

Food Security in the Americas

Inter-American Institute for Cooperation on Agriculture



Photo: IICA El Salvador

In the countries affected, the crisis hit the most vulnerable population groups hardest.

The issue of food security had been low on the global and hemispheric agendas for decades until the agrifood crisis in 2008, when it suddenly took center stage once again. That year, several factors combined to cause serious food supply problems, as well as soaring and volatile prices, including poor harvests in a number of countries that supply food, the diverting of large amounts of land to the production of crops for biofuels, the growing demand for food in the emerging economies, and declining stocks of certain agrifood commodities.

The impact of the crisis on people and countries varied, depending on whether the latter were net food exporters or importers, their level of economic development, and the degree to which their agrifood sectors were integrated into the global market. Thus, while the United States, Canada and the Southern Cone countries in general saw an improvement in their agrifood trade balance, other countries in the Caribbean, Central, and Andean regions experienced supply problems and suffered through spikes and volatility in the prices of cereals and vegetable oils. Moreover, in the countries affected, the crisis hit the most vulnerable population groups hardest.

IICA underscores the need for the countries and regions to develop, adopt and implement comprehensive strategies and investment plans designed to ensure that food security becomes a reality for all their inhabitants.



Photo: Darwin Grandia - Red SICTA

In response to the situation, the Agrifood Summit was held in Rome in June 2008. The declaration adopted at the summit called upon the members of the international community “to increase their assistance for developing countries, in particular the least developed countries and those that are most negatively affected by high food prices.” The declaration also stated that “there is an urgent need to help developing countries and countries in transition to expand agriculture and food production, and to increase investment in agriculture, agribusiness, and rural development, from both public and private sources.”

The structural problems that affect food security in the Americas are still present. Therefore, it is hardly surprising that food security will be one of the key issues addressed at the 42nd General Assembly of the Organization of American States, scheduled to take place in Cochabamba, Bolivia, from June 3-5, 2012. As input for the discussions of the Assembly, the Inter-American Institute for Cooperation

on Agriculture (IICA) was asked to contribute a document providing important, comprehensive information about the food security situation in the Americas and the critical factors that affect it, and how those factors impact the different regions, countries, and most vulnerable population groups.

As the Inter-American Agency specializing in agriculture and rural development, IICA is well versed in the issue of food security, which has always figured on its agendas and formed part of its medium-term plans, projects, and activities. For this reason, the Institute wishes to take advantage of this opportunity to not only provide an overview of the situation in the Americas and the hemisphere’s potential for achieving food security, but also to underscore the need for the countries and regions to develop, adopt and implement comprehensive strategies and investment plans designed to ensure that food security becomes a reality for all their inhabitants.

Food availability levels in the Americas are adequate

Regional production could grow faster and make a bigger contribution to food security. This will require greater investment in agriculture and the rural milieu and the provision of more incentives for research, extension and the transfer of appropriate technologies.

In general, **food production has grown in the Americas**, with major differences being reported between regions and between countries. The Andean, Southern and Central Regions reported high rates of growth in production between 1990 and 2010, whereas in the Caribbean Region production grew more slowly due to a decline in vegetable production and the stagnation of grain production. Nonetheless, a *food availability gap* of close to two million tons still exists in LAC. In addition, the **volatility** of international prices has had a negative impact on production. As food production has grown, **so have food imports and reliance on international markets**, outpacing production by far. This situation can entail risks and varies from region to region. Thus, the Northern and Southern Regions are able to produce nearly enough food locally to ensure food availability for their populations, while the other regions, especially the Caribbean, are highly dependent on food imports, despite recent successes in lowering such dependence.

Regional production **could grow** faster and **make a bigger contribution to food security**. This will require **greater investment** in agriculture and the rural milieu and the provision of more incentives for research, extension and the transfer of appropriate technologies. More important than having access to more arable land is **to increase the productivity, efficiency and sustainability** of agriculture.

