2016 Annual Report of IICA

Agriculture, opportunity for development in the Americas

March, 2017
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The Inter-American Institute for Cooperation on Agriculture (IICA) will shortly celebrate 75 years of existence as an organization dedicated to supporting its member countries’ efforts to achieve agricultural development and rural well-being.

There are two main reasons for the Institute’s successful longevity: first, the conviction of IICA’s member countries that international technical cooperation is a particularly important tool for complementing and boosting their individual capabilities; and, second, the Institute’s ability to continuously adapt in order to provide the best possible response to the needs of its Member States as they tackle the challenges of the continent’s ever dynamic and changing agriculture sector.

It is the countries of the Americas themselves that continually set the direction and priorities of the technical cooperation provided by IICA. This responsibility is reflected in IICA’s 34 country strategies, which are prepared together with the authorities. All the actions included in them are designed to achieve productive, competitive, inclusive, and sustainable agriculture, because only then will the countries be able to produce the food and byproducts they require from the sector, as well as the other benefits it provides.

A number of studies have suggested that our continent has the potential to become the world’s leading agrifood producer. To harness that potential, we must transform the way we produce, achieving greater efficiency while at the same time maintaining a social and environmental commitment consistent with the principles that undergird international cooperation.

In recent decades, the globalization process has thrown up new opportunities for the development of agriculture, to which we as a region have responded positively. We have opened doors that should never be shut again, because the consequences would be disastrous for millions of producers throughout the Americas. On the contrary, we should increase North-South and South-South cooperation, efforts to develop and complement capabilities, knowledge management, and social inclusion.

The economic performance of agriculture has shown that the sector is highly resilient. In fact, on many occasions it has even grown and been key to ensuring the well-being of millions of people during years of economic instability, such as those seen recently. However, if the sector is to continue to play a decisive role in development, the governments of the countries must lend it every possible support so that, far from being a source of conflicts, agriculture continues to enrich the fertile soil of technical cooperation and collaboration among our peoples.

Seven years ago, the ministers of agriculture identified the four overarching challenges facing the sector. These have not changed and are a) to raise productivity, b) to increase the sector’s adaptation to the effects of climate change, c) to reduce poverty and inequality, and d) to achieve food security. Joint work by all the national and international actors involved remains vital to tackle these challenges.
The Institute focuses its actions on the delivery of international public goods designed to contribute to the countries’ individual and joint efforts. In 2016, we consolidated our results-based cooperation model by coordinating 12 regional integration mechanisms and implementing 5 inter-American projects, 12 multinational projects, and 31 rapid response actions. We also carried out 208 externally funded projects that called for total expenditure of close to USD 110 million.

Those projects and actions enabled us to strengthen the capacity of public institutions to devise and implement agricultural policies and strategies; modernize research, extension, agricultural health and marketing services; support family farming; improve the meshing of production chains; increase the resilience, health, and market access of agricultural production; guarantee more opportunities for development to those who have had the fewest; and promote area-based development, innovation, and sustainability as the principal means to improve agricultural production and the well-being of the actors involved.

Presenting an annual report of the work carried out by IICA is more than a commitment to transparency and accountability; it is also a way of acknowledging the progress made by our Member States on behalf of their peoples. What they achieve thanks to the Institute’s contributions gives them continued confidence in an organization that, in fact, belongs to them. This report is entitled Harvest Times, reflecting the Institute’s achievements since it adopted a results-based technical cooperation model in 2014.

This report on 2016 is especially important for me. It is the last I will be presenting, as my eight-year term at the helm of the Institute draws to an end.

Reflection and an expression of appreciation are therefore in order. The Member States need to reflect on the Institute’s future, as the organization requires technical and financial strengthening to enable it to carry out its mission and tackle the complex future challenges of agriculture in the Americas. For my part, I wish to express my appreciation to IICA’s member countries for allowing me to guide the work of an exceptional group of professionals committed to the Institute’s noble purposes and capable of delivering results despite the serious constraints we face. Thanks to them, we have been able to respond successfully to the confidence placed in us.

This report is an account of our results and of a story we will continue to write in the new times that are approaching.

Víctor M. Villalobos
Director General
Executive summary

In 2016, the Inter-American Institute for Cooperation on Agriculture (IICA) consolidated its results-based cooperation model through the implementation of 5 inter-American projects, 12 multinational projects, 12 regional integration mechanisms and 31 rapid response actions. This set of initiatives was complemented with 208 externally funded projects whose execution called for total expenditure of close to USD 110 million.

The principal objectives of those projects and actions were as follows: a) strengthen the capacity of public institutions to devise and implement policies and strategies for agriculture and rural life and promote the modernization of research, extension, agricultural health and marketing services; b) boost organizational and individual capabilities for the meshing of chains, resilience, health, inclusion, and market access; and c) promote innovation, with emphasis on technologies associated with production systems, agribusiness, renewable energies, water harvesting, packaging, greenhouse gas management and the improvement of seeds, among others.

The most significant results achieved through the implementation of IICA’s portfolio of projects were as follows:

- **More competitive agricultural chains:** more than 3500 people working in various chains (cashew, coffee, cacao, flowers, poultry, vegetables, cattle, sheep, goats, sweet potatoes, bees, bamboo, corn and sugar) in 20 countries are better equipped to access markets, add value to their products, strengthen partnerships, generate new business, and innovate.

- **Family farming with greater opportunities:** Honduras, Peru, Colombia, Paraguay, and Venezuela received proposed policies for improving the performance of family farming (FF), while Chile, Paraguay and Guatemala expanded the capabilities of their FF extension services.

- **Social inclusion in rural territories:** nine countries have area-based development plans or coordination entities that promote the economic, social and political integration of vulnerable groups in rural territories such as Esmeraldas (Ecuador), Manpoliza (Guatemala), Cariri (Brazil), and Marowijne (Guyana).

- **More resilient agrifood systems:** as many as 450 technical officers from 65 institutions were trained to implement plans that integrate climate change management into agricultural programs, while another 60 were trained in risk mapping. At least three platforms for sharing knowledge about climate, insurance, and soil and water are operating for the benefit of IICA member countries.
• **Agricultural health and food safety:** Timely assessments were carried out of the status of current or potential pests and diseases, such as mollusks (Andean Region), coffee leaf rust (Central America and Jamaica), the carambola fruit fly (Guyana and Suriname), and *Huanglongbing* (Argentina). IICA also designed strategies for strengthening animal and plant health services, collaborated in efforts to prepare officials to participate in international meetings, and helped the countries gain a better understanding of legal frameworks, including the U.S. Food Safety Modernization Act (FSMA), that permit smoother trade between exporting countries.

• **Reduction in food losses:** The updating and application of tools for the analysis of agrifood chains, such as the MECA methodology, are a first step towards the development of strategies for reducing postharvest losses and improving the efficiency of chains in the member countries.

• **Participation in global and regional events:** IICA helps representatives of national institutions prepare to play an effective part in global and regional events on climate change, agricultural health, food safety, and trade, among other subjects, and disseminates timely information prior to such events.

• **Knowledge management:** The Institute organized more than 700 training events designed to enhance the expertise of 51,750 people and share knowledge about various subjects: Codex Alimentarius, good agricultural practices, climate change adaptation, water management, soil use, renewable energies, food safety, risk management, associative enterprises, financing, and market linkages, among others. Furthermore, some 244 scholarship holders from 18 countries are enrolled in master’s and doctoral programs at Mexican universities thanks to the Capacity Building Program to Promote the Development of Agriculture in the Americas, implemented under an agreement between Mexico’s National Science and Technology Council (CONACYT) and IICA.

IICA provides most of its cooperation through joint undertakings with important strategic partners, such as the United Nations Development Programme (UNDP) the United Nations Food and Agriculture Organization (FAO), the Tropical Agriculture Research and Higher Education Center (CATIE), the World Food Programme (WFP), France’s Agricultural Research for Development (CIRAD), the Caribbean Agricultural Research and Development Institute (CARDI), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Japan International Cooperation Agency (JICA), among other international and donor organizations. Coupled with those carried out with ministries, research institutes and national universities, these efforts enable us to fulfill our mission to support the member countries’ endeavors to achieve agricultural development and rural well-being.
About IICA

A story of agricultural and rural transformation began 75 years ago, when the Inter-American Institute for Cooperation on Agriculture (IICA) was founded as the specialized agency of the Inter-American System with the mission to “encourage, promote, and support our Member States in their efforts to achieve agricultural development and rural well-being through international technical cooperation of excellence.”

The delivery of results-based technical cooperation services moves us closer to attaining our ultimate goal, which is to:

“achieve competitive, inclusive and sustainable inter-American agriculture that feeds the hemisphere and the world, while at the same time generating opportunities to reduce hunger and poverty among farmers and rural dwellers.”

The services and products we provide to the 34 member countries that we represent are intended to promote a more robust public institutional framework, proposals for modern policy proposals, concrete projects and actions aimed at the improvement of agricultural productivity, agricultural chains with more business opportunities, rural territories with inclusive developments plans, knowledge management, and the training of more specialized human talent.

IICA’s work is summed up in the delivery of eleven contributions to its member countries aimed at:

1. Strengthening the capabilities of the Member States at the national, regional, multinational and continental levels to establish public policies and institutional frameworks designed to make agriculture more productive and competitive, improve management of rural territories, adapt to and mitigate the impact of climate change, and promote food and nutritional security.
2. Implementing, through public and private institutions, technological, institutional and business innovations aimed at boosting the productivity and competitiveness of agriculture and the production of basic foodstuffs of high nutritional quality.
3. Increasing the capabilities of the public and private sector to ensure agricultural health and food safety and thereby improve productivity, competitiveness and food security.
4. Strengthening the business and associative capabilities of the different stakeholders in agricultural production chains.
5. Increasing the capacity for area-based social management among stakeholders in rural territories, especially those involved in family agriculture, in order to improve food security and rural well-being.
6. Enhancing the capabilities of different stakeholders of the agricultural production chains and rural territories in the integrated management of water and sustainable use of soil for agriculture.

