism are extreme, the big challenge is how to develop family farming associations from the grassroots level. It might seem obvious – if we want to get organised we have to find small-scale farmers. In Chile there are 14 organizations claiming to represent family
farmers. So where are we going in the medium or long term? We need to ensure that the national association is the result of the organisation of small—scale producers at the local level and not the other way around. In family farming there tends to be many generals and few soldiers. We want there to be many soldiers and only the minimum number of generals chosen by the soldiers.

Of the 220,000 farming units in Chile, only 1,800 belong to cooperatives. The cooperative can be a good alternative for family farming in Chile and we have proof. The study convinced us that we are not wrong in promoting cooperative enterprises as an alternative for family farmers. Our big idea is to consolidate UNAF from the grassroots level as the main organisation of family farmers in Chile. But how can we do that? To the extent that we can demonstrate that local organisations are active. If a cooperative is working well, the farmers who are not organised will become interested by the idea.

Another challenge is the lack of enthusiasm shown by farmers who have seen how other initiatives have not achieved the desired results. It is very important for women and men working in family farming to get organised. They need to understand that the only way to protect their land, retain their water rights, and obtain a soft loan from the State or a private enterprise, is through a business partnership. On their own they can’t do this.

What recommendations do you have for farmers that want to strengthen organisations in other countries of the region?

Actually we can’t recommend anything because we are far behind compared with the progress of associations in countries such as Uruguay, Paraguay, Bolivia and Ecuador. They inspire us. They may have a number of problems, maybe as complicated as ours, but their leaders are empowered and they inspire confidence.

Take one example. UNAF has an alliance with Nicaragua’s UNAG (National Union of Farmers and Cattle Ranchers), an organization of 70,000 members, which is the main if not the only family farming organisation in Nicaragua. As such, it has the ability to dialogue with the government and can influence its decisions. A major achievement is the recent creation of the Ministry of Family Farming and Economic Solidarity in Nicaragua. The current Minister was the founder of UNAG. That is our dream as UNAF, to someday have a strong association in our country with very clear proposals for public policy and the role of the State.

And so there is much to learn. Today we are looking at our Latin American brothers to see what things can be applied here.
This year was declared the International Year of Family Farming. What actions are planned in this regard?

It is a very good opportunity to highlight family farming in our countries, to raise awareness in society about its importance and also to put on the table, whether through social dialogue or in direct dialogue with the government, that this is a sector that produces food for the population and that needs public policies to help it develop and continue to provide this function.

In that regard, we are planning actions that start at the grassroots level. We are preparing a calendar to promote the International Year of Family Farming and get inside the home of the small-scale producer. Our slogan is that united we are stronger and live better.

We have scheduled an average of two seminars per region to address the advances that may have taken place in family farming, any difficulties that still exist, and to discuss key issues such as water and land management, investment, financing, protection of seeds, young farmers and education, women, and climate change. The aim is that, under the framework of the International Year of Family Farming, the country’s 57 cooperatives will join UNAF by the end of this year.

We are open to participate in the National Committee that was formed together with the FAO. To make the most of the International Year of Family Farming we are putting together several activities, including the opening of our first school for leaders of family farming with emphasis on production, trade and cooperatives. This should train an average of around 100 leaders from UNAF members. For a long time nobody has trained farming leaders in Chile and without training there is no future.

Finally, we hope to present a proposal for better public policies to the new government and generate enough pressure to create political will. That is the challenge – to create a good, fair public policy proposal with political will behind it, which requires members of parliament, mayors and political parties. But they have to see an association that is disciplined, robust and organised, which is not easy in Chile. It requires much effort to get 14 national organisations to agree. If this is not possible, we will continue working as UNAF.

Do you have a final message for readers?

Yes, first to say that we are very pleased that the United Nations has declared an International Year of Family Farming. I would invite all those that have something to do with family farming and the rural world, whether they be professionals, academics, public and private entities, governments, youth, university students, and everyone else, to see that we have the will to strengthen family farming but also to understand that this life is in danger.
8 out of 10 people who produce food in Latin America and the Caribbean, are family farmers.
Haiti has a history of devastating natural disasters. Partly as a result, farming and livestock activity in this country, which is located in the West Indies, faces adverse conditions, either due to the effects of the earthquake in 2010 (which caused losses of US$32 million in the agricultural sector), or to the degraded environment.

However, a glance at the economic data shows that Haiti’s agriculture sector has a promising future, albeit full of challenges. For example, 25% of the gross domestic product (GDP) depends on the agriculture sector, which indicates the strong foundation of agriculture in the economy. In addition, 50% of the country’s food supplies are produced domestically, representing potential growth for the agriculture sector.

The future growth of agricultural activity in Haiti will come from the 1,018,961 farms throughout the country, of which 94% (956,892) are smaller than 3 hectares (see Figure 1), which are mainly family-run farms according to the General Agriculture Census of 2012. The main crops produced in Haiti are cane sugar, cassava, maize and yam (see Figure 2). Regarding the producers, 52% are aged between 35 and 54 years, while 25% are women.

Land used for family farming covers 89% of Haiti’s total area, with 21% of this managed by women. Farmers without formal education manage 52% of the total area under cultivation. Some 90% (47.5% of the total area) of these are family farmers. In addition, 58% of the area that provides food to market belongs to family farmers (see Table 1).