The Concept of Food Security



The concept of food security came into being following the adoption of the Universal Declaration of Human Rights in 1948, but it was not until 2001 that, thanks to FAO, the current, generally accepted definition was adopted, which reads: **“Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”** (FAO 2011).

Food security depends on the existence of four interrelated conditions or dimensions:


- a) the **“availability”** or existence of sufficient quantities of food of appropriate quality for all inhabitants;
- b) **“access”** to the rights and resources required to acquire foods that are nutritious and culturally appropriate;
- c) the conditions that must exist to ensure the biological **“use”** of food, in order to reach a state of nutritional well-being where all physiological needs are met; and
- d) **“stability”** in terms of both the availability of and access to food at all times.



Food Security and the Summit of the Americas Process

The issue of food security has long been a topic of discussion in meetings dealing with agriculture and food, including those of the Ministers of Agriculture and the Heads of State and Government of the Americas. In the **Declaration of Bavaro** (Dominican Republic, 2001), the ministers of agriculture stated that agriculture and food security

should be considered strategic topics. Later, in the **2003-2015 Agro Plan** (Panama, 2003), the ministers agreed to adopt a number of measures for implementing the mandates issued at the Third Summit of the Americas (Quebec, 2001) that dealt with food security. Since then, the topic of food security had been addressed at all subsequent Summits of the Americas.



The problem is not the availability of **food**, but **access** to it

In today's globalized world, **"country access" acquires greater importance**. In order to finance food imports, countries use revenues originating from the export of goods and services as well as external loans and remittances sent by persons residing abroad. All these items form part of the countries' international monetary reserves (IMR). The indicator of IMR, expressed in terms of months of food imports, shows that net food importing regions are able to finance from 43 and 98 months of food imports. It is recommended that this indicator be no less than 12 months since this limits the ability of the countries to negotiate and prepare. Nations such as Haiti, and to a lesser extent St. Lucia, Dominican Republic and Nicaragua, have little liquidity with which to supply themselves with food from the international market in the event of domestic food shortages.

- ✓ **The Caribbean countries are more vulnerable** in terms of access to international food supplies. International net food purchases, taken as a percentage of Gross Domestic Product (GDP), range from 2% to almost 10% in the Caribbean countries, a fact that makes them highly vulnerable to potential increases in international food prices.
- ✓ **Price volatility affected the purchasing power of exports**. High international prices for food can severely limit access to food for net food importing countries, depending on the importance of imports in the domestic food supply and the composition of the baskets of agricultural exports and imports.



Photo: IICA Brazil



Photo: IICA Headquarters

The countries of LAC have managed to **reduce hunger and undernutrition**

The Global Hunger Index (GHI, from IFPRI), in general, showed steady **improvement** between 1990 and 2010, and most of the countries in LAC fall into the category of **low** (index below 4.9) or **moderate** (between 5 and 9.9) food insecurity, but **the situation is critical in Haiti, where 58% of the population suffers from undernutrition**, while in Bolivia, Guatemala, Nicaragua, Dominican Republic, Ecuador and Panama, at least one in six inhabitants is affected. It should be noted that undernutrition is more prevalent among children than in the general population in Uruguay (2% and 6%, respectively) and Argentina (1% and 2.3%, respectively) (IFPRI 2011).

To achieve food security, it is necessary to **improve the biological utilization of food**

In addition to concerns about unhealthy diets and growing levels of obesity, there are also concerns related to problems of sanitation (86% of the urban population and 55% of the rural population had access to some type of sanitation system for wastewater in 2011), access to potable water (7% of the population of LAC did not have access in 2008) (ECLAC 2011), medical care and agricultural health and food safety services. The latter problems tend to increase as trade flows grow and, although in some countries (e.g. the United States) those issues are within the operational scope of the department of agriculture, in most of the countries of the region they are addressed by the ministries of health and education, with little or no involvement by the ministries of agriculture.

