

LATIN AMERICA: OVERVIEW

## Organic Farming in Latin America and the Caribbean

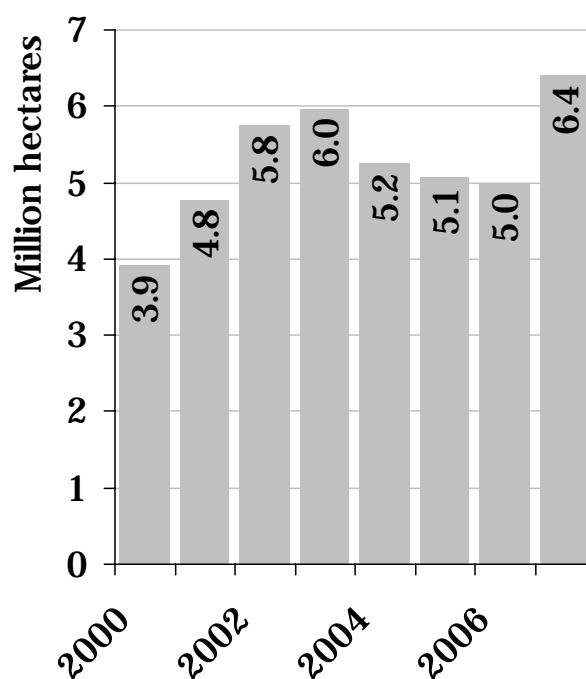
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### Organic production in Latin America

Latin American agriculture is in a state of flux, and it is becoming increasingly interesting for many farmers to produce organically. Some see organic agriculture as a way to live, to produce and to maintain ancient Latin American agricultural traditions and to obtain a better income. Other farmers or companies see organic agriculture as a good business opportunity, to market fresh or processed products locally or export them. Profitability is, however, not the only motive to produce organically; there are farmers that consider organic agriculture as an alternative in order to maintain and protect their local resources and avoid damage to the environment or mitigate climate change, and others are trying to integrate social aspects.

For example, with participatory certification systems, farmers' organizations can reduce certification costs, and in addition build relationships with the local consumers. Consequently, consumers feel the need to support such farmers to produce organically.

Figure 33 shows that organic agricultural land production jumped from about 5 million hectares to about 6.4 hectares from 2006 to 2007, representing approximately one percent of the total agricultural area for Latin America. The high increase in organic land is partly



**Figure 33: Latin America: Development of the land under organic management in Latin America 1995-2007**

It should be noted that the 2007 figures for Brazil include – other than previously - data on the in-conversion area. The drop of the Latin American organic land area 2004-2006 is mainly due to decreases of the organic agricultural area in Argentina as well to a major decrease in Chile in 2005.

Source: FiBL survey

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explained by the fact that, for the first time, data on the in-conversion area were available for Brazil (more than 800'000 hectares). There have also been major increases of organic land for instance in Argentina and many Central American countries. In addition to the agricultural land, approximately 6'000 hectares of aquaculture (in Ecuador) and about 7.5 million hectares (most of this in Brazil) of wild collection areas were reported. Furthermore, Argentina reported almost half a million hectares certified for bee keeping.

The leading countries (Figure 34) in terms of organically managed agricultural land (without certified wild collection areas) in Latin America are Argentina, Brazil and Uruguay.

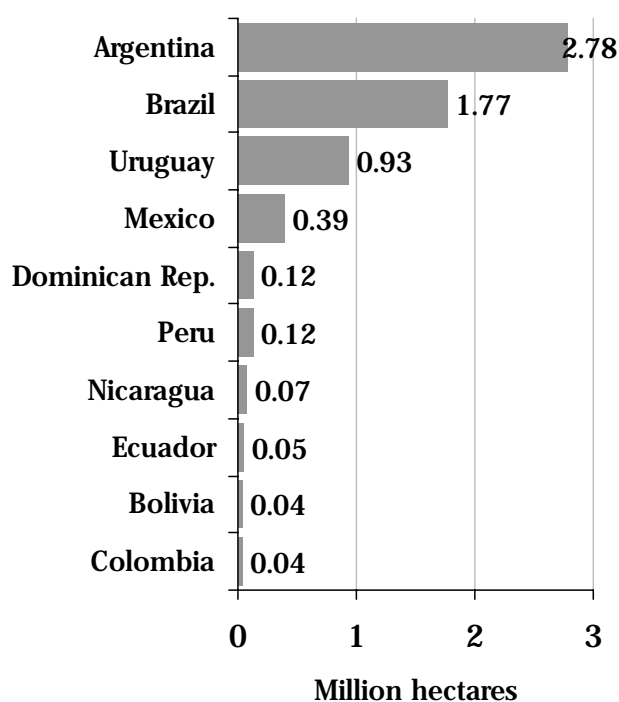
The countries with the highest percentages of organic agricultural land are the Dominican Republic and Uruguay with more than six percent and Argentina and Mexico with more than two percent. All other countries are around one percent or below.