The institution in charge of agricultural and nutritional development in Haiti is the Ministry of Agriculture, Natural Resources and Rural Development (MARNDR), which is responsible for establishing policies.
# Area of Farms in Haiti

![Pie Chart showing the distribution of farms in Haiti.](image)

<table>
<thead>
<tr>
<th>Description</th>
<th>Non-Family Farms</th>
<th>Family Farms</th>
<th>Percentage of family farms compared to total agricultural land</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of farms</td>
<td>62,059</td>
<td>956,892</td>
<td>93.90%</td>
</tr>
<tr>
<td>Number of smallholdings</td>
<td>65,848</td>
<td>1,758,184</td>
<td>96.39%</td>
</tr>
<tr>
<td>Area of arable land (ha)</td>
<td>80,762.5</td>
<td>655,479.2</td>
<td>89.03%</td>
</tr>
<tr>
<td>Average area per farm (ha)</td>
<td>1.3</td>
<td>0.7</td>
<td>-</td>
</tr>
<tr>
<td>Area cultivated by women (ha)</td>
<td>11,423.1</td>
<td>138,921.2</td>
<td>18.87%</td>
</tr>
<tr>
<td>Area cultivated by farmers without formal education (ha)</td>
<td>37,251.8</td>
<td>349,717.2</td>
<td>47.50%</td>
</tr>
<tr>
<td>Area of arable land that produces food for sale (ha)</td>
<td>62,259.4</td>
<td>433,244.0</td>
<td>58.85%</td>
</tr>
<tr>
<td>Area of arable land that is private property (ha)</td>
<td>70,382.3</td>
<td>561,706.1</td>
<td>73.10%</td>
</tr>
<tr>
<td>Number of smallholdings with irrigation</td>
<td>6,443</td>
<td>228,144</td>
<td>12.51%</td>
</tr>
<tr>
<td>Area of arable land with irrigation (ha)</td>
<td>8,015.0</td>
<td>67,190.8</td>
<td>9.13%</td>
</tr>
<tr>
<td>Area dedicated to the cultivation of grains (ha)</td>
<td>38,408.0</td>
<td>423,399.2</td>
<td>34.92%</td>
</tr>
<tr>
<td>Area dedicated to the cultivation of legumes (ha)</td>
<td>30,027.6</td>
<td>291,255.2</td>
<td>24.02%</td>
</tr>
<tr>
<td>Area that has benefitted from loans (ha)</td>
<td>2,568.3</td>
<td>12,273.2</td>
<td>82.70%</td>
</tr>
</tbody>
</table>
MARND has identified the key conditions for family farming that also allow the sustainable management of natural resources:

- Availability of water resources and irrigated land.
- Diversity of agro-ecological environments.
- 1,700 kilometres from the coast for fishing.
- Proximity to markets in the Caribbean, especially the Dominican Republic, as well as North America.

To support the agriculture sector, the Ministry has developed the Triennial Agriculture Recovery Plan 2013-2016, which consists of four programs:

- Institutional strengthening and governance of the agricultural sector.
- Program to Support Family Farming.
- Strengthening of agriculture for commercial purposes.
- Development of rural infrastructure and management of river basins.

The Program to Support Family Farming includes three key actions:

- Registry of farmers with an emphasis on the state of conservation of the environment, production systems and the farmer’s socio-economic situation.
- Subsidy for the purchase of inputs and agricultural services, especially for crops of rice, corn, sorghum, beans, bananas and tubers, in addition to supporting the development of livestock and beekeeping.
- Expansion of the Champs Écoles Paysans (Farmer Field Schools) strategy to increase the number of farms that benefit from technical support related to good agricultural practices (agricultural techniques, storage, packaging, processing and sale of products).

In addition to supporting these government initiatives, FAO is developing two projects specifically geared towards family farming that aim to increase direct investment and training of family farmers in the dairy sector.

Byron Jara, Mariana Muñoz
Regional Office of the FAO for Latin America and the Caribbean

More information:

- Ministry of Agriculture, Natural Resources and Rural Development: http://agriculture.gouv.ht/view/01/
- The Outlook for Agriculture and Rural Development in the Americas 2014 (Spanish): http://www.iica.int/Esp/organizacion/LTGC/ForosTecnicos/Documents/Foro6-2013/Perspectivas2014/5.0AgriculturaFamiliar.pdf
Introduction

The Sustainable Modernisation of Traditional Agriculture (MasAgro) is an initiative led by the government of Mexico and the International Maize and Wheat Improvement Centre (CIMMYT). Its aim is to obtain higher and more stable yields of maize, wheat and other crops through sustainable agricultural practices and the use of improved seeds that increase incomes and reduce the impact of farming activities on the environment. It focuses mainly on farmers who grow crops through rainwater harvesting and have limited access to technology and market information. The initiative has four divisions: (i) MasAgro Biodiversity, including genetic research of maize and wheat; (ii) MasAgro Maize, focused on improving maize and developing skills in small and medium-sized enterprises; (iii) MasAgro Wheat, dedicated to research on the potential yield of wheat; and finally, (iv) MasAgro Farmer, focused on training as well as the creation and development of skills among actors in the agricultural innovation system. MasAgro is a 10-year strategy launched on October 15, 2010, following the signing of an agreement between Mexico’s Secretariat of Agriculture, Livestock, Rural Development, Fishing and Food (SAGARPA) and CIMMYT.

Activities

MasAgro has agreements with 22 of Mexico’s 32 states. To date, 12 state governments (Puebla, Sinaloa, Mexico State, Tlaxcala, Jalisco, Querétaro, Sonora, Morelos, Hidalgo, Guerrero, Michoacan and Guanajuato) have committed to the initiative, while 11 others are in the process of signing agreements. Additionally, MasAgro has signed more than 200 agreements for specific research, development and innovation (R+D+I) projects, in addition to having more than 150 public and private partners in its innovation network.

