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Inter-American Institute for Cooperation on Agriculture (IICA)



20
18 Annual
Report

Inter-American Institute for Cooperation on Agriculture (IICA), 2019

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Message from the Director General



The year 2018 represented a period of renewal of the technical cooperation model of the Inter-American Institute for Cooperation on Agriculture (IICA) and modernization of its management structure. IICA's Member States readily approved the 2018-2022 Medium Term Plan (MTP) - the Institute's new roadmap, which charts its planned course of action for this period.

The Administration has concentrated on harnessing the Institute's immense capabilities to fulfil its role as a bridge between the supply and demand for knowledge, thereby providing innovative solutions for the development of agriculture and rural areas.

Based on discussions with the countries, IICA has focused its cooperation efforts on areas in which it has longstanding involvement,

among them, agricultural health and food safety (AHFS), rural territorial development and agri-food trade. Moreover, it has redoubled ongoing efforts to promote smart and resilient agriculture and extensively addressed the issues of gender and youth. One unique component of the Institute's actions has been its promotion of the vision and concept of bioeconomy, which fosters the intensive use of the biological resources of the land, guaranteeing improved levels of social well-being and sustainability.

The American region has an opportunity to capitalize on its potential as a food producer and to position itself accordingly at the world level. Achieving this will depend in great measure on the ability of its countries and institutions to offer concrete solutions for the hemisphere's agricultural and rural development. It is in this area that IICA—as an organization of the Inter-American system—has its greatest strength: its ability to combine the interests of various groups, identifying innovative solutions, sharing experiences, exchanging knowledge, adding value to the efforts of countries, and transforming them into international public goods.

In 2018, we successfully concluded the four flagship projects that have made an invaluable contribution and have positioned IICA in the areas of resilience, chains, rural territorial development and family farming. The AHFS cooperation agenda continued to grow, in conjunction with these projects, and in response to the widespread demand of the countries. Moreover, more than a hundred externally funded initiatives complemented and built on the investment that the Institute, its countries and partners have made in agriculture. All of this has served as the

platform to implement the new programs defined in the 2018-2022 MTP, and to restructure the organization. The Institute's proactive actions in devising development proposals has been a feature of the broad spectrum of cooperation activities that it has attempted to strengthen in all operational units in the 34 countries.

IICA continued to contribute to the achievement of the Sustainable Development Goals (SDGs), and its focus on collaborative efforts saw it joining forces and capacities with various global and hemispheric partners. In so doing, it has been able to expand its international cooperation in agriculture and rural development through direct collaboration with government institutions in the United States, Brazil, Mexico, Canada and other countries, as well as with donors in the European Union, Australia, New Zealand, Japan, Italy, and Germany.

Other priorities in 2018 were the identification of new opportunities for private sector

We at IICA recognize that harvesting is a continuous activity and source of satisfaction, as producers throughout the length and breadth of the hemisphere will agree. As such, each year we prepare accountability reports, share results and assess the work that we have undertaken.

cooperation. For example, support from Bayer and Microsoft enabled the Institute to incorporate innovation, speed and flexibility into its activities. Furthermore, closer ties with entities such as Vogue allowed it to explore new ways of giving exposure to rural life.

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The 2018 Annual Report is the main testament to the results reaped from our work this year. We hope that its content will inspire discussion among our Member States, their partners and other actors, prompting them to provide us with input to fuel our journey along the path that we have set for ourselves.

Manuel Otero
Director General



Executive Summary

Building upon its 76 years of experience, the Inter-American Institute for Cooperation on Agriculture (IICA), including its Headquarters in Costa Rica and the 34 Delegations in its Member States, has renewed the manner in which it operates under the guidance of Dr. Manuel Otero, who was elected as the Director General for the period 2018-2022.

One important milestone for the incoming administration was the timely approval of the 2018-2022 Medium-term Plan (MTP), the roadmap approved by the Member States during the Thirty-eighth Regular Meeting of the Executive Committee, held in Costa Rica from July 17 to 18, 2018. IICA also prepared the “Strategy for Gender and Rural Women in Agricultural Development and Rural Territories,” which establishes the guidelines to incorporate gender as a cross-cutting issue in its cooperation programs. The Institute also defined the manner in which it would bring greater attention to sustainable development issues, which it must promote at the hemispheric level.

Based on the abovementioned MTP and under the Institute’s characteristic results-based management approach, cooperation efforts focused on strengthening the public and private institutional capacities required to achieve sustainable and equitable agricultural development. To this end, the Institute continued to drive the mobilization of human resources, the management of technical proj-

ects, horizontal cooperation between countries, the preparation of policy proposals and concrete plans at the national level, as well as proactive work through the regional cooperation mechanisms.

The main results achieved in 2018 were as follows:

- Through the implementation of the five new hemispheric cooperation programs, which are related to the bioeconomy, territorial development, international trade, climate change and agricultural health, the Institute carried out 67 interventions in 34 countries, using institutional resources.
- The four flagship projects related to agricultural chains, family farming, resilience and inclusion were successfully completed: more than 90% of the programmed results were achieved.
- A total of 188 technical cooperation initiatives, funded with more than USD 154 million in external resources, were implemented.
- IICA resources totaling about USD 300,000 were invested in rapid response actions to address urgent or current issues in 15 countries.
- A total of 1000 stakeholders, 140 institutions and 34 countries strengthened their risk management capabilities in agricultural health and food safety (AHFS); additionally, AHFS systems in Chile, Colombia, Ecuador, Peru, Mexico and several Caribbean countries were improved.

- The development of an online version of the renowned Performance, Vision and Strategy (PVS) tool allowed for expanding its implementation.
- Several IICA-led programs were implemented in order to safeguard the sanitary status of Mexico and several countries in the Caribbean and Southern regions.
- Several training activities enabled at least 300 professionals from 12 countries, 24 food companies from five countries and 888 producers from Colombia, Guatemala, Peru and the Dominican Republic to become more familiar with the U.S. Food Safety Modernization Act (FSMA).
- The Institute supported the participation of representatives from about 25 countries in events that enabled them to increase their knowledge of *Codex Alimentarius*, harmonize standards, and expand their participation in Codex committees.
- Close to 500 agricultural exporters, traders and other stakeholders from 11 countries became more proficient in matters related to trade integration and promotion, market linkages and investment profiles.
- A total of 297 agents from 18 chains and close to 100 institutions received training in the areas of value adding as well as business, associative and commercial management.
- The coffee, cocoa, sheep, floriculture, fruit, milk, poultry, vegetable, sweet potato, pine-nut, banana, honey, mango, coconut and citrus chains in eight countries boosted their management capacities in terms of competitiveness, sustainability and inclusion.
- Agricultural innovation was fostered through the cooperative programs (PROCI-NORTE, PROCISUR, PROCITROPICOS and PROMECAFE), the INNOVAGRO Network, the Forum of the Americas for Agricultural Research and Technological Development (FORAGRO) and the Inter-American Commission for Organic Agriculture (ICOA).
- Innovation processes related to clones, value adding, biocontrol, good practices and bio-fortification were completed for the coffee, cashew, cocoa, sweet potato and fruit chains.
- More than 250 public and private sector authorities and technical specialists increased their awareness of the potential of the bioeconomy.
- The Institute assisted 150 government agencies in establishing frameworks, policies and mechanisms that promote the inclusion of excluded groups in family farming (FF). Furthermore, processes aimed at improving rural extension services for FF were implemented in at least four countries, and nine countries received assistance in order to develop and implement strategies to promote the differentiation of FF products.
- The Institute provided 260 technical specialists from at least 20 countries with training in the design, monitoring and evaluation of public policies and their instruments in a differentiated way for FF. IICA also facilitated training for 500 leaders in Chile, Guatemala and Venezuela in various topics, which will allow for improving FF production systems.
- Nearly 4000 women, young people and members of indigenous and Afro-descendant populations strengthened their organizational capabilities.
- An observatory for integrated risk management was established and made available to 18 countries; three new digital tools were generated to support soil analysis and management; and the capacity building process related to the rehabilitation of degraded soils in Antigua and Barbuda, Guyana, Haiti, Jamaica and Suriname was completed.
- A total of 17 profiles of projects related to resilience in agriculture were prepared and presented to a forum of donors in Haiti.

- At least 130 persons from around the world participated in the Seventh Global Workshop of the Agricultural Model Intercomparison and Improvement Project, which IICA co-organized.
- The Institute supported efforts undertaken by Antigua and Barbuda, Brazil, Dominica, Panama, Paraguay, Peru, Saint Kitts and Nevis, Suriname and Venezuela in matters related to water management, climate change, the protection of ecosystems, sustainable access to renewable energies, reforestation and the rehabilitation of production in the aftermath of disasters.
- IICA's international cooperation was expanded through at least 21 new partnerships and the strengthening of its linkages with the World Trade Organization (WTO), the International Fund for Agricultural Development (IFAD), the Inter-American Development Bank (IDB), the World Bank, the Development Bank of Latin America (CAF), Microsoft, international research centers, the European Union (EU) and its cooperation agencies, among other organizations.
- IICA's knowledge management capabilities

were expanded. To this end, the Institute received support from Argentina's horizontal cooperation programs to host a mission of ministers of Agriculture from the Caribbean that visited the country; from Brazil in order to coordinate knowledge exchanges between research institutes from several Latin American countries and the Brazilian Agricultural Research Corporation (EMBRAPA); from the U.S., in order to implement 38 research projects in Guatemala's agricultural chains; and from Mexico, to give continuity to the successful implementation of the CONACYT - IICA scholarship program, which benefited 260 professionals from 18 countries in the Americas.

The achievement of good results is also due to the organization's modernization and increased flexibility and efficiency. The reorganization of IICA's structure under a more horizontal model fostered teamwork and allowed for defining and optimizing 13 macro processes, while also reducing expenditures related to travel, consultancy services and operating costs by 10%.

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About IICA

In keeping with its institutional mandate, the mission of the Inter-American Institute for Cooperation on Agriculture (IICA) is to “stimulate, promote and support the efforts of its Member States to achieve agricultural development and rural well-being through technical cooperation of excellence”¹, by working with these countries and with its strategic partners.