Mexico has the largest number of organic farms, followed by Peru and the Dominican Republic. Whereas in Mexico and other countries in Central America the average farm size is small (Mexico 2.8 hectares), the size tends to be far larger in many South American countries.

More than half of the agricultural land for which land use details area available is grassland. Eleven percent of this land is in permanent crops such as bananas, cocoa and apples. For a major part of the agricultural land, no land use details were available.

The development of agricultural land in Latin America is not increasing in all countries. The main reasons are:

- Other certification standards such as those of the Rain Forest Alliance, or bird friendly and Fair Trade standards compete with organic standards. Some of these standards permit the use of chemical inputs. For the farmers, this means fewer changes in the production than converting to organic farming.
- Climate change effects are increasing in the Caribbean region. In countries such as Cuba, Haiti and Jamaica, hurricanes have destroyed many crops. The effects of climate change in these countries (hurricane season are longer and stronger) is making it difficult to maintain stable production. This not only applies to organic farming.



**Figure 34: Latin America: The ten countries with the largest organic agricultural area 2007**

Source: FiBL survey

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- Pest and diseases are affecting the crops, and for many, solutions have not yet been found. For example, in cacao, the Monilia Pod Rot (*Moniliophthora roreri*) is a serious fungal disease. Its range includes northwestern South America (including Ecuador, Colombia, and Peru) and southern Central America, (from Nicaragua to Panama, including Costa Rica). Damage caused by the disease varies from less than 25 percent in some regions to a total loss of production in other regions. The Asian citrus psyllid (*Dia-phorina citri*) is the vector of the devastating bacterial diseases named Huanglongbing or citrus greening. This disease already caused enormous damage to the organic citrus production of Cuba.
- The prices that farmers receive do not always cover the entire production cost. Farmers get disappointed about the price conditions offered by the buyers and abandon organic production. If the prices for organic products are reduced in the international or local market, the first ones to feel the reduction in income are the farmers.

### **The market in Latin America**

Many organic products from Latin American countries are sold in the European market, especially those that cannot be produced there as well as off-season products. In the past years, imports of fair trade products have increased, and in many Latin American countries products are produced with both organic and fair trade labels.

#### **Local Market**

- Supermarkets: Many supermarkets in Latin America are selling organic products. The sales of vegetables and fruits, milk and milk products, honey, coffee, and others are commonly sold in Mexico, Honduras, Nicaragua, Costa Rica, Peru, Bolivia, Brazil Uruguay, Chile and Argentina, and to a lesser extent in other countries. The principal driver of this trend is the strong expansion of the supermarket chains that are now offering organic products in the urban centers. Different foreign supermarkets were investing, and they are competing strongly with the small stores. In Costa Rica, more than 50 percent of organic food is sold by the supermarkets.
- Specialized stores: Most Latin American countries feature specialized stores, or health food stores, which sell products from local organic farmers to an informed customer base. Such stores often serve as a central distribution point for information about local activities and organic regulations. A growing trend is the 'consumer cooperative shop.' In many cities and towns, consumers come together and organize a cooperative, rent retail space and begin selling products from farmers that are members of the cooperative. This is common for instance in Southern Brazil through the Eco Vida Network, stores are often consumer owned, permitting both lower prices and a fair share for producers.