MasAgro has also taken important steps at the international level. In July 2011, the initiative was presented to the World Bank during the celebration of the 40th anniversary of the Consultative Group for International Agricultural Research (CGIAR), highlighting that MasAgro is leading international efforts to support CGIAR’s research programs with the aim of increasing the yield of maize and wheat obtained by smallholders in Africa, Asia and Latin America. MasAgro has also contributed to other international programs that have the support of the Inter-American Institute for Cooperation on Agriculture (IICA), the Inter-American Development Bank (IDB) and the...
World Economic Forum (WEF). As a result, the G-20 Agriculture Group recognized MasAgro in its 2012 report as “an experience that could serve as a model to coordinate research and development, innovation, technology transfer, as well as partnerships in the agro-food sector”. In March 2012, the Bill & Melinda Gates Foundation said MasAgro is “the most original program that exists so far aimed at the most fragile agriculture at the global level”, while expressing its interest in replicating this experience in countries of South Asia and sub-Saharan Africa.

Finally, it is important to mention that on February 13, 2013, CIMMYT’s new Biosciences Complex opened with support from the Gates Foundation and the Carlos Slim Foundation. The complex is comprised of highly specialized greenhouses for plant breeding and a series of research projects in the framework of MasAgro, which include the Nutritional Quality of Maize Laboratory to analyse the biofortification process of high-protein maize.

**Results**

The MasAgro Biodiversity division has established the Service of Genetic Analysis for Agriculture (SAGA) at the National Centre for Genetic Resources at the National Institute of Forestry, Agricultural and Livestock Research (INIFAP) in Jalisco, Mexico. The services offered by SAGA have significantly reduced the time required for genetic improvement. So far, MasAgro has studied the genetic makeup of 18,000 varieties of maize and 40,000 varieties of wheat, which will allow the generation of new seeds that are more resistant to heat, drought, pests and diseases.

The MasAgro Maize and MasAgro Wheat divisions have established collaborative research networks with different public and private stakeholders. In the case of maize, the Collaborative Network for the Evaluation and Exchange of Seeds was created in order to accelerate the development of improved maize seeds. Currently, 35 small and medium-scale Mexican seed companies participate in this program and it is expected that during 2014 they will produce up to 800 tons of commercial seed to plant approximately 40,000 hectares. In the case of wheat, MasAgro coordinates research by experts from 33 research centres in 21 countries. In Mexico, MasAgro Wheat established the Mexican Phenotyping Platform (MEXPLAT). Thanks to this investment, 17 Mexican scientists have been trained in methods of genetic improvement, In addition to supporting the research of seven Mexican doctoral students in Australia, Chile, Spain and the United Kingdom.

The MasAgro Farmer division has developed a strategy based on hubs or nodes of innovation, which are collaborative networks to promote adaptation, adoption and dissemination of sustainable farming practices and technologies. There are currently 6 hubs operating at 100%; 2 hubs are in development and 4 more are in the design and planning stage. To date, MasAgro covers an area of 623,901 hectares, thanks to the integration and coordination with the Strategic Program for the Productive Chain of Maize and Bean Producers (PROMAF) and the project “Subsistence Agriculture: Support for Maize Smallholders up to Three Hectares” in the framework of Mexico’s National Crusade against Hunger. MasAgro has been responsible for an average nationwide increase of 17% in the yield of maize and 24% in the case of wheat.

Similarly, it has contributed to an average decrease in the costs of production of 12.3%. This is the result of different programs, including the participation of more than 22,000 farmers in demonstration events; the consolidation of a network of 92 experts who have trained more than 2,000 farmers and provided technical assistance to more than 60,000; the certification of 114 technicians in Conservation Agriculture with 170 applicants hoping to obtain the certificate this year; more than 100 performances of the play “A Field with Heart... Conservation Agriculture” (Pa’ un campo con corazón... Agricultura de Conservación) seen by more than 7,000 people; and the production and distribution of 55.2 tons of Triticale Bicentenario TCL08 seed, among other initiatives.

**Lessons Learned**

- **Territorial approach to promote research and extension.** The area of operation of the hubs is bounded by agro-ecological conditions of the territory, as well as regional production systems. The physical infrastructure is formed by a network of platforms for the development, adaptation, validation and dissemination of technologies and demonstration modules jointly established with farmers and technicians trained to observe the differences between the traditional practices of farmers in the area and the MasAgro technologies. The MasAgro research and extension interventions are
designed to respond to the demands and challenges faced by farmers, considering the specific characteristics of each region, farming systems and scale of production. As a result, these interventions are planned and executed with a high level of participation of actors at different levels, in addition to offering channels for feedback.

- **Public-private collaboration.** The success of MasAgro is based on a multi-stakeholder approach to promote agricultural sustainability. This requires collaboration and coordination among researchers, suppliers, farmers and extension agents, in addition to political support and the support of SAGARPA and state government programs. MasAgro encourages collaboration between different actors, public and private, through different mechanisms of governance, such as the MasAgro State Councils, public-private innovation platforms and the annual strategic planning meetings in each hub.

- **Promotion of the farmers’ association.** The association of farmers is essential to achieve the objectives of MasAgro, since it recognizes them as active agents of change and not as passive recipients of aid (agents vs. patients). MasAgro is based on a scheme of incentives and not subsidies – it helps farmers without giving direct subsidies and complements existing public programs in rural areas.