The fulfillment of this responsibility will be guided by the following vision:

“To be a modern and efficient institution supported by a platform of human resources and processes that are capable of mobilizing the knowledge available in the region and around the world, with the aim of achieving a competitive, inclusive and sustainable agriculture that takes advantage of opportunities to contribute to economic growth and development as well as to foster greater rural well-being and sustainable management of its natural capital”².

Through its technical cooperation, the Institute contributes to conceptual development; policy formulation; strengthening of public institutions; capacity development; the promotion of dialogue and public-private forums; as well as agricultural planning and investment in these countries.

IICA’s work is geared toward the achievement of four strategic objectives:

1. Increasing the contribution of the agriculture sector to economic growth and sustainable development;
2. Fostering the well-being of all inhabitants in rural areas;
3. Improving international and regional trade in countries in the region; and
4. Increasing the resilience of rural areas and agrifood systems to extreme events.

The Institute is undertaking technical actions through five programs that have been defined, based on the Institute’s main areas of work: i) Bioeconomy and Production Development; ii) Territorial Development and Family Farming; iii) International Trade and Regional Integration; iv) Climate Change, Natural Resources and Production Risks; and v) Agricultural Health, Safety and Food Quality. In addition to these areas, there are two cross-cutting themes that span all of these programs: gender and youth, and innovation and technology.

IICA’s Headquarters are located in San José, Costa Rica and the Institute boasts offices in the capital cities of all its member countries, as well as a Permanent Office for Europe, which is in Spain.

As Director General of the Institute, Dr. Manuel Otero—a veterinarian from Argentina—leads a team of more than 300 professionals, with expertise in agriculture and rural affairs.

1. IICA (Inter-American Institute for Cooperation on Agriculture, Costa Rica). 2018. 2018-2022 Medium Term Plan. San José, Costa Rica, p. 15. This mission was developed further to Article 3 of IICA’s convention.

2. Ibid.



Main results in 2018

A new Administration assumed the leadership of IICA in 2018. One of its first tasks was the preparation of the Medium Term Plan (MTP) for the 2018-2022 period, which was approved by the Executive Committee at its Thirty-eight Regular Meeting. This instrument establishes the roadmap for the technical cooperation that the Institute will provide to its member countries over the next four years, guided by a results-oriented approach.

In keeping with the guidelines of this MTP, five new hemispheric cooperation programs have been developed: i) Bioeconomy and Production Development; ii) Territorial Develop-

ment and Family Farming; iii) International Trade and Regional Integration; iv) Climate Change, Natural Resources and Management of Production Risks; and v) Agricultural Health, Safety and Food Quality. The knowledge management platform is based on these programs, for which general implementation strategies and management teams have already been identified, which will be supported by external advisors and networks of specialists. Conceptual and methodological approaches have been defined specific to the areas of cooperation of each program. All programs will also direct efforts to address the two cross-cutting themes: gender and youth, and innovation and technology.

Implementation of these programs began in the final four months of 2018, with IICA's own resources, with a view to generating at least 54 hemispheric products (achieving 78% completion, on average) and undertaking 67 activities in the Offices (achieving 74% completion, on average), mainly under the direction of local specialists, with the support of hemispheric specialists. The programs also succeeded in establishing and implementing knowledge management networks, which are key tools in the new technical cooperation model proposed in the 2018-2022 MTP, and which include the participation of recognized external specialists.

Implementation of these programs began in the final four months of 2018, with IICA's own resources, with a view to generating at least 54 hemispheric products (...).

An additional 13 regional integration mechanisms, 43 short-term actions and 188 externally funded initiatives were added to the Institute's technical cooperation agenda. Execution of the latter exceeded USD 154 million.

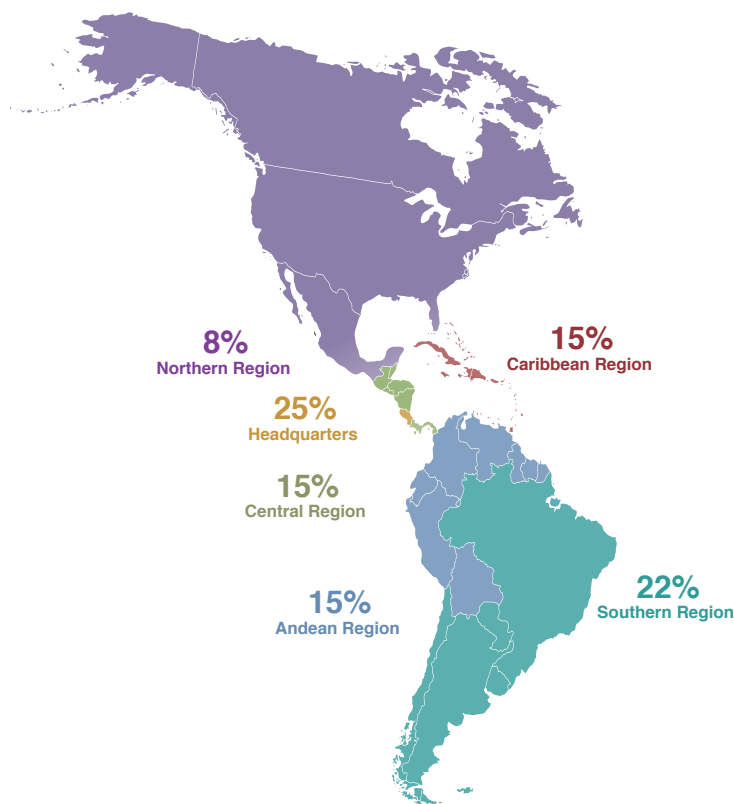
In 2018, IICA set itself the target of attaining 840 results, achieving a completion rate of 85%, according to the organization's monitoring system.

As seen in Figure 1, all regions of the Americas achieved results in areas such as agricultural health, resilience, rural development, agribusiness, agricultural innovation and policies, inter alia.

It must be pointed out that the four flagship projects implemented during the period 2014-2018 – Competitiveness and Sustainability of agricultural chains; Inclusion in agriculture and rural territories; Resilience and Integrated management of risks; and Productivity and sustainability of family agriculture – were successfully concluded, obtaining more than 90% of the projected results, some of which are mentioned further on in this report. The results obtained from these flagship projects have been an important basis for the work that was initiated under the five new programs established in the 2018-2022 MTP.

The following section describes the primary results achieved by the Institute's technical cooperation agenda in 2018, based on the strategic objectives defined in the 2018-2022 MTP.

Figure 1. Distribution of results, by region and headquarters.





Economic growth and sustainable development

Fostering agricultural development is IICA's *raison d'être*; consequently, the Institute has recognized the importance of taking advantage of opportunities available to produce more food in a sustainable manner. To this end, the Institute developed a new vision for its hemispheric work, which focuses on the bioeconomy, and presented this plan to partners in Latin America and the Caribbean (LAC) that are involved in the region's development, such as the Economic Commission for Latin America and the Caribbean (ECLAC), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Agricultural Research Center for International Development (CIRAD), the Tropical Agriculture Research and Higher Education Center (CATIE) and Brazil's Management and Strategic Studies Center, among others. In this way, IICA launched the implementation of a strategy aimed at positioning itself in the field of bioeconomy as well as outlining possible opportunities for cooperation in the hemisphere, which resulted in an agreement to establish an inter-agency group aimed at promoting the bioeconomy in LAC, which will be led by the Institute.

Towards that end, in 2018, IICA organized a series of in-person and virtual workshops and seminars that included the participation of 250 authorities and technical specialists from public institutions in the agriculture sector as well as representatives of the private sector, the academic sector and civil society in LAC, who learned about and increased their awareness of the potential of the bioeconomy to foster the productive development of agriculture and rural territories. For this purpose, the Institute took advantage of the following high-level technical-political events:

- Closing ceremony of a European Union (EU) project aimed at capitalizing on waste biomass in Central America.
- Zamorano Graduates Conference.
- Conference of the Latin American Foresight Network.
- III Meeting of the Network for Innovation Management in the Agrifood Sector (Red INNOVAGRO)
- Week of Agriculture and Food of the Food and Agriculture Organization of the United

Nations (FAO).

- International Bioenergy Week.
- Annual Meeting of the International Bioeconomy Forum (IBF).

Actions carried out at the national level in Colombia, Costa Rica, Peru, the Dominican Republic and Uruguay focused on identifying as well as analyzing gaps and progress achieved with respect to their regulatory, political and institutional frameworks for fostering the bioeconomy. Additionally, five national studies were conducted, which allowed for identifying elements that would facilitate or restrict the courses of action for taking advantage of the bioeconomy in two agrifood chains of great economic importance.

On the other hand, Belize, Costa Rica and Ecuador began developing a national strategy to promote the bioeconomy; public-private institutions from the agriculture and rural sectors played a crucial leading role in this regard. In Canada, together with 35 public and private bioeconomy constituents in three of the Atlantic provinces, the Institute assisted in reviewing the models utilized to carry out and support sustainable activities aimed at optimizing biological resources.

With respect to fostering sustainable development, IICA played a key role in increasing productive, economic and social knowledge of chains in several countries across the Americas.

Fostering agricultural development is IICA's raison d'être; consequently, the Institute has recognized the importance of taking advantage of opportunities available to produce more food in a sustainable manner.

Some of the results achieved in this regard were as follows:

- Master plans for the agriculture sector in Panama were prepared and implemented, with support from the Development Bank of Latin America (CAF). These plans will serve as a roadmap for achieving territorial development, regional competitiveness, productive transformation and the attraction of investments in regions such as Veraguas, Colón, Azuero and Occidental. For the latter region, approval was obtained for a loan of close to USD 28 million to drive agriculture.
- More than 38 research projects on priority agricultural chains were carried out in Guatemala with funding from the United States Department of Agriculture (USDA), which allowed for capitalizing on public and private interinstitutional consortia.
- IICA provided support to Ecuador's Ministry of Electricity and Renewable Energy (MEER) to strengthen the pine nut biofuel value chain, including through the development of biocosmetics, which increase the overall profit of the agribusiness.
- El Salvador's fruit sector was strengthened through cooperation from the Institute, which facilitated specific consultancy services on agribusiness in Zacatecoluca, exchanges with Guatemala, as well as the development of projects of interest to seven cooperatives.
- A partnership involving financial, public and academic institutions was established with the Trinidad and Tobago Goat and Sheep Society. This allowed for developing investment guides and business plans as well as strengthening producers' capabilities in food safety.
- The Institute partnered with the University of Belize and banana producers in that

country, who, thanks to a project with the European Union, improved their knowledge of integrated soil fertilization techniques, which they are currently utilizing on their plantations.