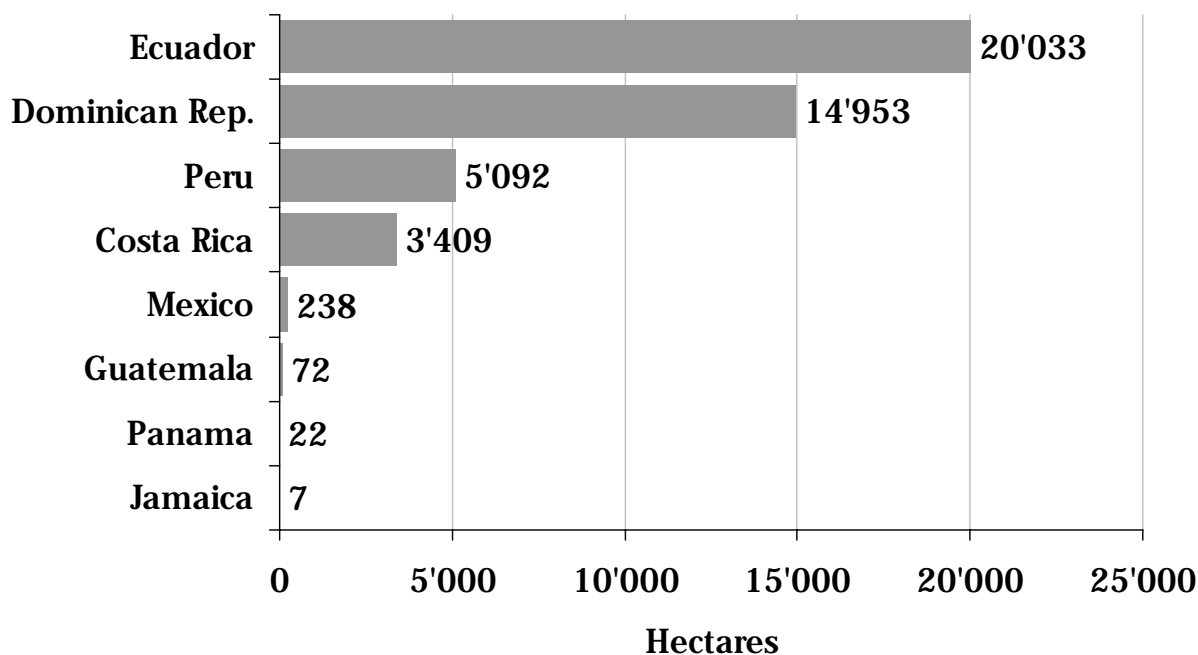
- Popular farmers' markets: Arguably, the most popular form of organic trade in Latin America is the neighborhood fair or informal farmers' market. Most towns have a space, such as a park or sports arena, where producers can sell goods directly to the public on a weekly basis, which is a good opportunity for farmers to benefit from the full price without intermediaries. Local governments often support farmers' markets by providing the market infrastructure and advertising. Although the impact of these local markets may be economically insignificant, they support the livelihood of modest peasants throughout Latin America, in total representing an important percentage of the organic market.

### **Exports**

Most organic production from Latin America remains destined for export markets. From the coffee grains and bananas of Central America, to the sugar in Paraguay and the cereals and meat in Argentina, the trade of organic produce has been mostly oriented towards foreign markets. In Mexico, currently, at least 85 percent of the organic food grown in this country is shipped to other nations, including the United States, European Union members and Japan. Its domestic market, on the other hand, is still in its infancy. Less than five percent of Mexico's organic products are sold through natural food stores and restaurants (Nelson et al. 2008).

In Costa Rica, there are many organic export projects stimulated by the government. In Honduras and many other countries, multinational companies are buying land to produce organic for export. Increasingly, European and American companies and investors' funds are buying or renting Latin American land for large-scale and technologically advanced organic production projects that benefit from relationships with buying markets and their country of origin; such projects are usually beyond the financial limitations of local companies.

Fresh fruits and vegetables: Many Latin American countries have been selling their fruit harvest to Europe and the United States. Brazil sells apples and grapes. Chile has a thriving kiwi export business, and focuses on the export of soft fruits like raspberries and strawberries. Mexico, Colombia, Honduras and the Dominican Republic sell bananas, pineapples, mangoes and other tropical fruits. Argentina trades apples, pears and citrus fruits. Mexico markets apples, citrus fruits and avocados on the world market. Argentina, Brazil and Chile are strong vegetable exporters, both fresh and dried. In addition, Costa Rica, and other Central American countries sell smaller quantities of fresh vegetables to external markets.