7. Increasing the capacity of public and private institutions to promote and implement measures for climate change adaptation and mitigation, as well as the promotion of integrated risk management in agriculture.

8. Improving the efficacy and efficiency of food and nutritional security programs in the Member States.

9. Ensuring that producers and consumers benefit from a greater use of native species, promising crops and native genetic resources with food potential.

10. Improving institutional capacity to reduce losses of food and raw materials throughout the agricultural chains.

11. Strengthening the Member States’ capacity for interaction and participation in international forums and other mechanisms for the exchange of knowledge and mobilization of sizable resources for inter-American agriculture.

IICA’s Headquarters are located in San Jose, Costa Rica. The Institute has delegations in each of its member countries, as well as a Permanent Office in Spain. Its Director General is Dr. Víctor Villalobos, who heads a team of over 300 professionals drawn from every nation in the Americas.
Main results in 2016

In a continuous dialogue with the Member States, reflected in the 34 IICA strategies in the countries and the active, results-based international cooperation agenda, in 2016 the Institute contributed to its members' efforts by means of 59 instruments financed with IICA resources and 208 externally funded initiatives.\(^1\)

The Institute coordinated the work carried out with its own resources through five inter-American flagship projects, 12 multinational projects financed by the Technical Cooperation Fund (FonTC), 12 regional integration mechanisms,\(^2\) and 31 rapid response actions. The latter were consolidated as a mechanism for providing a timely response to requests for urgent support from the countries.

The portfolio of initiatives financed with IICA's own resources was complemented and expanded through the coordination of more than 200 externally funded projects and actions whose execution involved total expenditure of nearly USD 110 million. Most of the resources concerned were donated by the European Union (EU) and the governments of Mexico, Brazil, Argentina, and the United States.

Figure 1 shows the distribution of results across the continent, broken down by the five regions and Headquarters.

**Figure 1**
Geographical distribution of the results of IICA’s cooperation projects and actions.

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\(^1\) Of these, 80 other subprojects are derived.
\(^2\) These are the secretariats that IICA operates, such as those of various innovation programs (PROMECAFÉ, PROCISUR, PROCINORTE and PROCITROPICOS), the veterinary and plant health councils (CVP and COSAVE), and the agricultural councils of Central and South America (CAC and CAS, respectively), among others.
The principal results achieved through the technical cooperation actions carried out in 2016 are described below, organized under headings that match the eleven medium-term contributions being made to our member countries:

**Public policies and institutional frameworks**

**Policies with an impact on agriculture:** Argentina, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Uruguay, Paraguay, and Peru received support with the design of policies, plans and agreements, administrative processes and international or regional regulations, which benefited 14 agricultural chains. IICA trained officials from 133 institutions and 522 actors in milk regulations, the Food Safety Modernization Act (FSMA), biosafety, and value added, among other subjects.

Under the Agriculture Policy Programme financed by the European Union (EU), IICA worked with the Caribbean Community (CARICOM) to improve the policy structures of 15 Caribbean countries. Eight of them also increased their capabilities for implementing national agriculture plans.

**Policies to improve the performance of family farming (FF):** Honduras, Peru, and Colombia consolidated their knowledge of the specific characteristics of FF, reflected since in the inclusion of the issue in public agendas. In Honduras and Colombia, IICA drafted proposed policies that were presented to the pertinent authorities. Moreover, information about Peru’s national FF strategy was disseminated among two *mancomunidades* (indigenous communities). Leaders of national FF committees, government officials, researchers and specialists from Central America, Dominican Republic, Trinidad and Tobago, Brazil, Bolivia, Mexico, Uruguay, and Spain identified opportunities for improving policies, services, and modes of organization for FF.

**Policies for resilient agriculture:** Colombia’s Sustainable Livestock Group, the technical forums for the bio-input sector created in Ecuador and Colombia, and the agreement that the Institute signed in Peru with the National Agricultural Health Service (SENASA), the National Meteorology and Hydrology Service (SENAMHI) and the National Coffee Board are examples of IICA cooperation aimed at working with the authorities in those countries to generate consensus-building and coordination mechanisms to support decision making and the development, implementation and management of public policies for resilient agriculture.

**Policy monitoring and evaluation:** more than 95 officials and technical officers of the agricultural policy units of Argentina, Bolivia, Brazil, Chile, Costa Rica, Paraguay, Peru, and Uruguay increased their knowledge of good practices and lessons learned for following up on, monitoring and evaluating agricultural policies, thanks to joint work with partner institutions in Mexico, Colombia, Chile, Brazil and Canada.
Regulatory frameworks for inclusive territorial development: in Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Honduras, Mexico, and Suriname, IICA worked with 147 national and subnational government institutions\(^3\) to enhance their capabilities for the design, implementation and participatory management of institutional frameworks, policies and instruments for the promotion of inclusive area-based development. The institutions concerned work in a wide range of areas, including agriculture, rural and community development, social development and inclusion, women, youth, indigenous populations, planning, natural resources and the environment, agricultural research, education, and health. As many as 562 technical officers took part in 77 national events and 62 events at the territorial level. IICA’s cooperation efforts led to concrete results in a number of countries. In Costa Rica the government endorsed the public policies for area-based development and inclusion; in Ecuador, the Provincial Strategy for Social and Productive Inclusion was adopted; and Mexico approved the Regional Community Ecotourism Strategy.

Master Plan for the Western Region of Panama: this plan, developed jointly by the public and private sectors, is an innovative model that will be financed with USD 557 million in national resources and a USD 157 million loan from the Development Bank of Latin America (CAF). Designed to promote the recovery of the agricultural sector in the Western Region, it will benefit 15,000 Panamanian producers.

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Technological and institutional innovation

High-quality seeds: the EU-financed Regional Program for Research and Innovation in Agricultural Value Chains (PRIICA) enabled the research institutes of Central America to release germplasm of improved cassava, potatoes, avocados and tomatoes for 5314 beneficiaries. Coupled with a large number of training events, this work improved productivity, competitiveness and food security in the region. Furthermore, community seed banks and other mechanisms facilitated access to, and the production of, high-quality seed.

Plantations with an agroecological approach: nine procedures for the integrated management of avocado, potato, and tomato crops, including fertilization, soil and water practices, pruning and grafting, demonstrated the capacity of the PRIICA beneficiary countries in Central America to care for the environment and protect the health of their producers. In the Central Region, 1625 beneficiaries applied good agricultural practices.

Forestry innovations: in the Andean Region, IICA strengthened farmers’ knowledge of the sustainable use of biodiversity through a course that drew on the experience of the Sustainable Forest Management Programme financed by Finland’s Ministry of Foreign Affairs. The course material is available online at [www.mfsandina.net](http://www.mfsandina.net).

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\(^3\) Ministries, secretariats, institutes, committees, public corporations, national funds, and directorates.

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**FF seal:** in Paraguay, the Ministry of Agriculture and Livestock adopted a commercial innovation process based on a strategy aimed at establishing a differentiating seal for FF, which was designed with technical personnel and social organizations. The objective is to raise the profile of FF products in the marketplace.

**Rural extension for FF:** the technical assistance and extension services of Paraguay, Venezuela and Honduras received proposals for improvements that are now being implemented, while rural extension management capabilities were boosted in Guatemala and Chile.

**Biotechnology and biosafety in Guatemala and Honduras:** in Honduras, cooperation from IICA facilitated a review of the biosafety regulatory framework and the drafting of proposals for the use of living modified organisms. In Guatemala, 24 government spokespersons and members of the press crops received training in biotechnology and biosafety.

**Improved handling of breeding material in the Caribbean Region:** as part of the EU-funded Agriculture Policy Programme, IICA worked with the Caribbean Agricultural Research and Development Institute (CARDI) to improve germplasm management facilities in eight countries and animal reproduction facilities in three. These actions facilitated wider distribution of materials throughout the Caribbean.

**Promotion of innovation:** within the framework of the Network for Innovation Management in the Agrifood Sector (Red Innovagro), which is made up of 82 public and private institutions in 16 Latin American and European countries, the following three technological innovation processes were implemented: a) method for the biological control of the olive-tree fly in Spain, b) a state-of-the-art adjuvant for vaccines for production animals in Argentina involving the use of nanoparticles in an aqueous solution; and c) an app for determining the fertilization needs of rice crops in Uruguay. Seminars, video conferences, and workshops were organized to enhance the expertise of 3500 people.

**Program for Regional Agricultural Research Consortia:** under this program, financed by the United States Department of Agriculture (USDA) and implemented by IICA, research topics for 18 agricultural chains were prioritized by mapping actors and conducting assessments in the Guatemalan departments of Alta Verapaz, Quiché, Chiquimula, Zacapa, Quetzaltenango San Marcos, and Huehuetenango.

**Modern market information systems:** the Market Information Organization of the Americas (MIOA), which has 33 active member countries, provided IICA with an opportunity to develop a new study program on agricultural market information and analysis with universities in Brazil, Costa Rica, Honduras, and Trinidad and Tobago; prepare a catalogue of 39 commercially important products in Central America; and exchange good practices and innovative experiences on price information management.
Research and innovations in the countries

**Beekeeping:** in Barbados, 30 perone beehives were constructed, distributed, and installed to strengthen the Barbados Apiculture Association. In Trinidad and Tobago, an inventory of active apiaries was carried out using global positioning systems (GPS). In Saint Lucia, 35 beekeepers were trained in the use of inexpensive technologies and the adding of value to products obtained from honey and pollen.