- Through the establishment of demonstration plots and the use of local seedlings, the Institute enabled stakeholders from the coconut and citrus fruit chains of Antigua and Barbuda to increase their knowledge of techniques related to production, pests, diseases and the competitiveness of these crops.
- The Ministry of Agriculture and Food Security of Barbados boosted its capacities with respect to the modern management of small ruminants.
- In Saint Kitts and Nevis, mango pulper machines were introduced and training in agroindustry was provided for members of producers' cooperatives, which allowed for generating various economic opportunities.
- Progress was achieved in research studies on fungus control agents in sweet potato, carried out with the Ministry of Industry, Trade, Agriculture and Fisheries of Jamaica.
- A Project for the In Vitro Fertilization of Embryos was developed in Paraguay together with the Deputy Ministry of Livestock (VMG), the School of Veterinary Sciences (FCV) of the National University of Asunción (UNA), the Paraguayan Institute of Agricultural Technology (IPTA), the National Quality and Animal Health Service (SENACSA) and the Rural Association of Paraguay (ARP).
- Together with the Technical Centre for Agricultural and Rural Cooperation (CTA), the Institute increased knowledge related to agrotourism, food safety and the development of agrotourism plans in Jamaica, Suriname, Saint Lucia, Saint Vincent and the Grenadines, Grenada and Barbados. The Institute also provided the Ministry of National Planning and Economic Policy (MIDEPLAN) of Costa Rica with technical support to develop the Strategic Plan for Agrotourism in the Central Southern Region of Costa Rica.
- Theoretical and practical knowledge of the innovative System of Rice Intensification (SRI) was expanded through demonstration plots that were set up in Bolivia and Venezuela. The Agricultural Research Institute (INIA) of Chile spearheaded technical exchanges relating to this system in international conferences and forums. Additionally, SRI was introduced in at least six Maroon indigenous communities of Suriname.
- National cocoa and avocado plans were prepared in order to serve as instruments for reactivating both production sectors in Costa Rica under a strategic long-term vision. A 2018-2030 National Action Plan for Peruvian Coffee was also prepared as a result of joint work with Peru's National Coffee Board and the United Nations Development Program (UNDP).
- Two new varieties of coffee imported from Costa Rica were introduced in Saint Vincent and the Grenadines for research and development purposes under local conditions.
- A software was developed to objectively assess the incidence of coffee leaf rust in Jamaican farms. This action forms part of the assessments of the early warning systems for coffee developed together with research centers in Colombia, the University of Arizona, the University of the West Indies and public and private authorities in Jamaica.
- The capabilities of honey producers in Saint Kitts and Nevis, Suriname, Saint Vincent and the Grenadines, Guyana and Grenada

were renewed and strengthened, primarily with respect to the use of Perone beehives.

- Together with the City Hall of El Hatillo in Venezuela, the Foundation for Socio-economic Development (FUNDES) and the Development Bank of Latin America (CAF), a model for sustainable agricultural development was established with the aim of increasing vegetable production using ecologically safe and innocuous methods; this enabled 35 farmers to improve their technological, productive and marketing levels.
- A regional proposal of good practices for cow's milk production in Central America was developed in an effort to address the heterogeneity that characterizes dairy production systems and farm development levels across the region. The proposal was made available to Nicaragua and Guatemala through national consultation workshops carried out in coordination with the Executive Secretariat of the Central American Agricultural Council (CAC), the Central American Dairy Federation (FECALAC), as well as public and private entities from both countries.

About the regional mechanisms that foster agricultural innovation:

a. Inter-American Commission on Organic Agriculture (ICOA)

Thanks to the support from IICA delegations and the ICOA Secretariat, the national control services of 20 member countries of the commission now possess new knowledge regarding the updating, implementation and monitoring of standards established by the National Organic Program (NOP) of the United States and by the European Union. This has enabled the countries to improve marketing conditions for their organic

products in the most demanding world markets, and to take advantage of business opportunities in those markets.

On the other hand, Guatemala, Honduras, Nicaragua, Costa Rica and Panama now possess harmonized Central American technical regulations on organic agriculture, which are expected to enter into effect in 2019. In Panama and the Dominican Republic, a public certification system was implemented; this instrument for the development of organic production was widely discussed within the framework of ICOA deliberations.

The following were some of the primary achievements at the national level:

- In Saint Lucia, IICA contributed to developing an improved assessment of the organic market; the Institute also facilitated knowledge exchanges related to organic production between the Belle-Vue Farmers' Cooperative, the Jamaica Organic Agriculture Movement (JOAM) and Source Farms.
- Panama now possesses a methodology for developing differentiated policies for organic agriculture, thanks to horizontal cooperation between that country, Argentina and IICA.
- Peru strengthened its national and international standing in the field of organic agriculture, by serving as the host country for the Tenth ICOA Assembly. During this assembly, the Commission strengthened its governance with the incorporation of Spain and Portugal as permanent observer members and extra-continental strategic partners.
- Through an agreement with Ecovalia, a private-sector association in Spain, ICOA incorporated the experience, strength and vi-

sion of producers, researchers, certifiers and traders who are familiar with the standards of the Spanish of Standardization Association (UNE). The agreement gave rise to the creation of a network made up of chambers of producers who create suitable production supplies at the hemispheric and international levels; it also allowed for harmonizing stances regarding the new opportunities and challenges that organic agriculture faces at the global level.

Lastly, IICA has taken on a proactive role in generating a new proposal for an IICA-ICOA agreement, by modifying the ICOA By-laws, and by reaching an agreement to allow the operating costs of the IICA-ICOA Executive Secretariat to be self-funded during the 2019-2021 period through resources from quotas paid by the countries to ICOA.

b. INNOVAGRO Network

Within the framework of the INNOVAGRO Network, IICA and network stakeholders developed a diploma course in Good Innovation Practices and launched the fifth call for applications for the Master's Degree in Food Security, which currently has 460 participants and from which 133 students have graduated. Three workshops, one virtual course, two forums on agroforestry systems, and three technological tours aimed at sharing experiences were carried out. Twenty-three innovations generated by INNOVAGRO members were also evaluated and published.

c. Forum of the Americas for Agricultural Research and Technological Development (FORAGRO)

IICA contributed to completing the process of redesigning FORAGRO and to establishing the foundation to strengthen its positioning and rele-

vance as a multisectoral forum for agricultural innovation. The Institute supported the management of the Forum's reorganization process, participatory processes aimed at defining the Forum's current and future situation, as well as the development of various products that will guide the Forum's future actions, namely the strategic plan for 2019-2030, the 2019 work plan, the regulations for its by-laws, a communication strategy, a bilingual interface for its Web page, and a mechanism to facilitate communication between the members of the Steering Committee.

d. Regional Agricultural Technology Fund (FONTAGRO)

Together with FONTAGRO, the Institute improved the capabilities of professionals from public national research institutes in ten Latin American countries in matters related to protecting the intellectual property of research findings. The current status of models for strengthening public-private partnerships in agricultural research was documented, and six success stories related to this topic were shared.

e. Cooperative Program in Agricultural Research and Technology Transfer for the Northern Region (PROCINORTE)

Using resources from the USDA's Agricultural Research Service (ARS), the National Forestry, Agricultural and Livestock Research Institute (INIFAP) of Mexico and the Canadian Food Inspection Agency (CFIA), and within the framework of PROCINORTE, joint research projects were carried out in areas of importance to the United States, Canada and Mexico: vectors (bluetongue and *Culicoides spp.*), the diagnosis and control of equine piroplasmosis and the diagnosis of vesicular stomatitis. Furthermore, the Material Transfer Agreement (MTA) signed between INIFAP-IICA and Cid Bio Science Inc. (Felix Instruments) was an important result of

several years of joint research carried out by PROCINORTE and INIFAP in order to generate non-destructive maturity tests for avocado. This MTA will enable Felix Instruments to continuously update the model developed for these tests and to make these instruments available to the avocado industry throughout the region; this, in turn, will increase fruit quality, reduce waste and generate greater income for farmers.

f. Cooperative Program for Agrifood and Agroindustrial Technology Development in the Southern Cone (PROCISUR)

IICA contributed to finalizing PROCISUR's new strategy, which was widely discussed by its Steering Committee members, who approved and incorporated the strategy into the 2015-2018 Medium-term Plan. The completion of this process was materialized through the signing of an addendum that will extend the PROCISUR agreement until December 2019.

Joint work also led to the execution of the prospective study entitled "The Southern Cone's standing in a context of global technological development: megatrends, critical uncertainties and key questions for the future of agricultural and agrifood systems in the Southern Cone," which was coordinated by the National Institute of Agricultural Technology (INTA) of Argentina and the Brazilian Agricultural Research Corporation (EMBRAPA), with the participation of specialists from IICA and all national agricultural research institutes (INIA) in PROCISUR member countries, as well as stakeholders involved in the development of public policies and regional agendas.

The Secretariat of PROCISUR, which is led by IICA, played a crucial role in finalizing a proposal for a joint project on huanglongbing in citrus fruits, within the framework of the Plant Health Committee of the Southern Cone

(COSAVE). The Secretariat assisted in defining FORAGRO's needs and vision, collaborated with the Southern Agricultural Council (CAS) to prepare a report on the status of research on genome editing, and facilitated and monitored the research project entitled "Physiological and genetic basis of wheat and soybean responses to biotic and abiotic limitations: studies geared toward genetic improvement and crop management in the Southern Cone," developed by a network of over 30 researchers from INIA in PROCISUR as well as universities in Argentina, Brazil and Uruguay.

g. Cooperative Program for Agricultural Research, Development and Innovation in the South American Tropics (PROCITROPICOS)

Within the framework of PROCITROPICOS, an online survey was conducted among the INIA, in order to collect information for the Network of Genetic Resources regarding the current status of germplasm conservation. The survey allowed for identifying accessions and protocols that could be shared, as well as for obtaining up-to-date information on investment challenges and needs in the countries.