**Figure 35: Latin America: Organic banana area 2007 (including in-conversion area)**

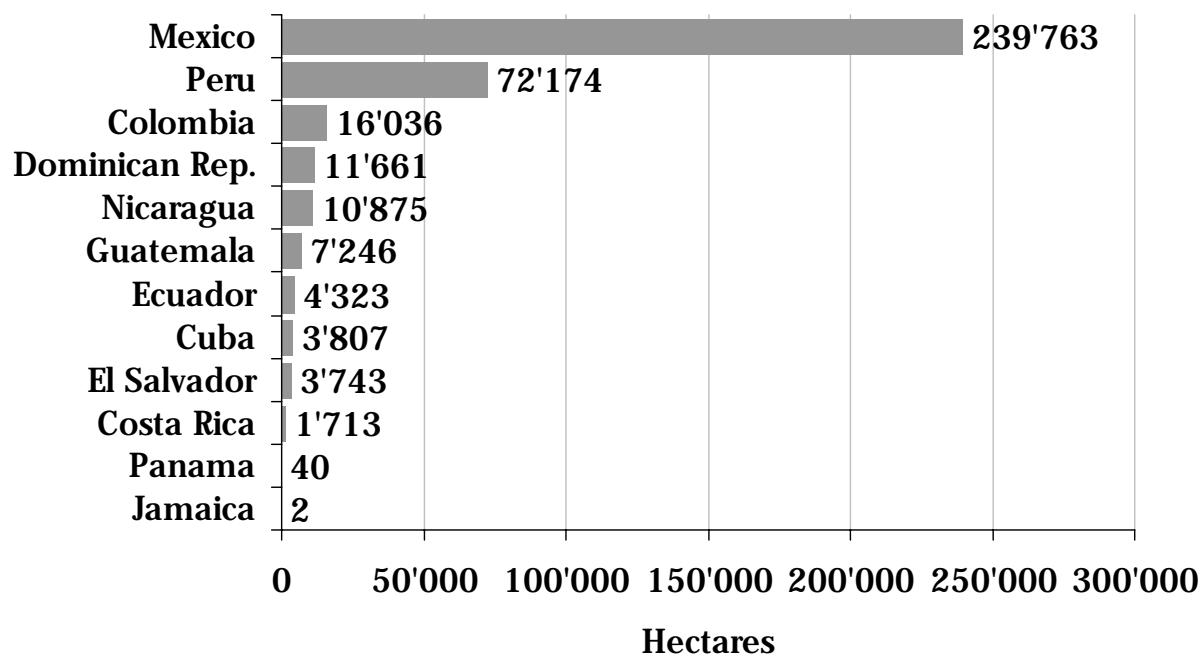
It should be noted that for Brazil, which has one of the largest banana areas in the world, data were not available.

Source: FiBL survey

**Bananas:** The most important supply countries for bananas are Ecuador, Dominican Republic, Peru, Colombia and Brazil. For example, seventy percent of the bananas produced in the Dominican Republic are organic. Other suppliers are Costa Rica, Honduras, Mexico, and Nicaragua. According to market experts, supply does not cover demand, partially due to the quota system in the European Union, which regulates imports and production volume of organic banana; this remains a limiting factor for supply countries (Garibay 2005).

**Pineapples:** Since ethylene for the induction of pineapple flowering has been allowed according to the EU regulation on organic farming as well as the US NOP, organic pineapple is growing in many Latin America countries. Limiting factors to production are, however, specific limitations imposed by some standards (ethylene is not allowed for instance by the Bio Suisse standards or those of Naturland), limited availability of organic pineapple and low quality production. The market for fair trade pineapple juice shows that development has been slow due to lack of good quality products.

**Grains and cereals:** Paraguay is a big organic soybean producer, together with Argentina, Mexico and Brazil, which produce and export organic corn and wheat. Organic grain farmers in several southern countries also face the problem of increasing cultivation of genetically modified soy and corn.