- **Multi-focus and market-oriented extension approach.** MasAgro has to adapt to different agro-ecological zones, different production systems, the variety of actors involved and different types of farmers. It must also respond to the needs of agribusiness. For this reason, there is no preference for any specific extension methodology (linear, participatory, etc.), and the decision to opt for one or the other depends on the effectiveness of the technology and its suitability. Some methods can be used on their own or combined as a way to cope with local challenges and demands.

*Horacio Rodríguez*
*International Maize and Wheat Improvement Centre*

---

**More information:**

- About CIMMYT: [http://conservacion.cimmyt.org](http://conservacion.cimmyt.org)
- About MASAGRO: [http://masagro.mx](http://masagro.mx)
- Videos: [http://www.youtube.com/user/CIMMYTCAP](http://www.youtube.com/user/CIMMYTCAP)
- CIMMYT social media: [https://www.facebook.com/accimmyt](https://www.facebook.com/accimmyt)
Good practices
Palm oil cultivation as a strategy for pasture recovery in degraded forests of the Brazilian Amazon

Introduction
One of the most important programs to curb deforestation in Latin America is the United Nations collaborative initiative on Reducing Emissions from Deforestation and Forest Degradation (REDD). Thanks to this program, which helps to promote biodiversity conservation and the adoption of good forestry practices, Latin America and the Caribbean has almost 13 million hectares of forest certified by the Forest Stewardship Council (FSC), including more than 6 million hectares of native forests and areas under reforestation in the Brazilian Amazon (FAO, 2012).

During the decade of 2000-2010, there was a reduction in the rate of deforestation in the Brazilian Amazon (Figure 1). The low rates of deforestation since 2004 are the result of environmental policies to promote good forestry practices, as well as the protection of natural forests.

Figure 1 Deforestation rates in the Amazon between 2002 and 2012

Source: INPE / PRODES, 2012
As a way of recovering degraded forest areas and avoiding deforestation in new areas, the Brazilian government has developed a program to promote palm oil cultivation, which is currently one of the main raw materials for the production of biodiesel. Palm oil represents an important alternative for the generation of income, diversification of production and restoration of the environment. As part of the program, the government has promoted palm oil projects on family farms in degraded areas.

In addition to being an important strategy to stimulate the recovery of degraded areas and to increase carbon sequestration, the introduction of palm plantations in the Amazon has put the region within the goals established in the National Program for Biodiesel Production and Use (PNPB). It has also created jobs in rural areas with an average of five people working on each hectare, making the cultivation of oilseeds an important instrument for social inclusion in Brazil (Figure 2).

Figure 2  Palm oil plantation in the Brazilian Amazon

In 2010, a set of regulatory tools were introduced to organise the adoption of best practices in the Amazon rainforest, including the Socio-Environmental Palm Oil Protocol, which aims to contribute significantly to the reduction of environmental impacts through minimum standards of sustainable production for this crop.

The best practices are those that consider environmental, social and economic impacts: the environmental impact means that agricultural and agro-industrial activities should be based on guidelines for soil use planning, the implementation of sustainable agricultural and industrial practices, and the protection of the environment and environmental services from ecosystems; the social impact implies rural, social and cultural development, respect and promotion of human rights, as well as legal compliance and democratic participation; finally, in terms of the economic impact, productive activities whether at the local or state level, should contribute to the sustainability of the national economy (Monteiro, 2013).

Recommendations

- Raise awareness at the national and local level about the importance of good production practices for the conservation of the region’s forests.

- Promote the conservation and proper management of forests, considering their importance in the generation of income and assets to promote food and nutritional security, while fighting hunger in the Brazilian Amazon.

Kátia Fernanda Garcez Monteiro
Universidad Federal Rural
de la Amazonia, Brasil

More information:

Rural development is important in achieving food security and poverty reduction, emphasizing a sustainable relationship between environmental, social and economic impacts, and supporting the way of life of the rural population. To reach the proposed development model based on respect for natural and cultural processes and systems, it is necessary to conserve biodiversity, use renewable energy sources, incorporate technologies with minimal environmental impact, avoid unsustainable patterns of consumption, and support local participation in decision-making. In Latin American and Caribbean countries, where rural poverty and environmental degradation remain important issues, agro-environmental policies based on a systemic approach, with objectives based on the economic, social and environmental aspects of sustainability, will enable them to progress towards the fulfillment of the Millennium Development Goals.

The Brazilian government and the FAO Regional Office for Latin America and the Caribbean have agreed to strengthen agro-environmental policies in the region as an essential step towards achieving the objectives of sustainable rural development and food security. To this end, the project “Strengthening agro-environmental policies in Latin America and the Caribbean through dialogue and exchange of national experiences” was launched in 2012 by the Brazil–FAO Cooperation Program in Brazil, Chile, Colombia, Mexico and Nicaragua. The aim is to share experiences and knowledge between countries about the results obtained in the implementation of agro-environmental policies.

Although there is no single model that works for all countries, the cases of successful experiences can serve as a reference and can be adapted to other contexts.

In this framework, 17 cases were identified that promote ecological agriculture in five countries and highlight the lessons learned in terms of environmental, social, economic, institutional and management aspects. The analysis of these experiences has contributed, in general, to a reduction in the impact of agriculture activity on the environment and the social inclusion of the most vulnerable rural communities. Below is a summary of one of these cases.