The members also participated in several support actions under the horizontal cooperation modality; some of the most noteworthy actions were as follows:

- Through Peru's National Agricultural Innovation Program and the Cooperation Program between EMBRAPA and the National Institute of Agricultural Innovation (INIA) of Peru, technical personnel from the institute received training from various EMBRAPA units, including those responsible for vegetables and genetic resources, as well as the unit located in the state of Acre.

- EMBRAPA and AGROSAVIA (Colombia) joined efforts to prepare the project entitled “Bridging technological gaps to scale up agroforestry systems in dry areas owned by small-scale producers in Colombia,” which was presented to FONTAGRO.
- With the participation of the Minuto de Dios cooperative and the Minuto de Dios University Corporation (UNIMINUTO) on behalf of Colombia, the Center for the Promotion of Peasant Agriculture (CPAC) of Bolivia prepared and shared with various donors (including FONTAGRO) the proposal entitled “South-South knowledge management that incorporates pisciculture as a livelihood for peasant families, through the application of good practices for resilience in the face of climate change, market conditions and the exercise of women’s economic rights.”
- The National Agricultural Research Institute (INIA) of Venezuela and EMBRAPA shared experiences during the First MUSAVEN Conference. Particularly noteworthy was the presentation by a researcher from EMPRAPA on the “Current status of Tropical Race 4 of *Fusarium oxysporum f. sp. cubense*: Potential impact for Latin America and the Caribbean.”
- The Peruvian Society of Gastronomy (APEGA), the government of Peru and IICA discussed the topic of gastronomy as it relates to the sustainable production of strategic agri-food crops and their potential use for food, in order to address EMBRAPA’s request for support in the establishment of its new Food and Territories Unit.
- Technical specialists from EMBRAPA and the National Agricultural Research Institute (INIAP) of Ecuador strengthened their capacities through their participation in a prospective studies course offered by Brazil’s University of Campinas (UNICAMP).

In coordination with genetic resources networks, the Institute negotiated with FAO to obtain funding for the project entitled “Latin American Network for the Implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture (LANIIT) to Improve Food Security in Latin America (Brazil, Paraguay and Uruguay) in the Face of Climate Change.”

h. Regional Cooperative Program for the Technological Development and Modernization of Coffee Production (PROMECAFÉ)

This program integrates ten countries in the region and various research and agricultural cooperation institutions such as IICA, CATIE, CIRAD and other cooperation agencies and partners, by means of a regional platform that has allowed for analyzing, prioritizing and defining topics, plans, strategies and activities aimed at overcoming the current challenges facing the regional coffee sector, as well as contributing to its development, strengthening and modernization. These efforts yielded the following achievements:

- The integration, involvement and coordination of stakeholders of the coffee value chain was fostered with a view to addressing coffee leaf rust, one of the most significant health challenges facing the coffee sector. The Third Coffee Leaf Rust Conference played a vital role in this regard by allowing for defining new actions, identifying partnerships and establishing plans to minimize the impact of this disease and improve conditions for coffee-growing families in the region.
- The capacities of coffee institutions and their technical teams were strengthened through various training events, including

a course on modern coffee production. The course allowed for disseminating research results as well as for fostering innovation by capitalizing on the knowledge management expertise of PROMECAFE, reciprocal cooperation as well as the disposition and interest of partners and cooperation agencies that work with the Program and the regional coffee sector, such as World Coffee Research (WCR), the UTZ Certification Program, the International Regional Organization for Plant and Animal Health (OIRSA), FAO, the Neumann Foundation, the Famine Early Warning Systems Network (FEWS NET) and ECLAC.

- The technical capabilities of personnel from coffee institutions as well as the competitiveness of the sector were improved through the strengthening of early warning systems for coffee at the national level, as well as progress achieved in establishing a regional early warning network that monitors climatic conditions and the progress of pests and diseases, in order to reduce potential crises and neg-

ative impacts on the living conditions of coffee families. This was achieved through the project entitled “Creating the foundation for an Early Warning System for Coffee Leaf Rust,” with financial support from FONTAGRO and in coordination with CIRAD/CATIE and the Central American Program for Integrated Coffee Rust Management (PROCAGICA).

PROMECAFE took advantage of regional integration platforms available in coffee-growing countries that form part of the program in order to discuss and generate policies on coffee farming, particularly with the aim of addressing the primary challenge that affects global coffee farming today, which is the low economic sustainability of production. These opportunities enabled the Program to demonstrate its leadership to global and regional agencies such as the International Coffee Organization (ICO) and the World Coffee Producers Forum, as well as to participate in high-level decision making and to secure resources for a project geared toward fostering domestic coffee consumption within the framework of the ICO.



International and regional trade

IICA's technical cooperation aims to further processes of regional integration, the development of international trade, and the improvement of agricultural health, and in so doing to create new opportunities for agriculture and rural areas in the Americas, in keeping with trade regulations.

The Institute's actions at the hemispheric level assisted more than 1055 actors and 140 institutions in 34 countries of the Americas to access information, increase knowledge, and enhance individual and institutional capacities in conflict mediation, and risk communication in relation to agricultural health and food safety (AHFS), and also facilitated the design, monitoring and evaluation of policies, strategic investments and inclusive financing in agricultural chains. IICA's actions also enabled these actors and institutions to strengthen their links to international institutions and forums, such as the Agriculture Committee and the Committee on Sanitary and Phytosanitary Measures of the World Trade Organization (WTO), the Southern

Common Market (MERCOSUR), and *Codex Alimentarius*.

IICA fostered the development of the technical and institutional capacities of its member countries, to enable improved participation and greater influence in *Codex Alimentarius*. On the matter of food safety and international trade, there were four virtual colloquia, which enjoyed an average attendance of 25 countries; two face-to-face colloquia (one in Brazil, in which 14 countries participated and another in Kenya, in which 12 countries from Latin America and the Caribbean and 21 from Africa participated); four twinning programs that benefitted five countries, with three countries providing cooperation; one modular virtual training program on pesticides, from which nine countries benefitted; one face-to-face workshop on food safety system equivalence (with 14 countries, including New Zealand, in attendance); 13 virtual coordination sessions of the Codex Committee for Latin America and the Caribbean (CCLAC), in which ten countries, on average, participated; and seven meetings of

various Codex committees, which enjoyed an average participation of four countries. However, the meetings of the Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF) and the *Codex Alimentarius* Commission (CAC) were attended by 15 and 16 countries, respectively.

All these initiatives helped to strengthen regulatory harmonization processes; fostered more active participation in the development and approval of international standards, guidelines and recommendations; minimized the use of unjustified trade restrictions; improved market access conditions and predictability for exports; and bolstered the negotiation position of the region at the international level.

IICA facilitated three activities that allowed member countries to review proposed regulations for the international trade of agricultural products and the protection of national production and natural resources, as well as to strengthen their positions in relation to this matter:

- A workshop for Latin America, held in Lima, Peru, and which was attended by 35 participants from 18 countries, the Secretariat of the International Plant Protection Convention (IPPC), and four observer organizations.
- An activity in Port of Spain, Trinidad and Tobago, which was attended by participants from 14 Caribbean countries, the Secretariat of the IPPC, and IICA.
- A workshop in San José, Costa Rica, which was attended by representatives from 27 member countries of the World Organization for Animal Health (OIE), and in which the countries of the Americas developed eight positions that were presented at the World Assembly of the OIE.

Another important achievement was the forging of a strategic partnership with the WTO, which resulted in the organization of an advanced course on sanitary and phytosanitary measures that trained delegates from 11 countries and provided support for the development of national action plans, some of which are of significant technical interest to IICA.

At the multiregional level, IICA's studies on the participation of countries in the Agriculture Committee of the WTO and compliance with agricultural notifications enabled the Central American and Caribbean countries to upgrade their knowledge about the current trade landscape.

Some of the main achievements at the national level were:

- St. Lucia, Trinidad and Tobago, Guyana, and Dominica determined that their priority technical issue was trade barriers that delay the implementation of the Economic Partnership Agreement between the European Union and the Caribbean. Various workshops were also organized with representatives from private sector companies and were geared toward improving their ability to capitalize on this agreement and to increase their exports.
- More than 200 public and private actors from Barbados, Dominica, Guyana, Trinidad and Tobago, St. Lucia, and Bahamas, participated in discussions that enhanced their knowledge about non-tariff measures and transport problems affecting intra-regional trade.
- In Bolivia, the Institute collaborated with the Ministry of Rural Development and Land (MDRyT) and the Vice-Ministries

of Domestic Trade and Foreign Trade and Integration to develop a training program on international trade strategies and to develop a proposal for the creation of a trade warning system for agricultural imports and exports.

- In El Salvador, IICA was instrumental in the preparation of a guide on financing and managing investments in the country's dairy chain. The response that it received from representatives of this chain and the financial sector attested to the sector's lack of familiarity with financial instruments that would allow it to reduce the risks associated with an absence of liquidity in short-term situations, such as leasing and factoring.

In the area of agribusiness promotion, IICA updated materials on strengthening export capacities that were successfully used to “create exporters” and to create market opportunities for agricultural and industrial products. The Dominican Republic has already expressed an interest in using this material again.

More than 430 actors from at least 11 countries strengthened their capacity to access markets, through training that was geared towards promoting trade integration with the agro-export and agrotourism sectors; the promotion of marketing strategies; the development of opportunities for exchange between actors in the countries' cocoa and floriculture chains; the development of investment profiles for the cultivation of moringa and turmeric, which were prepared in conjunction with the Caribbean Association of Investment Promotion Agencies; the implementation of methodologies, such as “One Village, One Product” (OVOP) in Costa Rica; and the development and implementation of marketing and value

added strategies for goat milk products in Trinidad and Tobago; and for cashew by-products in Honduras.