✓ **“Individual access” is the problem as well as the debt of many countries in LAC.** Food consumption is directly linked to the population’s income level, its growth and the way in which it is distributed. As a result, high indices of poverty and indigence and inequity in the distribution of income in the countries of the region, added to inflationary processes, limit access to food for vulnerable population groups and territories. Furthermore, there is a direct relationship between per capita GDP and per capita food consumption (expressed in calories).



Small-scale agriculture and family agriculture must be integrated



Photo: Emmanuel Fenelon

In LAC, the family agriculture sector provides between 27% and 67% of all foods.

In LAC, the family agriculture sector includes approximately 14 million farms, with an associated population of around 60 million people (Schejtman 2008), providing between 27% and 67% of all foods, occupying between 12% and 67% of the agricultural land and generating between 57% and 77% of agricultural employment (FAO 2011). Family agriculture plays an important role even in large countries such as Brazil and Colombia, but also in medium-size countries such as Ecuador. In Brazil, the sector produces 67% of beans, 84% of cassava, 49% of maize and 52% of milk; in Colombia, more than 30% of annual crops (especially maize and beans); and in Ecuador, 64% of potatoes, 85% of onions, 70% of maize and 83% of mutton (FAO and IDB, 2007). In Central America, this group accounts for 96% of all basic grain producers, whose harvests supply the domestic and regional markets (FAO and PRESANCA II). In addition to family agriculture, there is also

small-scale agriculture, which involves some 15 million farmers (IFAD 2011).

To achieve food security in LAC, there must be **greater access to technologies** that will make it possible to improve and diversify production, as well as efforts to **improve conditions for the participation** of small-scale and family farmers, ethnic groups and marginalized rural populations, so that they can make a two-fold contribution to food security: on the one hand, by boosting their contribution to food supply (for which they must improve their productivity); and on the other, by promoting and ensuring access to local, regional, national and international markets (which would help to generate employment and incomes and would contribute to reducing rural poverty and improving access to food). To achieve all these goals, it is crucial to promote associative arrangements as a means of accessing services and increasing their negotiating power in the markets.

For food security to become a reality, **climate change** must be taken into consideration

Food availability is threatened by climate variability in the short term and climate change in the medium and long terms.

To differing degrees, **agriculture in the Americas is not only threatened by climate change, but also contributes to it**, considering that, according to the University of Minnesota, agriculture worldwide generates 30% of all greenhouse gases. To this situation must be added soil and water contamination, as well as loss of

plant cover attributed to agricultural activities that are not environmentally responsible or sustainable.

Food availability is threatened by climate variability in the short term and climate change in the medium and long terms. Changes in temperature and rainfall patterns will affect different regions and countries to differing degrees, and will lead to smaller yields, affect adversely the quality of food, influence the distribution of pests and the virulence of diseases that impact crops and livestock, affect the storage and distribution of food, the control of pests and diseases that cause post-harvest losses, and affect the incomes and living conditions of vulnerable segments of the population, especially in rural areas.

What is needed therefore is a change in sociopolitical attitudes, to be reflected in **strategies and policies aimed at adapting** agricultural production and processing activities to climate change and mitigating its impacts.

Strategies, policies and investment plans for food security

IICA promotes the adoption of comprehensive food security policies, focused on achieving the following objectives:

- 1** To increase investment in agriculture in order to develop needed scientific, research, innovation and extension capabilities;
- 2** To develop efficient and transparent agricultural markets;
- 3** To adopt policies and institutional arrangements that promote the integration of small- and medium-scale agriculture into markets;
- 4** To promote free international trade in food;
- 5** To implement programs that provide access to food for vulnerable segments of the population;
- 6** To adapt agriculture to climate change and climate variability, and minimize the risks posed by those phenomena and the volatility of prices for agricultural products;
- 7** To reduce and mitigate the impact of agriculture on the environment, and promote a food and nutritional security educational programs.