**Rice:** IICA made available an agroecological methodology known as the Intensive Rice Growing System, designed to make rice production systems more resilient. The methodology was applied in Venezuela by 60 producers in the state of Guárico, who reduced their costs and increased their yields.

**Coconut:** with assistance from the Yucatán Scientific Research Center and the Government of Mexico, IICA contributed to the delivery of resistant, high-yield coconut plants to Grenada. The Institute also worked with Mexico to make plant material available in Saint Vincent and the Grenadines, and trained farmers in coconut micropropagation.

**Worm breeding:** IICA worked with the Ministry of Agriculture, Lands and Fisheries and Grandad’s Garden in Antigua and Barbuda on experiments with worm breeding, which made it possible to collect data on useful byproducts for agricultural production.

**Packaging:** in Dominica, 17 agro-processors improved their packaging technology skills and capacity to comply with packaging requirements and standards within the framework of the EU-financed Agriculture Policy Programme. In Ecuador, the Ministry of Agriculture, Livestock, Aquaculture and Fisheries developed a series of model types of packaging for ten perishable items sold wholesale.

**Energy for agro-processing:** in partnership with Brazil’s Electrobrás, 12 books were published on the application of innovative techniques in rural communities within the framework of the community production centers. The books deal with techniques for the production of coffee, fish, sugar, milk, cassava, honey and fruits.

**Energy-efficient stoves:** under the Energy and Environment Partnership (EEP) financed by the Government of Finland, IICA and private institutions in Colombia implemented technological innovation processes aimed at improving the quality of life, the efficient use of energy, and the reduction of greenhouse gas emissions through the installation of 297 wood stoves in Santander and Antioquia.

**Thermal renewable energies:** the Fund for Sustainable Access to Thermal Renewable Energies, set up as part of the GIZ’s EnDev Peru Project, and the EEP, financed by Finland, afforded 3342 producers access to the technologies and allowed 220 tambo operators to learn about the benefits of solar energy.
**Digital apps:** developed in Suriname, a mobile app on compost allows producers, mainly young people interested in organic agriculture, to determine and calculate the nutritional content of biofertilizers produced through composting.

**Drones:** the Policy and Statistics Unit of Belize's Ministry of Agriculture and Fisheries has new knowledge regarding the use of drones by its extension services to collect more accurate field data.

**Mobile telephones:** as part of the digital information management efforts spearheaded by the MIOA, four case studies were systematized on the use of short message services (SMS) in wholesale markets in Costa Rica, Ecuador, Trinidad and Tobago, and Uruguay. The lessons learned and good practices identified were made available in an [online publication](#).

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**Agricultural health and food safety (AHFS)**

**Strategies for animal health and plant protection services:** use of the Performance, Vision and Strategy (PVS) tool developed by IICA made it possible to define strategic actions for the plant protection services of Ecuador, Argentina, and El Salvador; determine the emergency response capacity in Uruguay and Chile; and strengthen the veterinary and food safety service of Ecuador.

**Compliance with international standards:** IICA was instrumental in increasing implementation of good agricultural practices in the region to facilitate compliance with the U.S. FSMA, in raising awareness of the act among public and private actors, and in certifying 45 food safety professionals in Antigua and Barbuda, Barbados, Grenada, Jamaica, Saint Lucia and Trinidad and Tobago as lead instructors.

**Integrated risk management plans:** with cooperation from IICA, several countries were able to enhance their capabilities for the design and participatory management of public policies and strategies for the integrated management of health risks associated with climate change. Cases in point are the national plan formulated in Costa Rica to handle emergencies in the poultry and hog sectors, the Action Plan of Brazil’s Animal Welfare Commission, and the preparation of a manual on the implementation of good crop and livestock production practices for resilient agriculture, which has already been used by 389 technical officers in ten countries.

**Harmonization of food safety controls:** as many as 479 inspectors successfully completed the food inspection and food audit courses run by the Regional Virtual School for Food Inspectors in Central America and the Dominican Republic, which has also made it possible to consolidate a network of experts on the subject.

**Strengthening of sanitary measures in the Caribbean:** a series of IICA efforts, coupled with actions by partners such as the EU, strengthened plant health capabilities in the Caribbean Region, mainly in the areas of plant virology, communication, pest
diagnosis and quarantine. The validation of model legislation on plant protection, animal health and food safety by the Caribbean Forum (CARIFORUM) countries served as the basis for formulating a harmonized legislative framework, creating regional coordination mechanisms and achieving a 60% increase in the countries’ participation in international AHFS meetings. Furthermore, 1350 public and private actors were trained in AHFS requirements, making it possible to improve safety systems for more than 25 private companies.

**New plant health capabilities:** institutions in Argentina, Brazil, Bolivia, Chile, Paraguay, Peru and Uruguay, all members of the Plant Health Committee (COSAVE), strengthened their technical capabilities in plant health and have tools for carrying out general phytosanitary surveillance processes. In addition, their plant health inspectors were enrolled as students in the International Module of the Regional Virtual School for Food Inspectors, in order to prevent the entry of pests and guarantee safe trade in agricultural products. Venezuela, Guatemala, Honduras, Colombia and Ecuador participated in programs to strengthen plant health management.

**Impact of animal health programs:** as members of the Standing Veterinary Committee (CVP), the six countries that make up the Southern Region have a methodology for evaluating the economic impact of their programs.

**Codex capabilities:** a number of actions, including the participation of 19 countries in nine Codex committee meetings, the organization of events involving the Codex Alimentarius Coordinating Committee for Latin America and the Caribbean (CCLAC) and the Codex Alimentarius Coordinating Committee for Africa (CCAfrica) and the implementation of five twinning projects, benefited more than 1000 people and strengthened the capabilities of Latin American and Caribbean (LAC) institutions.

**Improved laboratory techniques:** IICA increased the technical capabilities for detecting maximum residue levels of a number of laboratories that submit data to Codex Alimentarius. The aim in doing so was to improve access to, and the stability of, banana markets in Costa Rica and Guatemala, the pineapple market in Panama, and the avocado market in Colombia.

**Incidence of salmonella in chickens in the Caribbean:** under the “Regional study of microbial resistance” project, it was possible to determine the bacterium’s incidence in chickens and its level of resistance, and to enhance the capabilities of seven Caribbean countries for conducting microbial resistance testing.

**Good practices in chicken production in Venezuela:** in this country, 100 public and private interest groups were trained in good agricultural practices for chicken production, and a study was carried out in order to create guides on good poultry practices.

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4 Belize, Dominican Republic, Jamaica, Trinidad and Tobago, Barbados, Guyana, and Suriname.
Economic impact studies in Argentina: IICA contributed to national decision-making on sanitary matters by conducting studies with the National Health and Agrifood Quality Service (SENASA) on the economic impact of *Huanglongbing* on citrus fruits and *Lobesia botrana* on vines.

### Actions to deal with pests and diseases

**Giant snail**: in Puerto Suárez and Puerto Quijarro, in Santa Cruz, Bolivia, the National Agricultural Health and Food Safety Service, with support from IICA, implemented actions to control of the giant African snail (*Lissachatina fulica*). Talks were also given on the risks posed by the pest and another 1500 people were briefed directly.

**Ticks, bovine piroplasmosis, and paratuberculosis**: in Uruguay, animal health capabilities were strengthened by holding technical events on these pests and diseases. Support was also provided to increase surveillance systems, characterize emergency response capabilities, and carry out risk analysis. Assistance was received from Minnesota, Davis, Texas Tech, Texas A&M, Ohio State and other U.S. universities.

**Highly pathogenic avian influenza**: more than 500 people in the Caribbean participated in workshops held to promote biosafety on farms, to reduce the risks of avian influenza in the region.

**Frosty pod rot disease**: CAB International confirmed the presence in Jamaica of *Moniliophthora roreri*, a fungus that causes frosty pod rot in cacao. In response, a training program was organized involving the Cocoa Industry Board and several entities of the country’s Ministry of Industry, Trade, Agriculture and Fisheries. Support was provided by the Tropical Agriculture Research and Higher Education Center (CATIE) and Peru’s SENASA, which helped to identify and develop strategies for protecting national and regional cocoa production.

**Carambola fruit fly**: authorities in Guyana, Suriname, and Brazil exchanged knowledge related to continuous surveillance plans for the carambola fruit fly, and discussed new projects to continue monitoring the situation along the three countries’ common borders.

**Mollusk pests**: urban, peri-urban and rural communities in the Andean Region, Argentina, and Brazil affected by mollusk pests have more knowledge about their impact and methods for controlling them.

**Red palm weevil** (*Rhynchophorus ferrugineus*): professionals in Jamaica, the Cayman Islands, Belize and the Turks and Caicos Islands were trained in surveillance and control techniques for this large weevil that affects crops such as coconut.

**Coffee leaf rust**: the Central American Programme for Integrated Coffee Leaf Rust Management (PROCAGICA) was launched. Costing 16 million euros and financed by the EU, it will benefit 6000 small coffee producers.
Business and associative development of chains

Competitive chains: IICA strengthened the competitive, sustainable and inclusive management of several chains: coffee and cocoa in Panama, flowers and sheep in Paraguay, fruits in El Salvador, dairy goats in Trinidad and Tobago, poultry in Venezuela, vegetables in Argentina and sweet potato in Jamaica. This was accomplished through the establishment and strengthening of collaborative roundtables, the use of manuals and the drafting of business plans. A total of 1,900 chain stakeholders received training in technological options for milk management, postharvest of fruits, bio-inputs for ornamental plants, sweet potato farming, pest and disease control, economic and risk evaluations, cadmium management, and carbon footprint, among other topics.