Cooperation efforts to promote more competitive agricultural chains

IICA assisted ten agricultural chains in eight countries—coffee and cocoa in Panama, sheep and floriculture in Paraguay; fruit in El Salvador, goat milk in Trinidad and Tobago, poultry in Venezuela, horticulture in Argentina, sweet potato in Jamaica, and cocoa in Peru—to boost their management capacities in terms of competitiveness, sustainability, and inclusion, by establishing and strengthening collaborative platforms and forums, as well as by formulating strategic and business plans, *inter alia*.

The Institute's integrated chain-related efforts enabled more than 830 actors from 130 institutional bodies to strengthen their capacity to introduce technological innovation in chains, including in the following: a) epidemiological monitoring of antimicrobial resistance in the Dominican Republic and Venezuela (poultry, bovine and swine); b) long-term quality assurance throughout the Venezuelan poultry chain; c) development of a roadmap for the implementation of a National Antimicrobial Resistance Plan in Uruguay; d) production of high-quality goat cheese and yoghurt by community groups in Trinidad and Tobago; e) strengthening of the implementation of Good Agricultural Practices (GAP) and Good Farming Practices (GFP) in cocoa and other chains in Costa Rica, as well as GAP in the vegetable chain in Argentina; and f) reduction of food loss through the application of the second version of the Methodology for the Evaluation of Agrifood Chains (MECA).



Chain innovation processes were also instituted, such as the design and economic evaluation of animal health programs in the hemisphere; the establishment of demonstration clonal farms for coffee and cocoa in Panama; the production of cashew nectar in Honduras, in compliance with safety requirements and the application of Good Manufacturing Practices (GMP); biological control of sweet potato weevil, based on the results of a two-year study in Jamaica; the application of recommendations for the creation of a technology park for fruits and other products -"Ecosistema Local de Innovación de Zacatecoluca" – (Zacatecoluca Local Innovation Ecosystem) in El Salvador; the preparation of profiles to boost the environmental performance of two production chains in the Central American Dry

IICA's technical cooperation aims to further processes of regional integration, the development of international trade, and the improvement of agricultural health, and in so doing to create new opportunities for agriculture and rural areas in the Americas, in keeping with trade regulations.

Corridor; and the biofortification of sweet potato in Jamaica.

Moreover, 297 agents from at least 92 institutions received training in the areas of business, associative, commercial and value adding management, through processes and events aimed at capacity building, the upgrading of knowledge, and technical exchange. Eleven countries and eighteen agricultural chains were involved in these processes, which led to the consolidation of the Program for the Strengthening of Agribusiness and Associative Capabilities.

The experience of the Central American coffee chain

Under the banner of the EU-funded PROCAGICA program, technological models were implemented in 4005 coffee production units, for the purpose of boosting the profitability of coffee production. Careful environmental practices and production diversification patterns were applied, which could potentially provide additional benefits for preserving ecosystem biodiversity.

Six thousand small-scale coffee farmers (34% women and 14% young people under the age of 30) received capacity building support in implementing measures for climate change adaptation and the mitigation of its effects on

coffee cultivation, through integrated management of coffee cultivation. The beneficiaries were affiliated with 163 producer organizations, located in 69 municipalities and 13 districts in four countries.

In conjunction with CATIE, CIRAD and specialized national research bodies, a regional research platform was established, involving actors from Guatemala, El Salvador, Honduras, Nicaragua, Panama, Costa Rica, and Dominican Republic, and was activated to monitor and scientifically evaluate coffee rust races and issue recommendations for small and medium producers to apply in the field, in a bid to control this disease. Similarly, a regional network of 200 participatory research plots, comprised of small-scale coffee farmers and other local and regional actors, was set up in Guatemala, El Salvador, Honduras, and Nicaragua, to increase the competitiveness and sustainability of coffee cultivation.

The Program's promotion of innovative technologies for cultivating coffee, in keeping with a gender, youth, and multicultural approach, increased the capacities of 698 technical officers working in local technical cooperation networks in the region. Moreover, the transfer of this new technology also benefitted 209 students from five technical agricultural institutions that specialize in transferring knowledge to groups of young farmers in four countries; and the climate change and food security focus further enhanced their study programs.

The Program has already yielded positive results, enhancing the competitiveness and sustainability of 231 hectares of coffee, by implementing models for agricultural diversification on coffee plantations, to increase and stabilize the income of farmers.



Agricultural Health and Food Safety (AHFS)

One of the Institute's priorities is strengthening AHFS services in countries across the Americas. To this end, the virtual modality of the Performance, Vision and Strategy (PVS) tool was adapted order to optimize financial resources and expand the number of users involved in implementing the tool. This modality was applied to veterinary, phytosanitary protection and food safety services in Jamaica, Nicaragua and the Dominican Republic.

Additionally, at the request of the Phytosanitary and Animal Health Regulation and Control Agency (AGROCALIDAD) of Ecuador, work was conducted to adapt the PVS tool for use in fostering food safety in the primary production chain. The Institute also collaborated with the Chilean Agency for Food Safety and Quality (ACHIPIA) to analyze and monitor the results of the common vision process, with the aim of identifying priority areas of work as well as improving the food safety system in the country.

The case of Mexico: long-standing relationship in sanitary matters

For 24 years, IICA has contributed to the efforts undertaken by the National Service for Agrifood Health, Safety and Quality (SENASICA) to continue safeguarding Mexico's phytosanitary status, preventing the entry of approximately 1000 pests and 56 exotic diseases of economic importance. This, in turn, has allowed for strengthening fruit and vegetable farming, whose production is channeled toward local and international markets; increasing the number of jobs and foreign currency; as well as improving human health and the environment due to the reduced use of pesticides, among other benefits.

On the other hand, within the framework of the Greater Caribbean Safeguarding Initiative (GCSI), efforts were undertaken to strengthen plant health systems to protect U.S. and Caribbean agriculture and natural resources in the best way possible from the entry, establishment and propagation of pests. Within this context, ten actions were carried out in the field of communication and networks; a diagnosis of pests was conducted; the monitoring and management of economically important pests was driven; and international plant health standards were applied. Other achievements included the preparation of a list of pests requiring priority attention in the region; the continuous operation of a data management system geared toward protecting the Caribbean from threats and the impact of the introduction and propagation of fruit flies; the provision of training for 15 plant quarantine officials in 14 countries on plant quarantine principles and procedures; increased capacity building in the prevention and surveillance of *Fusarium* TR4 in banana, for the benefit of 26 plant health professionals from 13 Caribbean countries; and the identification of environmentally safe and effective strategies for monitoring and controlling the giant African snail in agricultural districts of the Caribbean.

Within the framework of the Pacific Alliance, Colombia, Chile, Mexico and Peru received assistance in order to conduct a comparison of the sanitary, phytosanitary and safety status of food, in order to identify harmonization opportunities based on the WTO Sanitary and Phytosanitary Agreement (SPS Agreement) and agree on a roadmap for IICA's cooperation.

More than 60 professionals from Guatemala, Honduras, Costa Rica, Nicaragua, Peru, Colombia, Jamaica, Trinidad and Tobago, Brazil, Chile, Mexico and Ecuador participated in an Intensive Regional Training Workshop for Lead



Trainers on the FSMA Produce Safety Standard. The workshop, which was organized by IICA in Costa Rica with support from the U.S. Food and Drug Administration (FDA), provided participants with the technical tools they require to be recognized as lead trainers by the Produce Alliance, in order to provide training to exporters and producers on the abovementioned standard.

Other similar initiatives benefited:

- 125 professionals from SENASICA in Mexico, who participated in two training workshops on the FSMA Produce Safety Standard, organized by the Institute together with the Joint Institute for Food

Safety and Applied Nutrition (JIFSAN) and the FDA.

- 40 specialists from Argentina, who improved their capacities related to the produce safety standard with support from the National Service of Agri-Food Health and Quality (SENASA) and the Secretariat of Agroindustry of Argentina.
- 71 professionals from Chile, Ecuador and Mexico, who received training on the FSMA standard and will be able to train local exporters, producers, public officials and private-sector representatives in preventive controls.
- 24 food companies in Jamaica, Trinidad and Tobago, Peru, Colombia and Paraguay, which were evaluated in order to determine their level of preparedness to comply with the FSMA standard.
- 888 producers from Guatemala, Colombia, Peru and the Dominican Republic, who received training through 17 workshops on the FSMA standard.

Within the framework of the Antimicrobial Resistance (AMR) Surveillance Project for the Agrifood Chain, more than 100 persons participated in workshops aimed at systematizing AMR plans prepared in Chile, the Dominican Republic, Brazil and Belize. Additionally, processes already underway to develop AMR plans in Ecuador, Colombia and Paraguay were continued. In addition to posing a challenge for human health, AMR represents a significant risk for animal production and market access in the Americas. The work that IICA conducts in matters related to AMR is geared toward providing countries with information on their national situation, to facilitate decision making to control the disease.

The following are other noteworthy actions fostered by the Institute to assist public institutional frameworks in making science-based decisions:

- A Regional Workshop on Electronic Phytosanitary Certification (ePhyto) in Latin America, held in Buenos Aires, Argentina with support from the Plant Health Committee of the Southern Cone (COSAVE) and SENASA. The workshop allowed for expanding and leveling the knowledge that Latin American countries possess on the nature, progress and tools of the ePhyto solution for electronic phytosanitary certification. Workshop participants assessed the implementation status of the certification in Latin American countries, and also identified possible difficulties that could arise, experts across the region and possible areas for future cooperation. International experts from Australia, Vietnam, the United States, IPPC, the Standards and Trade Development Facility (STDF) of the WTO, and the United Nations, as well as 99 specialists from IICA and 17 Latin American countries, participated in the workshop.
- The Regional Workshop “Risk Management, Good Decision-making Practices and Risk-based Sampling: Towards its Implementation,” organized in Lima, Peru, by IICA, the Animal and Plant Health Inspection Service (APHIS) of the USDA, STDF and the Andean Community (CAN). Its purpose was to improve and consolidate Latin America’s capacity to implement good risk management practices, as well as to understand and achieve progress in implementing the fundamentals, concepts and procedures of risk-based sampling. A total of 35 professionals from 11 national plant protection organizations (NPPOs) improved their knowledge of the manner in which risk-based sampling is conducted, and improved their

capacities with respect to the use of related tools and methodologies.