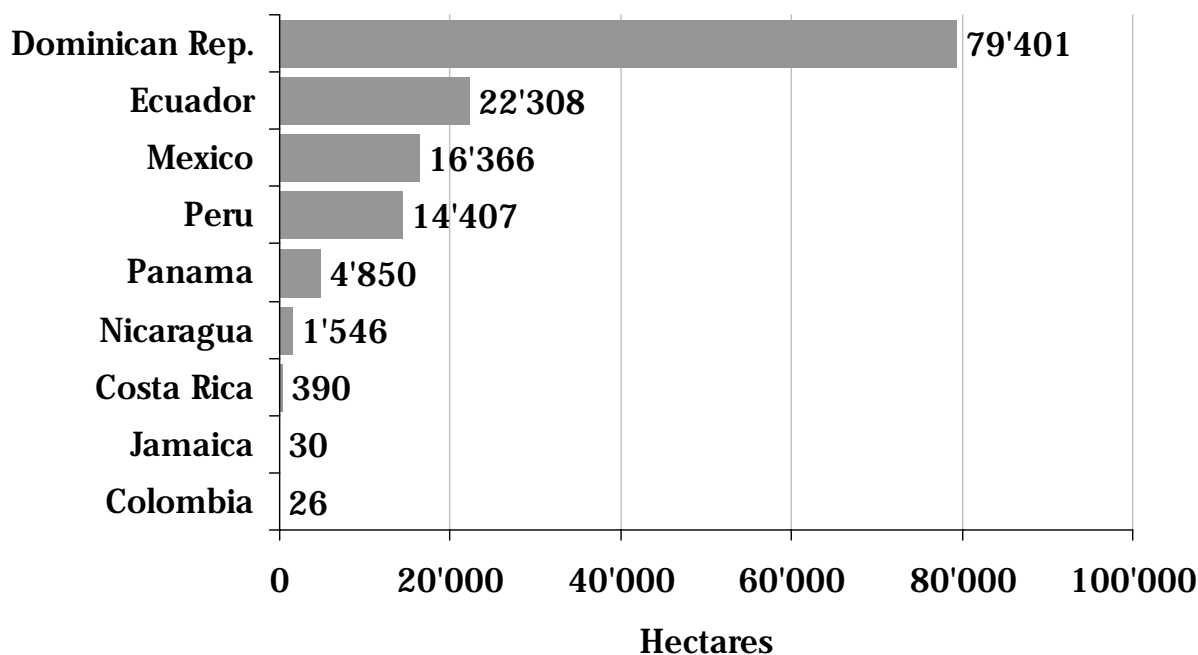


**Figure 36: Latin America: Organic coffee area 2007 (including in-conversion area)**

Data on organic production were not available for Brazil - the largest coffee producer in the world. See also table on global organic coffee production in the chapter on the global survey.

Source: FiBL Survey 2009

Coffee: Mexico is the largest organic coffee producer in the world, with tens of thousands of tons of coffee beans, mostly harvested by small indigenous farmers, and supplying the world's biggest supermarkets and coffee shops. Guatemala and other Central American countries have significant levels of coffee production with very similar characteristics. Coffee production is primarily defined by ecological forest management systems, creating a valuable alternative to the deforestation process that is taking place in the region.



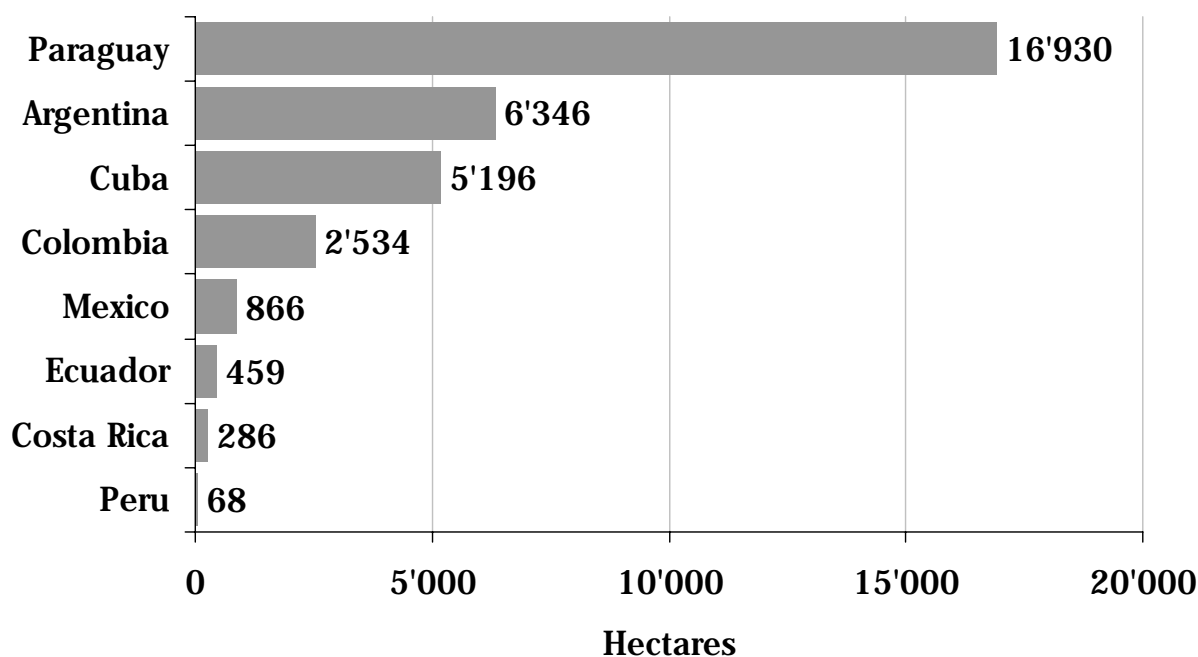
**Figure 37: Latin America: Organic cocoa area 2007 (including in-conversion area)**