Associative encounters: Through the application of an IICA methodology on associative encounters and internships in family farming, 65 organizations in Colombia, Guatemala, Honduras, Nicaragua, Uruguay, Chile, El Salvador, Venezuela and Ecuador strengthened their associative management capabilities to improve their performance, access to services and commercial linkages.

One Village, One Product (OVOP): Together with the Japan International Cooperation Agency (JICA), the OVOP strategy was applied in order to build the capabilities of small and medium-scale producers in the Costa Rican communities of Turrialba, Dota and Zarcero, and, in this way, facilitate their access to local markets.

Greater marketing and entrepreneurial capabilities: Within the framework of the EU-funded Agricultural Policy Program, 150 producers from 15 Caribbean countries benefited from training activities and new marketing, finance, entrepreneurship and governance tools. The governance capabilities of 30 groups in eight of those countries were also improved.

Defining the potential of avocado in Honduras: As a result of activities carried out within the framework of PRIICA, 195 stakeholders of the avocado chain in Honduras now have an inventory of farming areas, as well as a certification manual for nurseries. This will enable the sector to understand its potential, guarantee the production of high-quality avocado plants, and increase the productivity and performance of avocado plantations.

Fair trade certification: Five hundred small-scale producers, who form part of 47 organizations that are certified, or are in the process of becoming certified, improved their marketing, association, leadership, strategic planning, value-adding, project design and fair trade capabilities. Twenty-five of these organizations have contacted

5 Specifically in the green belt region of Corrientes.
6 A manual on good practices for the sheep chain, technical guides on floriculture, a book on cocoa postharvest management, and a guide on quality practices for cocoa.
7 The Ministry of Agriculture, Livestock, Aquaculture and Fisheries of Ecuador officially adopted the methodology.
buyers who are interested in coffee, cacao, chocolate, pineapple and banana, among other products.

**Promotion of agrifood businesses:** IICA consolidated the Platform for the Promotion, Knowledge Management and Prospects for Agribusiness in South America (AgroSur Network), which enables nine countries in the Andean and Southern regions to analyze new trade and agrifood investment scenarios.

**Increased trade with the United States:** The plantain, cassava and coffee chains in El Salvador, the Dominican Republic and Peru, respectively, identified the challenges that must be overcome in order to strengthen trade with the United States, following the participation of 80 representatives of 50 government agencies and businesses in training activities organized by IICA.

![Social management of territories](image)

**Improved social management capabilities:** A total of 501 persons from 18 countries\(^8\) successfully completed four virtual peer-learning modules, of 30 to 40 hours each, on FF territorial systems and social management methodologies for the development of rural territories. Additionally, 125 technical specialists from Guatemala, Paraguay and Colombia strengthened their capabilities in social management of development, through their participation in four in-person, 16-hour workshops led by IICA. As a result, 25 territorial management organizations and ten local, inter-municipal and sub-national governments strengthened their capabilities in social management of territories.

**More solid production systems:** Fifty family farmers, technical specialists and authorities from Mexico, Brazil, Colombia, Ecuador, Guatemala, Honduras, Paraguay and Peru broadened their knowledge of public policy strategies that can be implemented to promote rural development and FF, as well as innovative practices geared toward improving management of production systems, food availability and product marketing. In Saint Vincent and the Grenadines, Jamaica, Haiti and Guyana, FF dynamics and production strategies were described.

**Greater income, market access and food availability:** At least 96 economic projects or business plans were prepared based on the AT-SIAL, LINK/CIAT and CANVAS methodologies in Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico and Suriname. The objective was to address the business undertakings and production demands of over 1,400 excluded family farmers (women, young people, indigenous peoples, populations of African descent and men) in different areas of interest, such as the diversification of production, food security, ecotourism, livestock and farming of

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\(^8\) Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Spain, Honduras, Guatemala, Mexico, Nicaragua, Panama, Paraguay, Peru, the Dominican Republic, Uruguay and Venezuela.
cocoa, coffee, vegetables, greens, tubers, coconut and medicinal plants, among other crops.

**Broadened inclusion opportunities:** Through their participation in eight meetings focused on area-based coordination, dialogue and consensus-building, 68 government institutions, 19 non-governmental organizations and 104 FF organizations in Brazil, Colombia, Costa Rica, Guatemala, Honduras, Mexico and the Dominican Republic improved their capabilities in the areas of organization, planning, social management, collective action and political advocacy. To this end, different activities were carried out to provide training, share experiences and practices, territorialize policies, create territorial plans, prepare participative management instruments, and implement initiatives related to economic and production aspects.

**Rural families included in development:** Through affirmative actions and good inclusion practices, around 1,450 families broadened their participation in decision-making processes undertaken by coordination and consensus-building entities for area-based development. Among other things, the families developed inclusive criteria to foster the participation of vulnerable groups; created networks, associations and cooperatives for women, youth, family farmers, artisans, disabled persons, indigenous peoples, people of African descent and the elderly; assisted in the creation of business plans and the implementation of entrepreneurship projects geared toward generating income and promoting food security; received training in topics related to the specific needs of excluded groups; and established agricultural credit banks and trade fairs to improve the quality of life of rural farmers.

**Inclusion through capacity-building:** Over 1,500 people (40% women and 27% young persons) from selected territories in Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Haiti, Honduras, Mexico, the Dominican Republic and Suriname strengthened their capacities in topics related to empowerment, such as self-esteem, leadership, assertiveness, conflict management, associative undertakings and political advocacy.

**Organization and leadership in territories:** Over 98 FF economic organizations in Brazil, Colombia, Costa Rica, Guatemala, Guyana, Honduras, Mexico and Suriname strengthened their organizational capabilities, as well as the leadership capabilities of over 760 officers and leaders through their participation in activities focused on economic organization, production certifications, administration of agricultural credit banks, commercialization, rural tourism and ecotourism, among other topics.

**New generation of rural leaders:** Over 200 rural leaders in Colombia, Mexico, El Salvador and Honduras developed their collaborative and entrepreneurial leadership capabilities through interactive training processes carried out using the “Unleashing Local Energies” methodology developed by IICA as an international public good. This process was funded using IICA resources as well as resources from European

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9 Cooperatives, associations, informal groups, youth and women’s networks, federations, savings and credit banks, among others.
Commission projects in Colombia, the World Bank in El Salvador, the Spanish Agency for International Development Cooperation (AECID) in Mexico and counterpart national institutions in the participating countries.

**Support for rural youth:** Central American countries and the Dominican Republic established a regional network and support plan for rural youth, with representatives from the Presidency, Agriculture and Rural Development ministries; national institutions responsible for this topic; and national youth networks in the eight countries that form part of the Central American Integration System (SICA).

**Knowledge management for inclusive area-based development:** The Strategic Management System for Area-based Development and Family Farming (SiGET), a hemispheric tool that provides access to systematized information on area-based development and social inclusion, enabled countries to take advantage of a validated methodological proposal for social management of inclusive area-based development, six conceptual and methodological book chapters on FF area-based systems, learning materials and other capacity-building materials and resources that provide technical assistance in inclusive area-based development processes.

<table>
<thead>
<tr>
<th>Several cooperation initiatives promote the development of territories and their production systems in:</th>
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<tbody>
<tr>
<td>o Arreguy, Haiti.</td>
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<tr>
<td>o Roboré, Pucarani, Villa Montes and Comanche municipalities in Bolivia.</td>
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<tr>
<td>o Sierra region of Ecuador.</td>
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<tr>
<td>o Toledo, Belize.</td>
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<tr>
<td>o Cariri, Brazil.</td>
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<tr>
<td>o San José del Guaviare and El Retorno, Colombia.</td>
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<tr>
<td>o Zacatecoluca, El Salvador.</td>
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<tr>
<td>o Polochic and Izabal, Guatemala.</td>
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<td>o Belén Gualcho and Yeguaré, Honduras.</td>
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<tr>
<td>o Chiapas, Mexico</td>
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</table>
Inclusion of women in agriculture and rural life

Within the framework of the Central American Agricultural Council (CAC), technical personnel representing ministries of agriculture, territorial stakeholders and strategic partners promoted gender mainstreaming in the implementation of the Central American Strategy for Rural Area-based Development (ECADERT), through the development of workshops, meetings and seminars as well as the provision of technical assistance. Additionally, the pilot experience of the project entitled “Building Multicultural, Rural Area-based Development for Central American Women,” was systematized through the creation of methodologies for empowering rural women and communication efforts as well as the systematization of lessons learned regarding gender mainstreaming in area-based development.

In Chile, IICA supported the inclusion of women and youth in discussions of public policy for the rural world and FF, by generating coordination opportunities such as the National Roundtable of Rural Women. The Institute also co-organized the South American Meeting of Rural Youth.

In Suriname, 45 members of the Network of Rural Women Producers improved their capacity to comply with food quality and safety standards, specifically those pertaining to the cassava agro-industry, which receives support from the EU-funded APP project. In Trinidad and Tobago, the Institute collaborated with women bread and pastry producers, who now have new ovens and mixers.

In Antigua and Barbuda, over 25 women producers learned about different mango products and participated in a competition organized by the mango agro-industry, during which 20 sub-products were assessed.

Capabilities for integrated water management and sustainable soil use

Efficient water use in production: Two studies and two virtual courses on the water footprint methodology, which benefited over 3,000 persons in 28 countries, allowed for promoting the use of indicators to assess the quality and quantity of water used in agriculture.

Water harvesting in El Salvador: The National Council on Environmental Sustainability and Vulnerability (CONASAV) received horizontal cooperation to harvest and collect water using reservoirs and roofs, as is done in the Paraguayan Chaco region. Use of fertilizing irrigation system was also promoted among Salvadoran producers, who were able to reduce their water consumption.