- The Leadership Course on Sanitary and Phytosanitary Measures, which was offered for the first time to Latin American professionals who develop and implement international standards. The course was completed by 15 participants from nine countries and was funded by the Foreign Agricultural Service (FAS) of the USDA.

Regional agricultural health partnerships

a. Southern Cone Standing Veterinary Committee (CVP)

IICA continued to promote efforts to build the capacity to design and conduct economic evaluations of brucellosis programs in the CVP member countries, collaborate in the redesign and prioritization of Brazil's animal health programs, and provide support to the CAN's Regional Classical Swine Fever Program. An Institute representative gave a presentation on the sustainability of veterinary services at the Twenty-fourth Conference of the OIE's Regional Commission for the Americas, held in the Dominican Republic. IICA also assisted in the publication of an article on the evaluation of the financial impact of subclinical mastitis in the peer-reviewed journal *Frontiers of Veterinary Science*.

Working in tandem with the CVP, IICA helped to boost the animal health programs of the government veterinary services (GVS) of Argentina, Bolivia, Brazil, Paraguay and Uruguay by enhancing their technical capabilities in the areas of planning, economic evaluation and decision-making. The economic evaluation studies of the countries' brucellosis and bovine tuberculosis programs were a key element in these efforts. Furthermore, the Insti-

tute trained 24 professionals of the GVS of the countries mentioned and provided guidance on the technical work involved in the studies. The heads of the GVS were delighted with the expertise that their technical personnel acquired in the use of the evaluation methodology, as it is enabling the services to run various national animal health programs more efficiently. The studies conducted also permitted the GVS to take decisions that significantly improved the performance of the brucellosis and bovine tuberculosis programs.

Following the region-wide analysis of the OIE evaluations of the performance of the GVS of Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay, regional conclusions were drawn up for five thematic areas: trade, management of the GVS, laboratories, public health and animal health. The conclusions identified the strengths, subjects of interest and areas in need of improvement across the region, with a view to planning activities aimed at strengthening the GVS further. GVS professionals continued to receive training in the use of the OIE's PVS methodology and the information generated by the evaluations, thanks to financial and technical support from IICA.

b. Plant Health Committee (COSAVE)

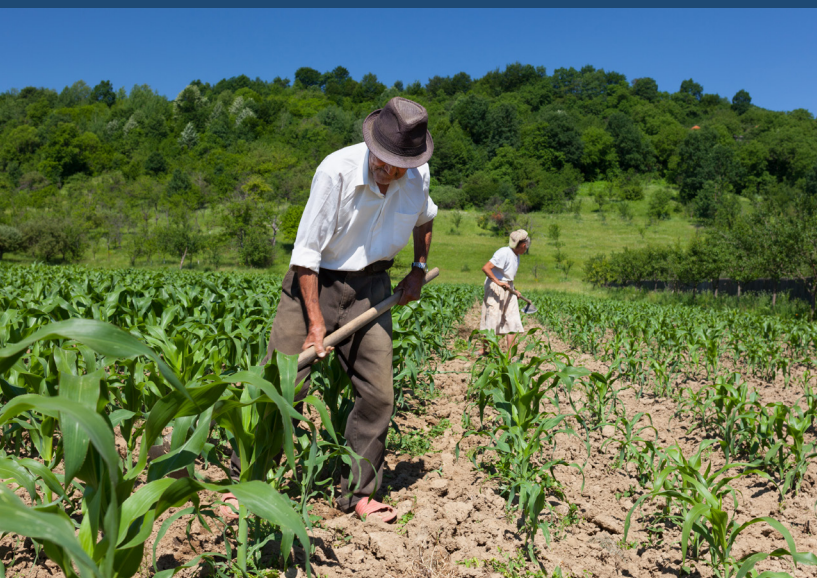
In Argentina, Bolivia, Brazil, Chile, Paraguay, Peru and Uruguay, the Institute promoted and spearheaded a process aimed at the close coordination of plant health protection efforts and strategies for the region.

With technical and financial support from IICA, COSAVE convened a conference of representatives of the public and private sectors that gave the committee's member countries the opportunity to engage in dialogue, identify common areas of concern and propose harmonized work

to help them to coordinate and consolidate their agrifood production and trade, facilitate access to and stronger links with markets, and position themselves as suppliers of a range of products.

Some of the results achieved with the Institute's support were as follows:

- Implementation of the STDF 502/COSAVE project in Argentina, Bolivia, Brazil, Chile, Paraguay, Peru and Uruguay, which boosted the technical capacity of the NPPO to implement plant health surveillance systems and undertake pest risk assessments and evaluations of the impact of the plant health measures introduced. More than 120 professionals enhanced their technical expertise, IT tools were developed, guidelines were drawn up for the implementation of the systems concerned, and a number of case studies were carried out.
- Preparation of an innovative methodology to evaluate the impact of the implementation of plant health measures.
- Implementation of the Regional Virtual School for Plant Health Inspectors (ERVIF). Some 54 officials in seven countries have already completed the international module hosted on IICA's online platform.
- Implementation of a study of the impact of climate change on the behavior and distribution of agricultural pests in the Southern Region.
- Identification of the project for the control of Huanglongbing (HLB) or citrus greening disease and its vector, which involves researchers of the NARIs of Argentina, Bolivia, Brazil, Chile, Paraguay, Peru and Uruguay, and specialists of the same countries' NPPO.



Well-being in rural territories

Providing solutions to exclusion, vulnerability in rural areas and rural poverty is an Institute priority. IICA therefore provided technical cooperation aimed at promoting public policy-making and the establishment of platforms on social management, empowerment and economic revitalization. The platforms in question are designed to spur the activation of inclusive processes for the development of excluded groups of family farmers (FF), such as women, young people and indigenous and Afro-descendant populations.

By consolidating and deepening its relationships with regional, national and territorial institutions responsible for inclusion policies and actions, IICA helped enhance the capabilities of:

- 150 government agencies and social and private-sector organizations in twelve countries, thereby increasing their ability to devise and implement, in a participatory and contextualized manner, institutional frameworks, public policies, mechanisms and operational instruments designed to promote the inclusion of excluded groups of FF in rural territory development processes. These efforts contributed to the creation and consolidation of various interinstitutional platforms used to discuss approaches, put forward proposals and influence the construction of inclusion policies.
- Nearly 4000 women, young people and members of indigenous and Afro-descendant populations belonging to groups, associations, cooperatives, community forums and other types of family farmer organizations. The beneficiaries are now equipped to organize agricultural production, processing and marketing processes in their communities, as well as non-agricultural rural activities (rural tourism, for example). They are also now better placed to play a dignified role in the dynamics of the development of the rural economy, and the social management of rural territories.

- 12 counterpart institutions, enabling them to implement and consolidate processes aimed at coordinating the supply of public policies for inclusive rural development and the organized strategic demand of territorial stakeholders. They are doing so by implementing institutional mechanisms and operational tools that facilitate the social management of rural territories, encouraging the participation of FF organizations—especially those of the most excluded and vulnerable segments—in decision-making processes related to projects and initiatives that reflect their collective interests, with a view to bringing about greater territorial cohesiveness.

Furthermore, the Institute published a document containing conceptual references and methodological guidelines. A public resource, it is intended to facilitate the implementation of multidimensional processes for the inclusive development of agriculture and rural territories, especially those aimed at promoting the inclusion of segments of the FF sector excluded from such processes, considering concrete empirical experiences and lessons learned by IICA in thirteen countries across the continent.

The Institute is mindful of the importance of partnerships to enhance technical cooperation under its new cooperation model. Hence, it focused efforts on strengthening existing partnerships and exploring the possibilities of new partners for rural and FF development. Important work was carried out with the following partners:

- Research and action networks: the territorial rural development networks of Brazil (Rete and Forum DRS), Mexico (Red GTD) and Colombia (Red GTD/PAZ); the Latin American Net-

Registration of family farmers in Bolivia

Through the Agro-environmental and Productive Observatory (OAP), in coordination with the Ministry for Rural Development and Land (MDRyT) and the Ministry for Productive Development and the Plural Economy (MDPyEP), more than 1200 farmers were included in the Consolidated Register of Sustainable Family Farming (RUNAF), thereby making the services they receive more effective.

work on Local Agrifood Systems (SIAL); the Latin American Network of Rural Extension Services (RELASER); and the Network for Public Policies and Rural Development in Latin America and the Caribbean (Red PP-AL).

- Civil society and private sector bodies: the Confederation of Family Farmer Organizations of the Expanded MERCOSUR (COPROFAM), the MERCOSUR Specialized Meeting on Family Farming (REAF), the Ayuda en Acción Foundation (AeA), Cooperatives of the Americas (ACI-Américas) and the Fund for the Development of the Indigenous Peoples of Latin America and the Caribbean (FILAC).
- International technical and/or financial cooperation agencies, such as CIRAD, CATIE, the FAO and the International Fund for Agricultural Development (IFAD).

- Other partners: the Regional Rural Dialogue Program in South and Central America, the Andean Regional Group, Ecuador's Alliance for Entrepreneurship and Innovation, the Southern Cone National Rural Youth Network, Honduras' National Women's Network and Guyana's Women's Agro-Processors Development Network.

At least four countries implemented technical and institutional capacity building processes to improve their rural extension services. These efforts resulted in the training of 32 Belizean officials; the creation of a joint public and private sector forum under the leadership of Ecuador's Ministry of Agriculture and Livestock, which made it possible to reposition technical assistance and rural extension (TARE) on the country's public agenda; the development and implementation of the Program "Departmental Agricultural Extension Plans for the Coffee Region in Colombia," through a technical partnership between IICA and the local governments of the departments of Caldas, Quindío and Risaralda; and the completion of the online platform for the application of the PVS-TARE tool, developed by IICA, validated in Chile and made available for use as a public resource in other contexts.