**Good practices**

**Successful Cases of Agro-Environmental Policies: National Plan for Promotion of Socio-Biodiversity Product Chains (Brazil)**

**Introduction**

Rural development is important in achieving food security and poverty reduction, emphasizing a sustainable relationship between environmental, social and economic impacts, and supporting the way of life of the rural population. To reach the proposed development model based on respect for natural and cultural processes and systems, it is necessary to conserve biodiversity, use renewable energy sources, incorporate technologies with minimal environmental impact, avoid unsustainable patterns of consumption, and support local participation in decision-making. In Latin American and Caribbean countries, where rural poverty and environmental degradation remain important issues, agro-environmental policies based on a systemic approach, with objectives based on the economic, social and environmental aspects of sustainability, will enable them to progress towards the fulfillment of the Millennium Development Goals.

The Brazilian government and the FAO Regional Office for Latin America and the Caribbean have agreed to strengthen agro-environmental policies in the region as an essential step towards achieving the objectives of sustainable rural development and food security. To this end, the project “Strengthening agro-environmental policies in Latin America and the Caribbean through dialogue and exchange of national experiences” was launched in 2012 by the Brazil–FAO Cooperation Program in Brazil, Chile, Colombia, Mexico and Nicaragua. The aim is to share experiences and knowledge between countries about the results obtained in the implementation of agro-environmental policies.

Although there is no single model that works for all countries, the cases of successful experiences can serve as a reference and can be adapted to other contexts.

In this framework, 17 cases were identified that promote ecological agriculture in five countries and highlight the lessons learned in terms of environmental, social, economic, institutional and management aspects. The analysis of these experiences has contributed, in general, to a reduction in the impact of agriculture activity on the environment and the social inclusion of the most vulnerable rural communities. Below is a summary of one of these cases.
The National Plan for the Promotion of Socio-Biodiversity Product Chains

Brazil’s Ministry of the Environment (MMA), the Ministry of Agrarian Development (MDA) and the Ministry of Social Development (MSD) have developed with other government agencies and NGOs, a plan to improve institutional instruments and programs in order to strengthen the value chains of products originating in Brazilian ecosystems. This has allowed the creation of new mechanisms related to the use and marketing of products such as the Brazil nut (Bertholletia excelsa), babaco, acai (Euterpe oleracea), pequi, buriti (Mauritia flexuosa), and yerba–mate (Ylex paraguayensis).

The main objective of this plan is to promote biodiversity conservation and create a source of additional income for rural communities, especially for family farmers and traditional groups (indigenous people, quilombolas and rubber tappers), engaged in ecologically sustainable forestry activities. The plan is designed to contribute through the strengthening of production and commercialization chains to a new understanding of environmental conservation and income associated with products from natural ecosystems. These chains involve the production, processing, marketing and consumption of these products.

The program has been implemented in selected territories, especially in protected areas. The beneficiaries receive loans, technical assistance, and rural extension especially for farmers linked to PRONAF (National Program for the Strengthening of Family Farming), as well as guaranteed minimum prices for their products. In return, they must engage in the sustainable use of soils and maintain the native vegetation of the ecosystem.

Minimum prices are based on production cost, and not market price, as a precautionary measure against potential exploitation by intermediaries. This works through a subsidy for products in rural credit operations that guarantee a minimum price based on the cost of production.

Results

An important aspect of the plan is institutional coordination to generate a more integrated policy approach. In this regard, the effectiveness of various existing programs has been improved to strengthen the socio–biodiversity product chains in Brazil’s rural areas.

The plan has been successful in communities that already have a certain level of social organisation, such as associations of farmers and cooperatives, and in micro-regions or territories where local farmers’ organizations or other organisations exist.

Currently, priority has been given to product chains of “castanha-do-Brazil” and “babaçu”, which benefit approximately 500,000 family farmers. Production of non-timber products is worth approximately US$360.4 million per year in Brazil (Brazilian Institute of Geography and Statistics, 2010).

The plan has generated a substantial increase in the resources available to rural families through measures to diversify lines of credit, resulting in the diversification of products.

The program helps communities to use the ecosystem while maintaining and restoring areas of economic interest, not only to comply with legislation but also for the practical reason of land and natural resource conservation that allows the generation of new sources of income.

Lessons learned

Although the plan has produced good results, there are still challenges for the development of socio–biodiversity product chains. These include the following:

- A lack of regulation in large tracts of land in Brazil hinders sustainable development. Although there is evidence of a substantial increase in the resources available to family farms, along with measures to diversify credit lines, there is still a gap between the start-up of innovative forms of credit and their adoption by rural agents of credit policy.

- Farmers who occupy remote lands (no formal title) in both protected and private area face problems of access to the Socio–Biodiversity Plan given the difficulty in obtaining a Declaration of Eligibility (DAP) from PRONAF. Excessive documentation and the need to travel long distances to cities to register also complicate the process. Given the difficulty in obtaining the DAP, participation in the Bolsa Verde Program (which is part of the National Plan to Fight Poverty: Brasil Sem Miséria) is being considered as a prerequisite to access the minimum price guarantees for socio–biodiversity products (PGPMBio), which would allow more homes to benefit from the plan.

- Even though the minimum price guarantee is an important contribution to improving the incomes of rural families, the opening of new markets is necessary to improve the prices paid to producers.
• The existing capacity of qualified technical support and extension services is able to meet the demand in the farming sector, but scientific research on Brazilian biodiversity needs to be strengthened in the areas of production, handling, processing and industrialization.

• The formulation and implementation of agro-environmental programs in Brazil has served as an important mechanism for inter-sectoral dialogue, especially when economic incentives for environmental conservation are proposed.

• The creation of channels for dialogue between the government and society helps agro-environmental programs adapt to the reality of farming communities. This framework highlights the importance of different ways to access the plan, which has increased the number of beneficiaries and improved the level of adoption of agro-environmental measures by rural families.