Water management strategies in Venezuela: In the Agua Negra community, 300 horticultural producers are implementing a comprehensive water management strategy that was designed in a participatory manner by the mayor’s office of the
Jiménez municipality, the Ministry of Popular Power for Ecosocialism and Water, and IICA. A total of 320 stakeholders from the Lara, Mérida and Trujillo states strengthened their capabilities in water conservation and harvesting, irrigation systems and watershed management.

**Development of tools for digitally analyzing soils:** IICA member countries now have access to instruments that facilitate the operation of national soil information systems, data digitalization, the prioritization of actions and the creation of strategies for sustainable soil and water management. These instruments include a digital soil map for Costa Rica, a document on good practices for the preparation of digital soil maps, and procedures for the creation of water erosion maps.

**Restoration of degraded soils:** In the Caribbean, IICA validated a regional training module on management of degraded soils, which included the participation of 40 extension workers from Haiti, Jamaica, Antigua and Barbuda, Suriname and Guyana. The Institute also held virtual forums in which 1,383 participants interacted, and offered several courses taught by specialists in soil management and efficient water use, enabling 575 participants to strengthen their capacities in those topics.

**Sustainable soil use in Antigua and Barbuda:** Public and private sector authorities responsible for soil management improved their technical capabilities related to climate change adaptation in agriculture. Soil samples were sent to the United States for analysis.

**Climate change adaptation and mitigation, and risk management in agriculture**

**Agricultural planning and climate change:** Over 60 institutions in IICA member countries are now better able to develop plans for climate change adaptation in agriculture, thanks to the participation of 450 technical specialists in training sessions on integrating climate change adaptation into agricultural planning processes. Most notably, 13 technical specialists from Chile, Argentina and Paraguay enabled those countries to validate the integration methodology and define follow-up actions that involve extension services.

**Agriculture and Climate Platform:** Under the leadership of CAC, authorities in Central American countries were informed in a timely manner of the outlook for climate, the evolution of the El Niño-Southern Oscillation (ENSO) phenomenon and other topics, such as climate change, climatic variability and risk management.

**Risk maps:** National strategies for the preparation and use of ago-climatic risk maps were developed in Colombia, Ecuador and Paraguay and made available to ministry of agriculture departments responsible for this topic. Additionally, in Trinidad and Tobago, Suriname and Guyana, 60 officers from public entities, including the ministries
of agriculture, as well as private entities, received training in the creation and use of disaster risk maps as well as communication of those risks.

**Platform for discussing climate-smart agriculture:** For the third year in a row, the Caribbean Forum on Climate-Smart Agriculture was held, allowing 150 Caribbean technical specialists to share information on the Paris Agreement, nationally determined contributions of Caribbean countries, access to the Green Climate Fund (GCF), integrated management of water resources, and success stories related to resilient agricultural systems in the region. The forum succeeded in attracting new partners, such as the Caribbean Community Climate Change Centre (CCCCC), the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the United Nations Development Program (UNDP) and the embassies of Mexico and Morocco in Saint Lucia. The forum also facilitated the creation of an inventory of policies and actions related to climate change in the Caribbean.

**Community of Practice on Climate Change Adaptation in Mesoamerican Agriculture:** With support from the Inter-American Development Bank (IDB), this virtual platform led by IICA increased the sharing of information on climate change adaptation in agriculture. A total of 667 users registered on the platform, six seminars with an average of 100 participants were organized, and a specialized library was made available to users.

**Ago-meteorological network for Costa Rican sugar:** IICA assisted the Sugar Cane Industry Association (LAICA) in setting up an agro-meteorological network, which provides sugarcane producers with new criteria that enables them to become more resilient.

**Knowledge management related to agricultural risks and insurance:** The establishment of the Risk Management and Agricultural Insurance Observatory of the Americas, an effort undertaken together with the Latin American Association for the Development of Agricultural Insurance (ALASA) and the Inter-American Federation of Insurance Companies (FIDES), has allowed for collecting, analyzing and disseminating relevant information, instruments and indicators related to management of agricultural risks. Additionally, 150 professionals from 15 LAC countries received training through a long-distance course on risk management and agricultural insurance, which included the participation of ALASA, the National University of the Littoral (UNL) of Argentina, the Research Center for the Management of Agricultural and Environmental Risks (CEIGRAM) of Spain, the Study Group on Insurance and Risks (GESER) of the University of São Paulo (USP) in Brazil, the National University (UNAL) of Colombia and the World Bank, among other organizations.

**Intensive climate change training program:** Over 4,000 professionals from public and private institutions, and producers from 29 countries, increased their knowledge of the development and implementation of climate change adaptation plans, good livestock practices for addressing climate change, management and restoration of
organic material in soils, water management, biogas use and production, efficient use of water and soil resources at a small scale, greenhouses, irrigation and fertilizing irrigations systems, and compost production and use, among other topics.

Food and nutrition security

Source of protein for Haitian families: With support from Caritas nuns and IICA, a poultry farm project in Arreguy, Haiti, was expanded through the addition of 500 chickens, allowing low-income children, the elderly and farmers to improve their diet at a low cost. Additionally, the project promoted the administration of farms by local women, and contributed to generating additional income through the sale of eggs to neighboring communities.

Diversification of food options in Central America: Twenty-four local consortia for the cassava, potato, avocado and tomato chains, established through PRIICA, played a fundamental role in improving food availability and access for project beneficiaries, who were informed of the results of different research projects and also participated in training events and fairs that enabled them to learn new ways to prepare and consume their crops. Relevant activities included delivery of the cassava seed to producers in Guatemala, cultivation of the ICTA Izabal variety in 890 smallholdings, the generation of 13 technologies in Costa Rica, and production of 35 new cassava genotypes in Nicaragua.

Family farmers with greater access to food: In Paraguay, Peru and Guatemala, IICA promoted the creation and implementation of strategies and plans for managing sustainable FF production systems. In Bolivia and Venezuela, on the other hand, the Institute fostered the strengthening of technical capabilities for formulating and implementing water and irrigation management plans. Both actions allowed for improving the management of natural and productive resources, guaranteeing good nutrition, and reducing malnutrition levels in those countries.

Greater income for fish farmers in the Dominican Republic: IICA contributed to increasing income and improving food security for 80 small-scale fish farmers in the Monte Plata province. The farmers adopted feeding technologies using natural products, allowing them to reduce the use of imported materials.

Reduction in food losses

Chain analysis and efficiency: The Commodity Systems Assessment Methodology for Problem and Project Identification (CSAM) was updated with support from the original authors and the Postharvest Education Foundation. This methodology allows for identifying weaknesses throughout chains that result in food losses, as well as developing solutions to problems identified. The methodology was applied in Peru in the hard yellow corn chain, which support from the Ministry of Agriculture and
Irrigation (MINAGRI), the Agraria Norte Chico cooperative (COOPANORTE) and the Ecumenical Center for Promotion and Social Action (CEDEPAS Norte). It was also applied by Uruguay in the lettuce chain, with support from the Mercado Modelo (Model Market) and the General Directorate of Farms (DIGEGRA) of the Ministry of Livestock, Agriculture and Fisheries (MGAP).

**Use of bio-inputs in the production of raw materials:** In Ecuador, technical specialists of the National Institute of Agricultural Research (INIAP) and the Ecuadorian Agency for Quality Assurance in Agriculture (AGROCALIDAD) received training in methodologies for the use of bio-inputs, in order to utilize wastes to produce raw materials.

**Reduced food decomposition:** In St. Kitts and Nevis, 31 agro-industrial specialists, professors and farmers received training in food management, health and safety, value-added and sustainability of their businesses. As a result, mango decomposition and waste were reduced.

**Reduced losses in Grenada’s banana chain:** Together with the Grenada Marketing and National Importing Board, IICA trained producers and extension workers in techniques for improving the quality of bananas and reducing losses in the harvest, selection, treatment and packaging processes.

**Improved management of roots in Dominica:** With support from CARDI, the Caribbean Farmers Network (CAFAN), the Dominica Bureau of Standards (DBOS) and the Dominica Export Import Agency (DEXIA), 25 producers, packagers and exporters received training in postharvest management, quality and traceability as it relates to roots.

**Recovering local knowledge:** In Nicaragua, Venezuela, Ecuador, Guatemala, Paraguay and Bolivia, FF knowledge was documented, specifically through the systematization of local knowledge and ancestral practices geared toward making greater use of native species and native genetic resources with food potential. Over 250 farmers and technical specialists shared local knowledge related to quinoa and quañawa, which allowed for reevaluating the use of these products in national production systems.

**Sweet potato and cocoa industries in Jamaica:** The competitive capabilities of the sweet potato industry in the St. Mary, St. Andrew and Portland communities were improved, which facilitated greater use of this native species. Additionally, the Partnership for the Development of the Cocoa and Blue Mountain Coffee Sectors allowed for taking greater advantage of cocoa to create value-added products, such as chocolate-coated Blue Mountain coffee beans.
Better-informed quinoa producers: The Ministry of Rural Development and Land (MDRyT) of Bolivia possesses an information, knowledge and communication system focusing on different aspects related to quinoa production, commercialization, distribution and consumption, which seeks to improve the situation of stakeholders involved in quinoa production, primarily those who are the most vulnerable.

Germplasm exchange and preservation of agro-biodiversity: Within the framework of the Genetic Resources Network of the Cooperative Program for Agricultural Research, Development and Innovation in the South American Tropics (PROCITROPICOS), program members, personnel from various institutions and stakeholders from countries in that region were trained in plant germplasm use and exchange, as a way of fostering the sustainable preservation of agro-biodiversity. Specifically, the Latin American Network for the Implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture (LANIIT), an initiative led by FAO and IICA and implemented in Brazil, Paraguay and Uruguay to improve food security, contributed to increasing knowledge of new strategies for utilizing and exchanging plant germplasm, with the aim of sustainably preserving agro-biodiversity.