Action Plan on Food Price Volatility and Agriculture of the Ministers of Agriculture of the G-20 (France, 2011)

The Action Plan, adopted at the meeting of ministers of agriculture of the G-20 (including five ministers from the Americas), attaches special attention to the formulation and application of macroeconomic and sectoral policies that will support small- and medium-scale agriculture, and focuses on the achievement of five objectives: **1** To improve agricultural production and productivity, both in the short and long term; **2** To increase market information and transparency; **3** To improve international policy coordination; **4** To mitigate the effects of price volatility, particularly in the poorest countries; and **5** To strive for transparent and properly regulated agricultural financial markets.

IICA and Food Security

The topic of food security has been a permanent feature of the Institute's mission and objectives, as reflected in its Medium-term Plans (MTP). For example, one of the strategic objectives defined in the 2010-2014 MTP is "to improve agriculture's contribution to food security." Accordingly, IICA provides the member states with support in developing strategies and national plans for making investments in agriculture that are aimed at improving the production and quality of food and increasing, over time, the participation of farmers in markets.

IICA's support focuses especially on improving the living conditions and possibilities for small- and medium-scale producers, so that they can improve their situation and contribute to food security in their countries and within the hemisphere. All of IICA's programs (Innovation for Productivity and Competitiveness; Agricultural Health and Food Safety; Agribusiness and Commercialization; Agriculture, Territories and Rural Well-being; Agriculture, Natural Resource Management and Climate Change; and Agriculture and Food Security) address topics related to food security.



Literature cited

- ECLAC (Economic Commission for Latin America and the Caribbean, CL). 2011. Statistical Yearbook for Latin America and the Caribbean (on line). Santiago, CL. Consulted Apr. 2, 2012. Available at: <http://www.eclac.org/publicaciones/xml/8/45608/lcg2513b.pdf>
- FAO (United Nations Food and Agriculture Organization, IT). 2001. State of food security (on line). Rome, IT. Consulted Mar. 23, 2012. Available at http://www.fao.org/docrep/003/y1500s/y1500s06.htm#p13_5516
- _____. 2011. Family agriculture (on line). Rome, IT. Consulted Apr. 2, 2012. Available at <http://www.rlc.fao.org/es/conozca-fao/prioridades/agricultura-familiar/>
- _____. IDB (Inter-American Development Bank, US). 2007. Family farming policies in Latin America and the Caribbean (on line). Santiago, CL. FAO Regional Office for Latin America and the Caribbean. Consulted Apr. 2, 2012. Available at http://www.rlc.fao.org/proyectoiniciativa/expertos_agri/documentos/interes/8.pdf
- _____. PRESANCA II (Regional Food and Nutritional Security Program for Central America, SV). 2011. Centroamérica en cifras: datos de seguridad alimentaria nutricional y de agricultura familiar. Consulted Apr. 2, 2012. Available at http://www.rlc.fao.org/uploads/media/ca_en_cifras_01.pdf
- IFAD (International Fund for Agricultural Development, IT). 2011. Latin America: the state of smallholders in agriculture. Presented at: IFAD Conference on New Directions for Smallholder Agriculture (Jan. 24-25, Rome, IT). 37 p.
- IFPRI (International Food Policy Research Institute, US). 2011. Global food policy report (on line). Washington, US. Consulted Jan. 23, 2012. Available at <http://www.ifpri.org/publication/2011-global-food-policy-report>
- Schejtman, A. 2008. Alcances sobre la agricultura familiar en América Latina (on line). Consulted Apr. 2, 2012. Available at http://www.rimisp.org/fckeditor/userfiles/file/documentos/docs/pdf/alcances_agricultura_familiar_alatina_alejandroschejtman.pdf

Inter-American Institute for Cooperation on Agriculture

Headquarters. P.O. Box 55-2200 San Jose, Vazquez de Coronado,
San Isidro 11101 — Costa Rica

Phone: (506) 2216 0222 • Fax: (506) 2216 0233
e-mail: iicahq@iica.int • Web site: www.iica.int