Jessica Casaza
FAO Regional Office for Latin America and the Caribbean

More information:
• Agri-environmental policies in Latin America and the Caribbean (Spanish): http://www.rlc.fao.org/es/programabrasilfao/proyectos/políticas-agroambientales/
Good practices

Small–scale and Limited Resource Aquaculture in Latin America and the Caribbean: A Comprehensive Public Policy Approach

Introduction

The FAO Regional Office for Latin America and the Caribbean, together with the Aquaculture Network of the Americas (RAA in Spanish), has published a report on small–scale aquaculture policies in Latin America. The report was presented on May 9-10, 2013, at a seminar on policies for farmers with limited resources in Latin America, which was held in Guayaquil, Ecuador. The objective of the report is to present an overview of the policies, programs and public instruments for the support of limited resource aquaculture producers (ARELs) and micro and small–scale aquaculture enterprises (AMYPEs) in Latin America and the Caribbean.

These definitions were adopted following a workshop organised by the FAO Regional Office for Latin America and the Caribbean. The workshop held in August 2010 in Paraguay was titled “Current situation and outlook for small–scale and limited resource aquaculture in Latin America”. The concepts of AREL and AMYPE can be defined as follows:

1) Limited Resource Aquaculture Producer (AREL): This activity is based on self-employment and is practised either exclusively or to complement other income–generating activities in conditions where there is the lack of at least one resource that prevents families from being self-sustainable. This definition includes producers who use aquaculture as a way to diversify their production and to help meet their family’s food needs. This activity can be limited by various factors including a lack of technology, natural resources, management skills, access to markets, capital, raw materials or services in the aquaculture production chain.

2) Micro and Small–scale Aquaculture Enterprise (AMYPE): This is commercial aquaculture performed by micro and small enterprises, which generates paid employment and uses some level of technology. These companies are slightly larger than limited resource producers (ARELs) but are also limited by the lack of resources, and need help to improve their competitiveness and achieve sustainability. A lack of resources can interfere with the ability of producers to ensure the quality and safety of their products, comply with the regulatory framework, obtain access to credit, implement technological improvements (innovation), achieve management efficiency, reach a profitable level of productivity, or obtain access to information (market, technology, standards, etc).

Considering the characteristics of small-scale aquaculture producers, especially those located in continental waters, ARELs and AMYPEs
share a number of traits in the practice of family subsistence farming and family farming in transition. These include:

- Low-income levels associated with reduced productivity and low capital investment.
- Potential to generate jobs and food locally, contributing to food security and family income in rural areas.
- Performed on a small area of land in a remote area, which normally does not have formal property rights.
- Complementary systems of animal and vegetable production, with a low degree of automation based on the use of family labour.
- Unfavourable relationship with markets, especially outside the community, as a result of limited negotiating power, low volumes of production, geographical isolation and lack of access to information about sales channels or the behaviour of prices.
- Limited access to credit and financing.

Some farming techniques with potential for integration in agricultural and aquaculture production in LAC include the use of irrigation systems, aquaculture in rice fields, aquaponics, integrated livestock-fish farming systems using polyculture (fish-ducks; fish-pigs; fish-chickens) or agro-aquaculture (using grasses and aquatic plants as fish food, or the integration of fruit and vegetable crops near aquaculture ponds).

**Activities**

Through case studies in 11 countries (Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Peru and Dominican Republic), the regulatory frameworks, institutions and public policy instruments for the development of ARELs and AMYPEs were analysed. This study also identified the main challenges and good practices to promote food security and overcome rural poverty through the integration of aquaculture and agriculture policies aimed at small-scale producers.

In addition, the study highlighted the need for an institutional framework that promotes the efficient use of land and water resources by the actors and public institutions linked to the chain of agro-aquaculture production.

Finally, conclusions and some general recommendations were presented to formulate policies that support the development of ARELs and AMYPEs. It is important to note that these are only general guidelines intended to contribute to the debate and discussion on the design and implementation of these policies, which should of course consider the local socio-political, economic, environmental and cultural conditions of each country.

**Results**

The main recommendations of the report are as follows:

- Adopt the multi-sector institutional approach of family farming, which recognizes that aquaculture is part of rural production systems and takes into consideration their differences through an ecosystem approach.
- Design aquaculture policies with the participation of stakeholders that include actions to build local capacities through processes of self-management and the promotion of a suitable environment for producers to achieve self-sufficiency.
- Increase the level of visibility of aquaculture policy to demonstrate to society the sector’s contribution to rural development.
- Develop regulations, laws, rules, guidelines, policies and programs to promote small-scale and limited resource aquaculture that are clear for producers and easily translated into concrete actions.
- Promote public-private coordination in applied research, training and human resources, as well as in the design and implementation of plans and programs for the creation of infrastructure to improve the functioning of agro-food markets, in addition to actions that promote the integration of small-scale producers into value added chains.
- Increase efforts to improve the collection of information about ARELs and AMYPEs, as well as mechanisms to evaluate the impact of public policies.
- Design policies that allow aquaculture producers to contribute more effectively to local food security through public food procurement programs.

**Lessons learned**

- Small-scale farmers in LAC have often been the focus of ineffective social programs that use...
a welfare approach, which inhibits their self-reliance rather than helping them build capacities and increase production in rural areas. However, small-scale producers such as ARELs and AMYPEs, can become part of the solution to the problem of rural poverty and food insecurity in the region.

- The main challenges faced by ARELs and AMYPEs have to do with access to technology, quality seed and balanced fish feed; the lack of access to credit and financing instruments; a limited capacity to meet quality and safety standards, and lack of negotiating power in the market.