Interaction with and participation in international forums

Coordination of topics in the Southern Region: Relationships with and among member countries of the Southern Agricultural Council (CAS) were strengthened through the signing of a cooperation agreement in which the ministries of agriculture of Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay reaffirm their commitment to working together on topics of regional interest, especially the production of regional public goods related to AHFS, agricultural sustainability and FF. IICA coordinated the actions undertaken by the secretariats of the Cooperative Program for Agrifood and Agroindustrial Technology Development in the Southern Cone (PROCISUR), the CVP and COSAVE.

Participation in AHFS events: Over 20 countries improved their ability to access markets following their participation in the Seventh International Seminar on Good Agricultural Practices in the Mercosur Region, the Second National Seminar on Good Agricultural Practices of Argentina, the Twenty-third Conference of the Regional Commission for the Americas of the World Organization for Animal Health (OIE), the Ninth Meeting of the Working Group on Fruit Flies of the Western Hemisphere of the North American Plant Protection Organization (NAPPO), the regional meeting of representatives of the seven CVP member countries, the Ninth Meeting of the Capacity Development Committee (CDC) of the International Plant Protection Convention (IPPC) and the Twentieth Meeting of the FAO/WHO Coordinating Committee for LAC.

Global climate change discussions: IICA continued its participation in four global initiatives on climate change within the framework of the United Nations Framework Convention on Climate Change (UNFCCC): the Technology Executive Committee, the NAP Expo (Bonn, Germany), COP22 (Morocco) and the Global Alliance for Climate-
Smart Agriculture (GACSA). The latter event provided an opportunity for IICA member countries to share the problems they face as a result of climate change as well as their outlook on this topic, and also increased IICA’s visibility, in order to take better advantage of technical and financial opportunities in this area.

**International agenda on biotechnology:** Together with public and private institutions in the region, IICA organized 17 training and accompaniment activities related to biotechnology and biosafety, which provided participants with an objective vision based on scientific principles for technology and technical arguments, with the aim of facilitating discussions and decision-making on this topic. Relevant activities included:

- I Seminar on Synthetic Biology for Biotechnology Decision-Makers of the Americas, organized together with the USDA.
- Seminar on Biotechnology and Biosafety for Lawyers and Judicial Branch Members (Mexican Bar Association).
- Series of seminars on biotechnology, biosafety, bio-inputs and their application in the agricultural sector (INIA, Peru).
- Seminar on the Status of Bolivian Agriculture and Progress Achieved in the Area of Agro-biotechnology (IBCE, Bolivia).
- Discussion session: The Use of Biotechnology in the Future of Agriculture, held in Nicaragua with support from the USDA.
- Meeting of the Central American Initiative on Biotechnology and Biosafety.
- High Level Policy Dialogue on Agricultural Biotechnology (HLPDAB) of the Asia-Pacific Economic Cooperation (APEC) forum, held in Peru.

**Knowledge-intensive agriculture**

As a result of 745 events, close to 52,000 persons became involved in IICA training or knowledge-sharing programs, and over 500 partner institutions are promoting better practices in agriculture, innovation, health, trade, soil and water management, and development opportunities for rural stakeholders. Noteworthy achievements included the following:

- 2,000 agricultural chain stakeholders received training in technological options for producing milk in Trinidad and Tobago, fruit postharvest in El Salvador, biological control of bio-inputs for ornamental plants in Paraguay, and sweet potato production in Jamaica, as well as good practices for control of pests and diseases, economic and risk evaluations, cadmium management and carbon footprint.

- 982 stakeholders from 44 institutions strengthened their knowledge of trade agreements, the FSMA of the United States, and other topics, as a result of their participation in forums organized by the World Trade Organization (WTO), the International Regional Organization for Plant Protection and Animal Health
(OIRSA), the Pan American Health Organization (PAHO) and Codex Alimentarius, among other organizations.

- Over 1,000 participants from 230 institutions in 20 countries shared knowledge related to business, association and commercial management, as well as value-added.

- 880 service providers, rural youth and family farmers from El Salvador, Nicaragua, Honduras, Guatemala, Paraguay, Chile, Uruguay, Venezuela, Antigua and Barbuda, St. Lucia, St. Vincent and the Grenadines, Grenada and Suriname improved their knowledge of food management, soil and water management, postharvest losses, vermiculture, beekeeping, leadership, entrepreneurship and planning.

- 700 stakeholders from over 20 countries strengthened their capabilities in good agricultural practices, AHFS requirements, detection of veterinary drug residues and safety regulations, among other topics.

- 244 scholarship recipients from 18 different countries are pursuing master’s and doctoral degrees at Mexican universities, thanks to an agreement between the National Council on Science and Technology (CONACYT) of Mexico and IICA.

- A joint publication by ECLAC, FAO and IICA enabled over 10,000 stakeholders to learn about the status of and outlook for agriculture and rural life in the Americas, the challenges that must be overcome to add value in agriculture, and the future of agricultural trade in the region. The publication is available at http://www.iica.int/sites/default/files/publications/files/2015/b3696i.pdf.
Governance and official meetings

Executive Committee (EC)\(^\text{10}\)

The Thirty-sixth Regular Meeting of the EC took place from August 23-24, 2016 in San Jose, Costa Rica. Agreements were adopted on the following general topics:

- **Institutional policy and technical cooperation services:** The EC approved IICA’s annual report for 2015, containing a summary of the cooperation activities carried out by the Institute during that year and information about programming, budgetary, and financial matters.

- **Budgetary and financial matters:** The EC approved the Institute’s financial statements for 2015 and the report of the external auditors, which attested to the fact that the Administration had complied with the Institute’s regulations and managed IICA’s financial resources properly. It also studied the report on the collection of quota contributions that the Member States contribute each year, updated the Financial Rules, and followed up on the financial strengthening of the Institute, a topic that would be addressed at the upcoming meetings of the Special Advisory Commission on Management Issues (SACMI), the EC and the Inter-American Board of Agriculture (IABA).

- **Matters related to IICA’s governing bodies:** The EC welcomed the report of the 2016 Regular Meeting of the SACMI and the status of the resolutions of the Eighteenth Regular Meeting of the IABA and the Thirty-fifth Regular Meeting of the EC.

- **Partnerships with international organizations:** The EC welcomed the report of the Market Information Organization of the Americas (MIOA) and the biennial reports of the Tropical Agriculture Research and Higher Education Center (CATIE) and the Caribbean Agricultural Research and Development Institute (CARDI) covering the period 2014-2015. The EC urged IICA to continue to strengthen the implementation of joint cooperation actions with these international organizations.

Official meetings held in 2016

<table>
<thead>
<tr>
<th>Official name</th>
<th>Date</th>
<th>Venue</th>
<th>Date and place of publication of the report or proceedings of the event</th>
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<tbody>
<tr>
<td>Thirty-sixth Regular Meeting of the Executive Committee</td>
<td>August 23-24, 2016</td>
<td>San Jose, Costa Rica</td>
<td>IICA, San Jose, Costa Rica, October 31, 2016</td>
</tr>
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</table>

\(^{10}\) The Committee comprised the following Member States: Argentina, Belize, Bolivia, Costa Rica, Dominica, Dominican Republic, Ecuador, Jamaica, Paraguay, Saint Lucia, United States of America and Venezuela.
Main results of IICA’s corporate management

The programming, budgeting and control processes that regulate the use of resources have been conducted in accordance with the guidelines established in the 2014-2018 MTP. This has facilitated institutional coordination and the provision of high-quality technical cooperation services, within the context of the Institute’s financial situation.

Programming of the results and budgetary resources of the Institute’s cooperation instruments is aligned with the MTP, the 2016-2017 Program Budget approved by the IABA, and current rules. The 2016 Annual Action Plan was programmed as approved by the Director General, and resources totaling USD 32.99 from the Regular Fund were executed, as detailed in the following figure.

Figure 2: Execution of resources from the Regular Fund by chapter in 2016 (in millions of USD)*.

Monitoring of the action plan’s budget execution allowed for improving operations and taking full advantage of institutional capabilities. Additionally, strict rationality and austerity measures were applied to buffer the impact of price increases, and economies of scale were achieved. All of this contributed to making IICA an efficient institution characterized by low costs and high impact.

The improvement of the capacities of the Unified Institutional Management System (SUGI) is one of several efforts made to facilitate fulfillment of the Institute’s commitment to implementing a results-based technical cooperation model. The SUGI
system has enabled IICA to plan, program, manage, monitor and conduct self-evaluations of all of its projects and actions, as well closely monitor the level of fulfillment of the annual goals established by its 55 operating units and the updating of their work plans. The SUGI also served as the single source of information for preparing reports on the results achieved by the units.

To evaluate its technical cooperation, the Institute established an Institutional Evaluation Policy and received continuous coaching from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); this enabled the Institute to review concepts related to results-based management and validate its methodology for evaluating cooperation projects and the criteria and instruments needed to evaluate strategic projects. Institute personnel completed self-evaluations for 42 projects and actions that ended in 2016, as part of an internal continuous improvement process.

The Internal Audit Unit verified satisfactory compliance with institutional rules and the commitments undertaken within the framework of externally funded projects. "In situ" audits were conducted in eleven IICA delegations in the member countries and four units at Headquarters; "extra-situ" audits were conducted for six delegations. The Institute is committed to the prevention, timely identification and mitigation of risks, as well as the continuous improvement of its management processes.