Nine countries have strategies to promote the differentiation of FF products targeted at specific markets, and technical assistance for the development of markets. IICA assisted them through the sharing of experiences; the design of distinctive tools, such as FF seals in El Salvador, Paraguay, Honduras, Bolivia and Ecuador; the training of 110 commercial managers, who will promote new markets for FF products and the competitive integration into those markets of FF organizations in Uruguay, Peru and Colombia; and the establishment, in Uruguay, of a public/private interinstitutional mechanism for

The Seasonal Agricultural Worker Program in Canada

The Institute raised the awareness of Canada's Government and industry of the opportunity offered by the Seasonal Agricultural Worker Program (SAWP) to promote knowledge transfer, an issue that is the focus of wide debate and is being studied by the country's national authorities. IICA will provide follow-up to the University of Guelph's studies on the subject and design a pilot project to demonstrate the positive impact of repatriated workers on organic and greenhouse production. IICA's analyses suggest that 80% of the workers participating in the SAWP learned about new production techniques on Canadian farms.

the design of proposals for commercial integration based on short marketing circuits and brand names.

In 13 LAC countries, the Institute helped to strengthen the management of 100 FF associative and agribusiness organizations, and promote their access to support services and commercial ties through the implementation of improvement plans drafted by agribusiness interns, who the ministries of agriculture of Ecuador, Guatema-

la and El Salvador made a permanent feature of their operations.

Moreover, IICA spearheaded the implementation of the Program for the Design of Strategies for the Improvement of Services in Support of Family Farming (SSFF), resulting in the design and execution of strategies to improve such services in El Salvador, Paraguay, Peru and Venezuela; and in more than 1000 technical officers of public, private and academic institutions in 19 countries enhancing their knowledge of strategies for linking the supply and the demand for SSFF more closely, and improving such services.

The Institute made progress with the conceptualization and implementation of a knowledge management platform that will serve as a technical cooperation tool, containing information about the knowledge and capabilities that IICA has generated in recent years. Its main purpose is to increase the Institute's capacity to provide technical cooperation, enriching its partnerships and channeling its partners' capabilities for addressing the priorities of the countries. The platform looks set to become the key tool for IICA's activities in the years ahead. A good example is the e-jovenrural app, which facilitates the sharing of information and knowledge about enterprises and rural youth, and access to support services and specialized and adaptable methodologies, guides and tools, based on the "Guide for the modeling of enterprises for rural young people (MEJOR)," which is used to prepare, carry out and provide follow-up to a workshop for the construction and validation of inclusive business models. Developed by IICA, it was validated with nine youth organizations in El Salvador and Paraguay.

IICA also undertook an intense training effort in at least 20 member countries, thanks to which 260 technical officers and students ac-

quired new expertise related to the design, monitoring and evaluation of public policies and their instruments in a differentiated way for FF and for their socio-productive development and contribution to rural territories. The Institute offered in-person and online courses that made it possible to consolidate the generation of tools and work methodologies, and apply them in processes for the design of public policies promoted by the ministries of agriculture.

Another 140 technical officers shared their experiences with regard to good production practices, local knowledge and technological, organizational and institutional innovations through peer dialogues held in five countries with the participation of national producer organizations and the extension agents who serve them. An international exchange between Paraguay and Chile also enabled the former to learn about Chile's experience with the Sello de Manos Campesinas and incorporate institutional, technical and organizational innovations aimed at improving Paraguay's Sello de Agricultura Familiar.

The conclusion of national FF training plans implemented with the support of universities, centers of education and farm schools resulted in the training of nearly 500 leaders in Chile, Guatemala, Honduras and Venezuela in various subjects that will allow them to improve FF production systems in a sustainable way, such as GAP, AHFS, agroecology, crop management, agricultural food processing, water management and youth enterprises.

The Institute completed the negotiation, approval and signing of a grant agreement with IFAD, to carry out the "Knowledge Management for the Adaptation of Family Farming to Climate Change" project (INNOVA-AF) for USD 2 million, during the 2018-2021 peri-

od. The project's Operational Unit was established; agreements with the partners (CATIE and CIRAD) were signed; and, in collaboration with IFAD, the regions that will be involved in the project in eight countries (Brazil, Ecuador, Colombia, Bolivia, Guatemala, Honduras, Dominican Republic and Mexico) were chosen. The competitive fund for the project was also designed, and the guiding framework established, in conjunction with CIRAD, for the scaling up of innovation experiences. A methodology was developed, in partnership with CATIE, to identify and prioritize needs and requirements to enable FF to adapt to climate change.

Agricultural awareness in Uruguay

Under this theme, the Ministry of Livestock, Agriculture, and Fisheries (MGAP) of Uruguay is fostering a culture to bridge the rural-urban divide and to promote lifestyles and ways of relating that facilitate better opportunities for the agriculture sector and strengthen its potential to contribute to the country. IICA assisted in the design of a promotional strategy, based on technical public opinion studies and prospective studies on the labour market and training needs.

In order to provide additional resources to the countries, IICA signed a framework cooperation agreement with the AeA Foundation to complement and strengthen mutual action in territorial development and FF in Latin America. AeA approved IICA's proposed project: "Boosting collaborative leadership capacities to improve the standard of living of rural dwellers in Zacapa and Chiquimula, Guatemala, 2019-2020". The project will apply the "unleashing local energies" methodology in AEA's 2018-2020 Eastern Territorial Development Program in the Motagua Basin (negotiations for the respective IICA-AeA grant agreement are already underway). Additionally, funding was sought for the project—"Regional Exchange and Capacity Building Program for Agricultural Health and Food Safety and Family Farming Services" (Healthy Communities)—prepared in partnership with the REAF, for implementation in eight countries in South America.

An alliance between IICA, PRONATURA South, the Nature Conservancy (TNC), the National Commission of Protected Natural Areas (CONAP) and CATIE, resulted in the implementation of the "Inter-institutional Platform for Exchange, Coordination and Joint Action for the Development of the Sierra Madre de Chiapas" in Mexico. The partners will provide technical, financial and institutional support and will develop a project to manage the resources that are required for its operation.

Differentiated actions of the Institute in the Caribbean contributed to the completion of the Action Plan for Technical Capacity Building in Beekeeping in eight countries, which began in 2016. A workshop was held to present and evaluate the results of this plan and to develop proposals to enhance the sustainability of bee production. Moreover, the Family Farming: Considerations for Agricultural Policies in

the Caribbean document was prepared through a participatory process, supported by the IICA Delegations in the Caribbean. This document analyzes FF-related issues that are addressed by current public policies, as well as the existing gaps, areas for improvement, and the potential value to the region of strengthening FF through public policies.

IICA's position and international presence in Latin America's agenda to develop rural territories and FF have enabled it to exercise leadership in both areas and to provide relevant support in international activities and meetings with partners and donors, such as:

- International Seminar on Public Policies and Rural Development in Latin America: Assessment and Prospects, organized by the PP-AL Network in Cali, Colombia, where the Institute joined with other organizations in recognizing and exploring alternative ways to foster the scaling up of rural development initiatives.
- XII International Forum on Territorial Development, which IICA organized in Bogotá, and which helped to position the Institute as a preferred partner for the implementation of the Colombia Peace Plan.
- Alliance for the Elimination of Rural Poverty in Latin America, organized by FAO in Argentina, in which the Institute's participation confirmed the importance of its role in providing technical cooperation to combat rural poverty.
- IFAD Subregional Meeting with Partner Institutions in Mesoamerica
- Doctoral Program in Sustainable Inclusive Development of Loyola Andalucía University.

- First Meeting of Ibero-American High Level Authorities on Indigenous People, organized by FILAC in Guatemala.
- International Forum on Territorial Development, organized by the PP-AL Network and the International Center of Economic Policy for Sustainable Development (CINPE) of the National University of Costa Rica (UNA).

Gender and rural women

IICA prepared a Strategy on Gender and Rural Women in the Development of Agriculture and Rural Areas, which establishes the guidelines for the Institute's cross-cutting theme in the 2018-2022 period. One of the tenets of the Institute is to improve the position of women in rural areas from multiple perspectives, and, in particular, to strengthen their role in agriculture, as a legitimate means of creating change in gender relationships through a greater level of equality.

The Institute's promotion of the gender issue in the international arena called for active participation and involvement in various activities, in particular, the following:

- Series of Conferences on Gender and Youth, in which there were two conferences that were open to the participation of technical experts and specialists in different fields and were streamed online to IICA member countries ("Gender and Rural Women" and "Transforming Gender Relations: Addressing Conflicts between Men and Women"), and a conference entitled "Conversation on Gender and Women", in which participation was restricted to gender specialists". One hundred national technical experts were in attendance.

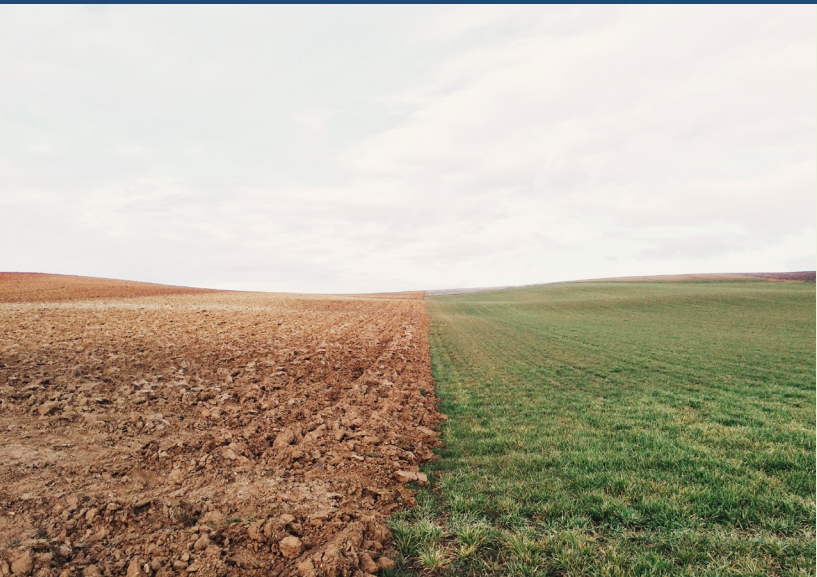
- Commemoration of International Day of Rural Women, in which 150 people participated, including representatives from the diplomatic corps, government institutions and women’s organizations, as well as national technical specialists, among others.
- Photo exhibit, “The Soul of Rurality”, which arose out of an unprecedented partnership between IICA and the Vogue Brazil fashion magazine. It sought to turn the public spotlight on women living in rural areas, true examples of resilience, sisterhood and courage. The images, which included 25 photographs by renowned photographer, Cecila Duarte, portray the reality of women who work the land in Jujuy (Argentina), Pará (Brazil), Treasure Beach (Jamaica), and La Antigua (Guatemala).
- Publication of the book “Warriors – Rural Women Around the World: 28 Enlightened Voices”, which is a collection of articles by different personalities across the world, offering different perspectives on the situation of rural women and their true contribution to agricultural activity and the development of rural areas. Illustrated with photographs by the award-winning

Brazilian photojournalist, Sebastião Salgado, the book is a powerful source of reflection on the topic and provides an initial framework for the formulation of sound public policies targeting rural women.