- Legislation, policies and programs to support ARELs and AMYPEs should consider the whole production process, from fingerlings to post-harvest handling and marketing. They should also consider the interactions between aquaculture producers and other local economic activities.

- Small-scale and limited resource aquaculture in LAC requires the promotion of participatory processes from the ground level up. In this regard, it is necessary to create integrated agriculture-aquaculture institutions, whose social, productive, environmental and economic impacts are considered systemically to promote local development and the distribution of benefits.

Alejandro Flores
Oficina Regional de la FAO
para América Latina y el Caribe

More information:

- Small-scale Aquaculture in Latin America and the Caribbean. Towards an integral view of policies. (Spanish) http://www.fao.org/docrep/019/i3623s/i3623s.pdf

- Aquaculture Network of the Americas (Spanish): http://www.racua.org/es/
Around the world, families who harvest, raise fish, poultry and livestock, help fight hunger, reduce poverty and protect the environment.
In Chile the employment rate of women in rural areas is low (27.7%), their activities tend to be concentrated in agriculture, hunting and forestry (31.1%), and they are often considered “unskilled labour” (40.4%). Of every 100 farmers nationally, only 22 are women and they often have lower access to resources: they account for only 16% of the total area cultivated and their farms are smaller than those of men, with 42% of their holdings used for subsistence agriculture versus 30% for men.

Faced with this reality, in 1992 the Foundation for the Promotion and Development of Women (PRODEMU) and the Agricultural Development Institute (INDAP) joined efforts to implement the Education and Training Program for Rural Women, of the Chilean territory. This program provides opportunities to rural women and expands the coverage of public policies.

The cooperation between these two institutions has become part of the solution to the problem. PRODEMU, as the organisation in Chile responsible for improving the quality of life for women and their families, helps to strengthen women’s groups and organisations and promotes social leadership within these groups. INDAP, for its part, is focused on the development of family farming. Therefore, as a result of cooperation between these institutions the program has improved the quality of life of rural women by facilitating their incorporation into economic, productive and social development through the generation of skills and knowledge.

The 3-year program is based on the development of human and social capital, and access to financial and physical capital for participating women’s groups. It offers the following main benefits:

- Training in modern farming techniques, management of agricultural and livestock enterprises, and organisational development;
- Financing and grants for the establishment of farms (in the first year);
- A fund for group projects (second year);
- Support related to formalization and commercialization of entrepreneurship (third year);
• Permanent technical support for women’s groups that is provided by a Rural Area Coordinator (CCA in Spanish).

A 2012 report found that the proportion of inactive women had dropped from 56% to 19% and that the average annual individual income for women farmers was US$285, which complements other household income. The women surveyed rated the knowledge acquired during the program, both in terms of skills development and technical processes, as “very good”.

The program has highlighted the specific needs of Chilean rural women, promoting women’s empowerment, integrating them into discussions related to their communities, and, above all, recognizing them as important actors in public policy, development and economic contribution, both in the household and in their communities.

Based on the experience of PRODEMU and INDAP, Chile offers the following recommendations:

• Respond to specific community needs with targeted land and gender policies.

• Fix asymmetries in access to information that affect rural women.

In order to replicate the Program for the Education and Training of Rural Women, countries should:

• Recognize that permanent technical, business management and psychosocial support are critical for the success of this strategy.

• Consider the main principles of this model: the breadth of the intervention, its local approach, flexibility of implementation, decentralisation of decision-making, and participatory approach, with a strong component of community involvement.

• Promote the development of farms linked to local markets and with potential for expansion to other markets.

• Adapt the general framework of the program to the local reality of women on the land.

INDAP
Development Division

More information:

• Agricultural Development Institute, INDAP (Spanish): http://www.indap.gob.cl/programas/formacion-y-capacitacion-para-mujeres-campesinas-convenio-indap-prodemu
The International Year of Family Farming (IYFF): A view from the field

Meeting of family farming organisations from the five continents in Abu Dhabi: Declaration of IYFF 2014

Following the declaration of the IYFF- 2014 by the United Nations General Assembly on December 22, 2011, and the creation of more than 50 National Committees, representatives of farmers’ organisations from five continents – Africa, America, Asia, Europe and Oceania – met in Abu Dhabi on January 21-22, to approve their main demands, which will be the subject of negotiations with governments and international institutions throughout the year. The meeting was organised by the World Rural Forum, with the support of Khalifa Fund and Agriterra.

In the statement agreed during the meeting, the participants reaffirmed that “Family Farming can and must become the cornerstone of solid sustainable rural development, which is an integral part of the development of each nation and people, while preserving the environment and natural resources”.

More Information (Spanish): www.familyfarmingcampaign.net/es/noticias/2014/02/declaracion-de-abu-dhabi

ECLAC: Family Farming can strengthen food security in Latin America and the Caribbean

During the 1st Family Farming Meeting of the Economic Commission for Latin America and the Caribbean (ECLAC) in 2013, representatives of 23 countries met in Brazil to discuss initiatives designed to guarantee food security and rural development through support for family farming.

At the meeting, FAO pointed out that family farming is not synonymous with poverty and that, on the contrary, it is a very important sector for food security and the economic and social development of Latin American and Caribbean countries.

Family farming today occupies an important place in the political agenda of the governments of the region and international organisations, as shown by the Declaration of Santiago at the 1st Summit of CELAC, held in January 2013 in Chile, which stated that “the principal cause of hunger is poverty and to overcome this it is necessary to coordinate actions related to the productive inclusion of family farmers”.