On the other hand, the Institute made progress in updating several documents on strategic issues related to human talent management, including the Evaluation Policy, the Code of Ethics, the Gender Policy, the Policy on the Prevention and Resolution of Sexual Harassment, and the Graphic Identity Manual, as well as human talent recruitment and selection protocols, all of which promote a better work environment based on transparency, respect, harmony and equity. Additionally, improvements were made to the Procedures Manual for the Procurement of Goods and Services, geared toward improving the effectiveness of institutional investments.

The preparation and evaluation of the Individual Contribution Plan (ICP) was incorporated into SUGI, which enables the Institute to detail each staff member's contribution to the achievement of institutional objectives and results, link their work to the projects and actions that IICA carries out in a calendar year, and better distribute workloads. Additionally, 607 Institute staff members conducted over 2,000 personnel processes online via the human talent management platform SAPIENS.

With the aim of promoting the long-term well-being of its personnel, the Institute implemented the Esplendor program, through which 50 people who will soon be retiring or departing the Institute due to their age, learned how to prepare for this phase of their lives. Additionally, the Institute conducted several campaigns geared toward promoting health and the prevention of illnesses, and also implemented a nutrition program through which 612 queries from 125 staff members were addressed, meal plans were monitored, and health and nutrition lectures were carried out.
Within the framework of the continuous training plan of the Institute, 17 training activities in various topics (communication, languages, effectiveness, writing, sexual harassment and gender, among others) were carried out and considered useful by 329 staff members who benefitted.

With respect to infrastructure and services, the Institute made improvements to buildings in order to adapt them to the current needs of the Delegations, and also continued to strengthen computer systems and equipment. In accordance with institutional principles, environmental awareness campaigns were carried out, resulting in the application of best environmental practices in the use of water, energy, paper and other resources.

Other important achievements associated with results-based corporate management, as well as a more intense institutional modernization process, are detailed below:

- Interdisciplinary groups comprising planning, management, technical cooperation, budgeting and control specialists were established to review annual action plan proposals. This review process enabled all institutional units to receive the funds needed to execute their activities in 2016.

- Corporate management continues to uphold the principle of transparent use of resources, and has therefore complied strictly with U.S. GAAP (U.S. generally accepted accounting principles) international accounting standards in preparing, auditing and approving financial statements.

- The budgetary module of the financial information system SAP is operating in all of the Institute’s Delegations in the member countries, allowing the units to check, in real time, the availability of resources and, in this way, improve their financial planning.

- Three communication plans for the Institute’s technical cooperation were developed: one at the hemispheric level, one for the IICA Delegation in Costa Rica, and another for the Delegation in Peru. Additionally, several Institute units contributed to developing websites for national and international cooperation projects and initiatives.

- IICA’s Virtual Campus (http://campus.iica.int/), an online education platform, was modernized for the benefit of technical personnel, professors and producers associated with the agricultural sector.

- The capabilities and scope of audiovisual production and migration services were broadened through the use of a full HD multimedia platform, through which audiovisual materials were viewed 57,000 times.

- New virtual media were used to prepare and disseminate the Institute’s annual report, available at http://informeanual.iica.int/.
## Annex 1
### List of projects under IICA’s Competitive Fund for Technical Cooperation (FonTC) implemented in 2016

<table>
<thead>
<tr>
<th>Name of project</th>
<th>Countries involved</th>
<th>Amount allocated in 2016 (USD)</th>
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</thead>
<tbody>
<tr>
<td>Institutional innovations for supporting the management of commercial processes in family agriculture and their links to markets</td>
<td>Argentina, Chile and Peru</td>
<td>68,710.00</td>
</tr>
<tr>
<td>Strengthening the official monitoring systems for veterinary drugs and promoting the responsible use of drugs in livestock production in Central America</td>
<td>Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama</td>
<td>16,256.00</td>
</tr>
<tr>
<td>Knowledge management and institutional capacity building to promote integrated water management in family farming (GIAAF)</td>
<td>Peru, Costa Rica, Nicaragua and Permanent Office for Europe (OPE)</td>
<td>19,480.00</td>
</tr>
<tr>
<td>Development of institutional capabilities in participatory approaches, strategies, and methodologies for optimum inclusion of young people in agriculture and rural territories in Costa Rica, Honduras, Dominican Republic, and Brazil</td>
<td>Costa Rica, Honduras, Dominican Republic and Brazil</td>
<td>44,800.00</td>
</tr>
<tr>
<td>Strengthening the agribusiness and associative capabilities of smallholder organizations in order to link them to local markets using the fair trade (FT) agribusiness model</td>
<td>Nicaragua, Costa Rica and Panama</td>
<td>60,007.00</td>
</tr>
<tr>
<td>Strengthening (development of institutional management and communication tools) for the implementation of good agricultural practices (GAPs) in fruit and vegetable production in the Southern Region countries + Bolivia</td>
<td>Argentina, Brazil, Bolivia, Chile, Paraguay and Uruguay</td>
<td>44,725.00</td>
</tr>
<tr>
<td>Strategic management system for area-based development and family farming</td>
<td>Brazil, Guatemala, Ecuador, Honduras, Mexico, Paraguay, Peru, Dominican Republic and Venezuela</td>
<td>44,000.00</td>
</tr>
<tr>
<td>Innovation and sustainability in wholesale markets and their links to family farming in the Americas</td>
<td>Costa Rica, Brazil, Ecuador and Mexico</td>
<td>5,000.00</td>
</tr>
<tr>
<td>Strengthening the management of water resources and irrigation systems for family farmers in the Chaco region of Paraguay, Argentina, and Bolivia</td>
<td>Bolivia, Argentina and Paraguay</td>
<td>10,714.00</td>
</tr>
<tr>
<td>Enhancing value-added opportunities of small scale cacao producers in Peru and the Dominican Republic</td>
<td>Peru and Dominican Republic</td>
<td>50,714.00</td>
</tr>
<tr>
<td>Development of the institutional framework for the subsector of commercial bioinputs for agricultural use (inoculants and biological pesticides) to promote cleaner agriculture in Paraguay, the Dominican Republic and Guyana</td>
<td>Paraguay, Dominican Republic and Guyana</td>
<td>36,056.00</td>
</tr>
<tr>
<td>Strengthening innovation processes in family agriculture in Southern Cone countries</td>
<td>Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay</td>
<td>15,500.00</td>
</tr>
<tr>
<td><strong>Total allocated</strong></td>
<td></td>
<td><strong>415,962.00</strong></td>
</tr>
</tbody>
</table>