It should be noted that cocoa data was not available for Brazil and Venezuela, two major cocoa producers. See also table on global organic cocoa production in the chapter on the global survey.

Source: FiBL Survey 2009

**Cocoa:** Most of the Latin American countries producing coffee also cultivate cocoa for chocolate, usually processed in Europe under fair trade logos and certified by European companies. It is also a very important source of income for small farmers throughout Central America and the tropical areas of South America. Different projects of organic and fair trade cocoa are starting (including Honduras and Nicaragua). Mexico, Nicaragua, Costa Rica and Bolivia have added value to the cocoa by producing organic chocolate for the local market.

**Sugar:** Brazil, Paraguay, Ecuador Argentina and Cuba are some of the sugar producers in the region. Small farmers in cooperatives own or manage small sugar mills. In Brazil, there is a big company producing sugar with high quality technologies and social standards on tens of thousands of hectares. In Paraguay, more than half of the total sugar produced is organic.



**Figure 38: Latin America: Organic sugarcane area 2007 (including in-conversion area)**

It should be noted that for Brazil, which has the largest sugar cane producing area in the world, data was not available.

Source: FiBL survey

**Meats:** While Argentina is a large beef exporter in the region, it also has a strong domestic market for organic meat. Uruguay and Brazil also produce organic meat. Brazilian companies are even buying processing plants in Argentina to expand their influence. Countries such as Mexico and Nicaragua have projects for producing organic meat, mainly for the national market. One big constraint is that organic meat production in Latin America is not moving forward because the main customers from Europe and the US ask only for the best pieces (hindquarter: sirloin tenderloin and pistol cuts). The rest of the meat has to be sold in the national market mostly as conventional.

**Wines and spirits:** Argentina and Chile are major producers of organic wines. The market of organic spirits in Latin America is beginning. There are marketing development initiatives for traditional spirits from the region such as tequila, mescal and rum for the local and export markets. All these kinds of spirits can be found in Mexico.

### **Organic guarantee systems**

Except for Argentina and Costa Rica, which have Third Country status with the European Union, all other Latin American producers need to be certified by a accredited certification agency to enter the EU market. However, American or European companies certify most of the export production in Latin America in any case, as buyers often impose the certification. Certification organizations such as The Organic Crop Improvement Association (OCIA) and Farm Verified Organic (FVO) from USA and Naturland, BCS Oeko-Garantie and the Insti-



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tute für Marktoekologie (IMO) from Europe are very active in the region. Others are Eco-cert, Control Union, Ceres.

Some national certification bodies are very well developed, such as Argencert and Organización Internacional Agropecuaria, (OIA, Argentina), Instituto Biodinamico (Brazil), Bolicert (Bolivia) and Biolatina (Peru and others). Other certification agencies include Ecológica from Costa Rica, Bio Nica from Nicaragua, Maya Cert from Guatemala and CertiMex from Mexico. Uruguay has Urucert and Sociedad de Consumidores de Productos Biológicos (SCPB). Apart from the aforementioned, Argencert Argentina has more than 12 certification agencies and OIA, Bio Letis (EU recognized), Food Safety, Agro Productores Organicos de Buenos Aires (APROBA), Ambiental, and Fundación Mokichi Okada (MOA) are also important.

Recently, some countries have created national laws governing organic production, including Costa Rica, Mexico, Uruguay, Chile, Paraguay and El Salvador. Bolivia has issued a decree that regulating organic production. Argentina has had a national law for many years, and its system dates back to 1992.

Latin America is changing rules regarding third party certification. Many farmers do not wish to depend any more of the private certification agencies in order to say that they are producing organically. Various examples of participatory certification systems (PGS) can be found in all parts of the continent (see also article by Joelle Katto in this book). The standards in Brazil accept PGS in local markets, and other countries including Peru, Mexico and Uruguay, are developing similar systems.