Statement of Paris: Ministers of Agriculture sign declaration to create “a favourable environment” for family farmers through public policies

Over 20 countries have signed the Declaration of Support for Family Farming promoted by the French Minister of Agriculture, Stephan Le Foll, during the 51st International Agriculture Exhibition held in Paris.

In this declaration, the Ministers of Agriculture of the member countries paid tribute to the work of family farmers, both men and women, while showing “their full confidence in their individual and collective capacity to meet the challenges of agricultural and of food production, as well as safeguarding the environment and employment”.

In addition, they emphasized the need to support young farmers through “public policies to create a favourable environment that facilitates family farming”.

So far, the declaration has been signed by France, Spain, Romania, Czech Republic, Portugal, Switzerland, Slovenia, Finland, Albania, Serbia, Afghanistan, Georgia, Ivory Coast, Mali, South Africa, Brazil, Tunisia, Algeria, Israel, Jordan, and the Walloon Region (Belgium).


Paraguay: Training of rural leaders helps to strengthen family farming initiatives

Paraguay’s Training Program for Rural Leaders, conducted between August and November 2013, helped leaders of rural organizations to strengthen their management capabilities, improve their ability to promote food security and increase their influence on the design of public policies.

The aim of this training initiative was to make public programs in Paraguay more effective in the design of policies for food and nutritional security. For participants, the course was an important space for the exchange of experiences and to enhance the development of family farming initiatives.


FAO and Brazil help aquaculture producers from Costa Rica increase their production in a sustainable way

Limited resource aquaculture producers of Guatuso de Alajuela, in the north of Costa Rica, took part in a project supported by the FAO-Brazil project of the Aquaculture Network of the Americas (RAA) that will allow them to generate more income and employment through sustainable farming initiatives.

Improving the access of farmers to markets

A new FAO report calls for recognizing the diversity of family farmers and improving their access to global markets in order to feed more people. FAO recommends policies to boost the output of family farmers, which requires a better understanding of rural families and their problems. In this way, investments and support will go where they are most needed to ensure that farmers can sell their crops.


Paraguay promotes public procurement of food from family farmers

In December 2013, the Paraguayan government issued Decree No. 1056, which introduced a new mode of procurement called “the simplified process for the acquisition of agricultural products from family farming”.

The Decree defines the legal framework to ensure family farmers receive fair market prices for their products by means of public procurement of food used by government institutions such as hospitals and schools.

One of the changes expected to occur with the promulgation of this Decree, is the direct purchase of food from family farmers to provide students at public schools with safe and healthy food for lunches and snacks.

The public procurement of food from family farmers boosts the local economy by giving priority to local products and also supports producers by increasing their participation in the value chain and generating employment.


The Andean Parliament proposes specialized policies to support family farming

The Andean Parliament, at a plenary meeting held on August 29, approved a statement that recommended implementing policies for the sustainable development of family farming systems in the Andean region.

The National Committees of Colombia, Ecuador and Bolivia have promoted this project in the context of the IYFF-2014, with the support of the Third Commission of the Andean Parliament and the World Rural Forum. The member of the Andean Parliament Luisa de el Río presented the project and, after contributions from other representatives and its approval in plenary session, it will be presented to the Council of Agriculture Ministers of the governments that make up the Andean Community of Nations.

Costa Rica leads the celebration of the International Year of Family Farming

Costa Rica established a National Committee for the International Year of Family Farming including farmers’ organizations, youth, academics, government institutions, and international organisations, among others. Three subcommittees were created – Technology, Communication and Resource Management – which are responsible for the organisation, management and development of the different events.

The government of Costa Rica declared the International Year of Family Farming to be of national interest and called on public sector institutions, NGOs, and the private sector to contribute with resources of a diverse nature to the various activities.

The International Year of Family Farming in Costa Rica will increase the visibility of family farming by focusing attention on the importance of family farming in contributing to food security and nutrition, improving livelihoods, managing natural resources, and protecting the environment, especially in rural areas.

Ploughing the future of family farming in Paraguay

The National Committee for the International Year of Family Farming was officially established in Paraguay on December 18, 2013, in the capital Asunción. Its main purpose is to identify, assess and strengthen the role of family farmers in public policies and in Paraguayan society, recognizing their strategic importance and contribution to the economic, social, environmental, cultural, spiritual, psychosocial and political development of the country.

The National Committee includes agricultural, indigenous and fishing organisations, NGOs, foundations, universities, and public and private institutions that work with family farmers. As part of the strategic plan for the International Year of Family Farming, the National Committee will form Departmental and District Committees approved in January 2014.

The strategy for the International Year of Family Farming includes the design of various new laws, including a law for the protection, development, strengthening and development of family farming, and the design of a National Plan for Agro–ecology and Family Farming.

Events in the International Year of Family Farming

Marzo
26 – 29 Regional Planning and Mobilization Dialogue for the International Year of Rural and Indigenous Family Farming - IYRlFF 2014

Abril
04 – 07 Regional Dialogue on Family Farming in North America. Quebec, Canada.

Mayo
06 – 09 XXXIII Regional Conference of FAO for Latin America and the Caribbean. Santiago, Chile.
08 Parallel event on Family Farming in the XXXIII Regional Conference of FAO for Latin America and the Caribbean. Santiago, Chile.
08 – 09 First Congress of the Forum on Universities for Family Farming. Córdoba, Argentina.
29 – 30 Family Farming Congress. Almería, Spain.

Noviembre
06 – 09 International Congress on Family Farming. Santiago, Chile.
Events in the International Year of Family Farming

© FAO RLC