*Source: Technical Secretariat of the FonTC.*
## Annex 2

### Rapid response actions implemented in 2016

<table>
<thead>
<tr>
<th>Start year</th>
<th>Country</th>
<th>Summarized name</th>
<th>Amount allocated in 2016 (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Belize</td>
<td>Developing capacities in Farmer Field schools for improving the livelihood of six indigenous communities in Southern Belize</td>
<td>13,207.00</td>
</tr>
<tr>
<td>2016</td>
<td>Belize</td>
<td>Support to hurricane damage assessment and improved surveillance and data collection through the use of modern technology in Belize</td>
<td>16,225.00</td>
</tr>
<tr>
<td>2015</td>
<td>Bolivia</td>
<td>Design and implementation of an information and communication model for knowledge management in quinoa and Andean cereals</td>
<td>1,300.00</td>
</tr>
<tr>
<td>2015</td>
<td>Brazil</td>
<td>Supporting the consolidation of strategic partnership with the Financial Fund for the Development of the Río de la Plata Basin (FONPLATA), through the execution of preparatory activities that support the implementation of a project for strengthening Paraguay's sheep chain</td>
<td>19,080.00</td>
</tr>
<tr>
<td>2016</td>
<td>Brazil</td>
<td>Consolidação da Secretaria Técnico Executiva do Fórum Regional de Gestores Públicos responsáveis pelas ações de promoção da agricultura familiar no nordeste brasileiro (Project: Consolidation of the Technical Executive Secretariat of the Regional Forum of Public Administrators responsible for promotional activities for family farming in the north-east of Brazil).</td>
<td>15,000.00</td>
</tr>
<tr>
<td>2016</td>
<td>Colombia</td>
<td>Strengthening the technical and business capabilities of small-scale agricultural producers in areas prioritized by the WFP</td>
<td>50,000.00</td>
</tr>
<tr>
<td>2015</td>
<td>Costa Rica</td>
<td>Proposal for reactivating and strengthening the National System for Agricultural Research and Technology Transfer (SNITTA) of Costa Rica</td>
<td>12,750.00</td>
</tr>
<tr>
<td>2015</td>
<td>Costa Rica</td>
<td>Redesign of the INTA structure in Costa Rica</td>
<td>19,193.00</td>
</tr>
<tr>
<td>2016</td>
<td>Costa Rica</td>
<td>Analysis of Costa Rican agriculture within the country's current context in international trade</td>
<td>10,000.00</td>
</tr>
<tr>
<td>2015</td>
<td>Dominica</td>
<td>Agricultural sector restoration initiatives for rural communities of Dominica in the aftermath of Tropical Storm Erika</td>
<td>33,750.00</td>
</tr>
<tr>
<td>2015</td>
<td>Ecuador</td>
<td>Technical cooperation for standardization of packaging and measurements of the main agricultural products sold wholesale</td>
<td>50,000.00</td>
</tr>
<tr>
<td>2016</td>
<td>El Salvador</td>
<td>Support to coffee unions to reactivate the coffee-growing sector of El Salvador</td>
<td>3,550.00</td>
</tr>
<tr>
<td>2015</td>
<td>Grenada</td>
<td>Rehabilitation of the coconut industry in Grenada through the provision and establishment of improved, early-bearing cultivars that are high yielding, disease (lethal yellowing) resistant, and of good tasting quality (water/jelly/copra)</td>
<td>20,000.00</td>
</tr>
<tr>
<td>2016</td>
<td>Guatemala</td>
<td>Formulation and management of the Strategic Plan of the Cocoa Agricultural Chain of Guatemala (ENAC)</td>
<td>34,500.00</td>
</tr>
<tr>
<td>2016</td>
<td>Guatemala</td>
<td>Supporting the formulation of a proposal for the production of cochineals in Guatemala</td>
<td>4,413.00</td>
</tr>
<tr>
<td>Year</td>
<td>Continent</td>
<td>Description</td>
<td>Cost</td>
</tr>
<tr>
<td>------</td>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>2016</td>
<td>American continent</td>
<td>III ECADERT Week Restructuring process of the Forum for the Americas on Agricultural Research and Technology Development (FORAGRO)</td>
<td>26,113.00</td>
</tr>
<tr>
<td>2016</td>
<td>Jamaica</td>
<td>Developing Chocolate Coated Blue Mountain Coffee Beans of Jamaica</td>
<td>8,310.00</td>
</tr>
<tr>
<td>2016</td>
<td>Jamaica</td>
<td>Population structure of the coffee leaf rust pathogen (<em>Hemileia Vastatrix</em>) in Jamaica</td>
<td>49,912.00</td>
</tr>
<tr>
<td>2015</td>
<td>Mexico</td>
<td>Development of a participative, area-based diagnosis for the financial management of a TA-SIAL project in <em>La Selva Lacandona</em></td>
<td>13,978.00</td>
</tr>
<tr>
<td>2015</td>
<td>Mexico</td>
<td>Project for monitoring the generation of commercial opportunities, market access and international cooperation topics</td>
<td>9,300.00</td>
</tr>
<tr>
<td>2016</td>
<td>Panama</td>
<td>Support to the Agricultural Master Plan for Repositioning the Agricultural Sector in the Western Region of Panama I</td>
<td>34,204.00</td>
</tr>
<tr>
<td>2016</td>
<td>Panama</td>
<td>Support to the Agricultural Master Plan for Repositioning the Agricultural Sector in the Western Region of Panama II</td>
<td>9,614.00</td>
</tr>
<tr>
<td>2015</td>
<td>Peru</td>
<td>Sectoral strategic plan for improving public services that support Peruvian agricultural exports</td>
<td>10,998.00</td>
</tr>
<tr>
<td>2016</td>
<td>St. Lucia</td>
<td>Support to the restructuring of the St. Lucia Marketing Board (SLMB) and the St. Lucia Fish Marketing Corporation (SLFMC)</td>
<td>15,425.00</td>
</tr>
<tr>
<td>2015</td>
<td>St. Kitts and Nevis</td>
<td>Enhancing the profitability of the mango industry in St. Kitts and Nevis through greater utilization of value-added products</td>
<td>4,770.00</td>
</tr>
<tr>
<td>2016</td>
<td>St. Vincent and the Grenadines</td>
<td>Supporting the development of a coffee industry in St. Vincent and the Grenadines</td>
<td>23,285.00</td>
</tr>
<tr>
<td>2015</td>
<td>Suriname</td>
<td>Research and development of onion production and the onion industry in Suriname with support from the Dominican Republic</td>
<td>4,700.00</td>
</tr>
<tr>
<td>2015</td>
<td>Uruguay</td>
<td>Scientific elements for risk-based decision-making regarding the opening of markets for sheep meat with bone from a country that is FMD-free with vaccination</td>
<td>3,325.00</td>
</tr>
<tr>
<td>2016</td>
<td>Uruguay</td>
<td>Contributing to reducing insecticide residues in Uruguayan meats</td>
<td>25,000.00</td>
</tr>
<tr>
<td>2016</td>
<td>Venezuela</td>
<td>Institutional strengthening of the Ministry of Popular Power for Productive Agriculture and Land in the areas of risk management and aid for animals in disasters in Venezuela</td>
<td>10,000.00</td>
</tr>
</tbody>
</table>

**Total**: 551,902.00

Source: Programming, Budgeting and Control Division.
## Annex 3
### IICA Knowledge Products

<table>
<thead>
<tr>
<th>Alliance of Agricultural Information Services SIDALC <a href="http://www.sidalc.net">www.sidalc.net</a></th>
<th>The alliance, comprised of 175 national institutions in 22 countries, facilitated access to 3 million references and 238,095 full-text documents archived in 345 databases, which had 3.7 million one-time visitors and 1.3 million recurrent users. Users shared 59,072 articles and documents, which represented the mobilization of over USD 2.3 million through knowledge-sharing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection of information management resources - IMARK <a href="http://www.imarkgroup.org">www.imarkgroup.org</a></td>
<td>Together with FAO and other international organizations, additional free courses on the Capitalization of Experiences for Continuous Learning as well as Scientific and Technical Writing were included.</td>
</tr>
<tr>
<td><a href="http://agriprofiles.agri-d.net/">http://agriprofiles.agri-d.net/</a></td>
<td>In LAC, the Institute spearheaded the adaptation and operation of the VIVO system, whose database of agricultural professionals and specialists in the Americas was broadened. Currently, 2,054 profiles of professionals can be accessed, related to more than 1,762 organizations.</td>
</tr>
<tr>
<td>Network for the Management of Innovation in the Agrifood Sector INNOVAGRO Network <a href="http://www.redinnovagro.in">www.redinnovagro.in</a></td>
<td>This network provided content to train at least 3,500 people in innovation, food security and climate change. It also facilitated the sharing of experiences in three technological tours and documented 42 successful experiences of the Mexican agricultural sector. The network’s web portal registered 64,684 visits, and its social networking profiles on Twitter and Facebook registered 4,039 and 1,265 followers, respectively.</td>
</tr>
<tr>
<td><a href="http://apps.iica.int/observatoriogirsa/">http://apps.iica.int/observatoriogirsa/</a></td>
<td>Together with the Latin American Association for the Development of Agricultural Insurance (ALASA) and the Inter-American Federation of Insurance Companies (FIDES), the Institute developed the conceptual framework, structure, content and sustainability measures of this observatory. Performance indicators for the insurance market in Southern Cone countries were also updated.</td>
</tr>
<tr>
<td>IICA website <a href="http://www.iica.int">www.iica.int</a></td>
<td>In 2016, IICA published 45 books and technical documents, all available in digital format and under the system of Creative Commons licenses.</td>
</tr>
</tbody>
</table>

### Examples of recent publications:

- Commodity Systems Assessment Methodology for Value Chain Problem and Project Identification
- [Las agriculturas familiares y los mundos del futuro](http://www.iica.int)
- Good Practices for the Preparation of Digital Soil Maps

**Source:** IICA's Inter-American Center for Information and Editorial Production
## Annex 4
Number of scholarship holders studying for master's and doctoral degrees at Mexican universities under the CONACYT-IICA 100 scholarships program (class of 2016)

<table>
<thead>
<tr>
<th>Country</th>
<th>Master's degree*</th>
<th>Doctorate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>8</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Belize</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Bolivia</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Brazil</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Chile</td>
<td>8</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Colombia</td>
<td>93</td>
<td>35</td>
<td>128</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ecuador</td>
<td>15</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>El Salvador</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Haiti</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Honduras</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Panama</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Paraguay</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Peru</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Venezuela</td>
<td>7</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>160</strong></td>
<td><strong>84</strong></td>
<td><strong>244</strong></td>
</tr>
</tbody>
</table>

**Source:** IICA's Center for the Promotion of Technical Capabilities and Leadership.

* Specializations and master's degree courses added together.

** Since the program began, 195 students have graduated or are close to graduating.

*** Since 2012, the program has benefited 930 people.
Acronyms

AHFS  Agricultural health and food safety
ALASA  Latin American Association for the Development of Agricultural Insurance
AT-SIAL  Territorial Activation Using the Localized Agrifood Systems Approach
CAC  Central American Agricultural Council
CARDI  Caribbean Agricultural Research and Development Institute
CAS  Southern Agricultural Council
CONACYT  National Council for Science and Technology (Mexico)
COP22  Twenty-second International Conference on Climate Change (UNFCCC)
COSAVE  Plant Health Committee
CVP  Standing Veterinary Committee
EC  Executive Committee (IICA)
ECADERT  Central American Strategy for Rural Area-based Development
ECLAC  Economic Commission for Latin America and the Caribbean
EnDev  Energising Development Project (GIZ)
EU  European Union
FAO  United Nations Food and Agriculture Organization
FF  Family Farming
FonTC  Competitive Fund for Technical Cooperation (IICA)
GIZ  Deutsche Gesellschaft für Internationale Zusammenarbeit (Germany)
IABA  Inter-American Board of Agriculture (IICA)
IBCE  Bolivian Institute of Foreign Trade
IICA  Inter-American Institute for Cooperation on Agriculture
INIA  National Agricultural Innovation Institute (Peru)
INTA  National Institute for Agricultural Innovation and Technology Transfer (Costa Rica)
LAC  Latin America and the Caribbean
MIOA  Market Information Organization of the Americas
MTP  Medium-term Plan (IICA)
NAP Expo  National Adaptation Plans Expo
OPE  Permanent Office for Europe (IICA)
PRIICA  Regional Program for Research and Innovation by Agricultural Value Chains
PROCINORTE  Cooperative Program in Agricultural Research and Technology for the Northern Region
PROCISUR  Cooperative Program for Agrifood and Agroindustrial Technology Development in the Southern Cone
PROCITROPICOS  Cooperative Program for Agricultural Research, Development and Innovation in the South American Tropics
PROMECAFE  Regional Cooperative Program for the Technological Development and Modernization of Coffee Production
SACMI  Special Advisory Commission on Management Issues
SUGI  Unified Institutional Management System
USDA  United States Department of Agriculture
WHO  World Health Organization