### **Governmental Support**

Historically, organic agriculture has had most of its support from NGOs, which have been trying to change the social, economic and environmental scenario the Latin America countries in the last 20 years. In recognition of the growing importance of the organic sector to Latin America's agricultural economy, the governmental institutions have begun to take steps towards increasing involvement and governments are beginning to play a central role in the promotion of organic agriculture. There are various types of support in the Latin American countries (see also country reports), from the promotion of organic agriculture to market access support (through official export agencies). In some countries, there has been support to pay certification cost during the first years of conversion or other financial support through different governmental programs. An important process occurring now in many Latin America countries is that organic laws are been established in order to set standards regarding the regulation and promotion of the organic sector.

In general, however, the organic movement in Latin America has grown on its own accord, with some seed funding for extension and association building by international aid agencies, especially from Germany, the Netherlands, Belgium, Switzerland and the USAID, among many others. International trade has been stimulated by buying companies and Fair Trade agencies, focusing especially on some basic products like coffee, bananas, orange juice and cocoa. For more details, please check the countries report.

## **Education and Extension**

Latin America has a great deal of educational activity relating to organic agriculture. Many universities and agricultural organizations offer teaching courses and on farm experimental projects. The Brazilian Instituto Biodinamico worked systematically on farm production. Agruco and Agrecol in Bolivia have excelled at agricultural extension work over the years, leading to a strong support for food security and farmer knowledge, especially in the Andean region. In Colombia, capacity building and training in organic agriculture has been carried out mainly by NGOs and also by farmers' associations, education centers and the agro-ecological schools. Colombian universities (like the National University of Colombia and the University of Antioquia) have, together with the University of Berkeley, developed the first PhD course in agro-ecology of Latin-America. Some other agricultural universities carry organic production courses, like the La Molina in Peru, Las Villas in Cuba and Chapingo in Mexico. In October 2004, the Catholic University of Argentina started a degree program on Organic Company Management, and one year later the University of Anahuac in Puebla Mexico launched a post degree studies in Business Development in Organic Products.

## **Research on organic agriculture in Latin America**

Some regional research institutions are increasing their work in agro-ecology and organic agriculture as can be seen from the Latin American country reports in this volume. It is expected that the three CGIAR centers in the region could also help to expand the research agenda for organic agriculture.

Recently, producers and researchers in Latin America and the Caribbean have begun to meet annually. The first meeting took place in 2006 in Nicaragua (Ochoa et al. 2006), the second was in Guatemala in 2007 (Fernández Montoya et al. 2007), and the third was carried out in Bolivia in 2008.

## **References**

- Fernández Montoya, Marco Vinicio; Ochoa, Gregorio Varela; Garibay, Salvador V. und Weidmann, Gilles, (Eds.) (2007) 2ndo Encuentro Latinoamericano y del Caribe de Productoras y Productores Experimentadores y de Investigadores en Agricultura Orgánica - Memorias de resúmenes [Second Latin American and Caribbean Meeting of Organic Producers and Researchers, held October 1-5, 2007 in Antigua, Guatemala. Summary of the Presentations]. Research Institute of Organic Agriculture (FiBL), Frick, Switzerland.
- Garibay, Salvador (2005): Mercado Europeo de banano orgánico. ECOMERCADOS.
- Lernoud, Pipo (2008): Organic Farming in Latin America. In: Willer et al. (Eds) (2008): The World of Organic Agriculture. Statistics and Emerging Trends. IFOAM, Bonn, Germany and FiBL, Frick, Switzerland, pp. 166.
- Nelson, Erin ; Schwentesius Rindermann, Rita; Gómez Tovar, Laura; and Gómez Cruz, Manuel Ángel (2008): Growing a local organic movement: The Mexican Network of Organic Markets. *Leisa Magazine*. 24.1, March.
- Ochoa, Gregorio Varela; Garibay, Salvador und Weidmann, Gilles (Eds.) (2006) 1er Encuentro latinoamericano y del caribe de productoras y productores experimentadores y de investigadores en agricultura orgánica, 26 al 29 de septiembre de 2006, Managua, Nicaragua. Memorias de resúmenes [First Latin American and Caribbean Meeting of Organic Producers and Researchers, held September 26-28, 2006 in Managua, Nicaragua. Summary of the Presentations]. Research Institute of Organic Agriculture FiBL, Frick, Switzerland.