- IICA’s signing of respective letters of understanding with the Ministry of Social Development of Brazil, the Council of Women’s Affairs Ministers of Central America and the Dominican Republic (COMMCA), and the Superintendency of Telecommunications (SUTEL) of Costa Rica, in support of rural women.

The Institute undertook various cooperation actions in support of rural women in Antigua and Barbuda, Argentina, Brazil, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Jamaica, Paraguay, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, and Venezuela, including providing support to women’s producer groups, and to the formulation of gender policies and affirmative strategies, the development of production plans, collaboration to capitalize on agribusiness opportunities, and the strengthening of training processes.





Resilience in rural territories and agrifood systems

Few things are more dramatic to the eye than the socioeconomic effects of the loss of crops and animals due to extreme events, emergencies and catastrophes. As an institution tasked with providing cooperation for agricultural development, IICA has the responsibility to promote sound risk management, increased resilience and the sustainable management of productive resources.

The Institute organized different national coordination actions to facilitate new institutional arrangements, promote the design and application of public policies, and implement actions aimed at permitting an agricultural transition under different scenarios and productive risks associated with climate change and other environmental issues. The most important of these efforts included:

- The Community of Practice on Adaptation and Agriculture in Central America.
- The Sustainable Cattle Ranching Forum in Colombia.
- Dialogue between the public and private sectors for the control of coffee rust in Peru.
- The Interagency Technical Group on Ecosystem Services in Uruguay.
- Risk management policies in the Dominican Republic.
- The Municipal Forum for Dialogue on Integrated Risk Management and Climate Change Adaptation in the Sensati Valley, Honduras.

Furthermore, IICA facilitated three exchanges with 75 actors in order to establish strategic guidelines for Panama's National Climate Change Plan for the Agricultural Sector, drawn up with the Environment Unit of that country's Ministry of Agriculture Development (MIDA). This plan attracted interest from the Ministry of Environment (MiAMBIENTE) and international agencies such as FAO and CATIE, and is a good example of collaborative work designed to identify the main prevention and mitigation actions needed to make it possible to cope with the negative effects, and even

take advantage of the changes to further develop agriculture.

In Peru, in collaboration with the Consortium for Sustainable Development of the Andean Ecoregion (CONDESAN) and Helvetas Swiss Intercooperation, an online course was designed entitled “Mountain ecosystems for sustainable development in the Andes,” targeted at social communicators and journalists in the Andean countries. Its purpose is to raise the profile of the issue and alert public opinion to the importance of mountain ecosystems and the contribution they can make to the achievement of the Sustainable Development Goals (SDG).

Prospective analysis of the possible effects of climate change on the agriculture sector is important for planning and decision-making. For that reason, IICA co-organized a Global Workshop (the seventh so far and the first to be held in Latin America) of the Agricultural Model Inter-comparison and Improvement Project (AgMIP). The activity attracted more than 130 people from all over the world, including an important contingent from LAC. IICA facilitated three opportunities for dialogue for the LAC participants, which concluded with a discussion of the needs, objectives and next steps required to determine the practical implications of the issue in the region, and the drafting of three project profiles.

The Institute also assisted the public and private sectors of Antigua and Barbuda with their efforts to restore production in the wake of hurricanes Irma and Maria, mainly with regard to beekeeping, alternative ruminant feeding systems and greenhouses. Similar efforts took place in Dominica, where experiences were shared regarding more resilient agricultural technologies, and capacity building was undertaken to improve the entrepreneurial skills used in composting and water collection.

Reforestation efforts in the Atlantic Forest of Eastern Paraguay

Under the Itaipú Binacional-IICA agreement, the Institute contributed to the connectivity of remaining patches of forest. The implementation of 1197 reforestation subprojects resulted in the planting of 1,152,872 trees of native, exotic and forest species, while 1549 hectares of new forest cover was planted with native, exotic and fruit tree species, as well as produce for on-farm consumption (organic vegetables and medicinal plants).

In St. Kitts and Nevis, 16 greenhouses were rebuilt and agricultural inputs were supplied to reactivate production. Furthermore, with the FAO and the U.S. organization Garden Pool, innovative aquaponic systems were built to contribute to the development of more resilient agriculture.

In Brazil, in partnership with the Ministry of National Integration, a technical, economic and environmental feasibility study was carried out for the use of renewable energy sources under the San Francisco River Integration Project (PISF), which would produce savings of more than 350 million reales per year for the federal and state governments.

One of the most important cooperation actions was carried out in Venezuela with the

Fund for Sustainable Access to Thermal Renewable Energy in Peru

With resources from the Energising Development (EnDev) Program, this IICA-implemented project injected new dynamism into the renewable energy market. The beneficiaries included 49,655 rural inhabitants who now have access to energy technologies for use in the home (improved stoves, photovoltaic systems and solar panels), while 1146 enterprises have access to energy for productive uses (greenhouses and solar dryers), leading to a 4727-tonne reduction in CO₂e emissions.

Nestlé firm. Under the Water for Life Program, the responsible use of water was promoted in the states of Aragua and Lara through the use of indicators to monitor good practices and thereby improve the quality of water and reduce consumption. Furthermore, working with several universities, mayors' offices and other local entities, Nestlé and IICA spearheaded the Comprehensive Training Program for the Sustainable Production of Cow's Milk in Táchira and Zulia.

In Suriname, working in tandem with Australia's cooperation agency and the country's Ministry of Regional Development, the Institute set up 30 low-cost rainwater collection systems to mitigate the negative effects of the long periods of drought that affect the country, and the

negative impacts of water sources polluted with mercury as a result of gold and lead mining activities.

In the area of soil management, 2018 saw the completion of the capacity building process related to the use of organic matter to rehabilitate degraded soils in Jamaica, Suriname, Antigua and Barbuda, Haiti and Guyana. In Haiti, with assistance from the U.S. Agency for International Development (USAID), IICA trained producers and the staff of community farming offices in the use of soil analysis kits, and 220 kits were distributed. The capacity of interest groups to implement climate smart agriculture techniques was enhanced in St. Vincent and the Grenadines, where demonstration models were established for soil conservation, water management and collection, as well as drip irrigation.

IICA took the lead in the holding of a workshop for the sharing of experiences, good practices and lessons learned from pilot projects on the subject of resilience, and in the organization of a forum of donors (FAO, WFP, UNESCO, AECID, IDB, USAID, IFAD, Swiss Cooperation, French Cooperation and the Ministry of Agricul-

Resilience Center for Global Agriculture

Under the leadership of the Ministry of Agriculture of Dominica, plans are afoot to establish a demonstration center of good practices in the fields of resilience, technology transfer and knowledge sharing for farmers and technical personnel in the Caribbean region.

Water management experiences in Brazil

The Institute assisted the Ministry of National Integration and the Ministry for Cities with their efforts to generate innovations, such as the Master Plan for Irrigated Agriculture and the Agricultural Reuse Project in the Federal District, and the training of professionals in the regulation and oversight of water supply and basic sanitation services.

ture of Haiti), where a portfolio of 17 profiles of projects related to resilience were presented.

The Institute's member countries have three new digital tools that facilitate the further development of national information systems on soils and the digitalization of data to support decision-making, the design of public policies and the establishment of priority actions for sustainable soil management and water management. The tools concerned are an inter-American, open access platform of soil maps; a protocol for water erosion maps; and a protocol for the mapping of the degradation of pastureland.

Furthermore, 18 Spanish-speaking IICA member countries have an observatory that compiles, disseminates and analyzes important information, innovations, indicators, instruments, policies and institutional models related to integrated risk management in agriculture across the continent. With the collaboration of several academic and development institutions, the Institute implemented the third distance

learning course on risk management and agricultural insurance in Latin America, in which 166 professionals took part. Working with World Animal Protection and the Coordination Center for the Prevention of Natural Disasters in Central America (CEPREDENAC), IICA undertook capacity building actions related to risk management and methods of estimating the impact of disasters on the livestock sector.

In other capacity building efforts, more than 1200 producers and professionals who work for public and private institutions acquired new expertise in integrated risk management (166 people), beekeeping, climate change, health, agroecology, bioinputs and sustainable production (more than 300 people), good practices for dealing with emergencies (645 people in 29 countries), water resource management (367 people) and the System of Rice Intensification (245 people).

Other major activities were as follows:

- Regional Workshop: Good Livestock Practices in Dairy Herds and Raw Milk Quality, targeted at both the public and private sectors and carried out jointly with the Executive Secretariat of the CAC and FECALAC.
- Inter-American Forum on Biobeds in Agriculture: A Viable Technology to Reduce the Risk of Contamination from Pesticide Use, organized by IICA and EMBRAPA to increase agriculture's resilience by means of integrated risk management. More than 365 actors from 22 countries took part.
- Use of the "Guide to good agricultural practices for resilient agriculture" (IICA-EMBRAPA), which made it possible to enhance institutional capabilities with respect to GAP in Honduras, Costa Rica and Brazil.



IICA as a bridge for knowledge management in the Americas

Thanks to its status as an international organization with offices in its 34 member countries and the resources it possesses for increasing the exchange of technical and scientific know-how, the Institute has been able to conduct an uninterrupted process of capacity building for the countries. Some examples of IICA actions in this area are as follows:

- The Institute carried out actions with Microsoft aimed at the digital transformation of agriculture, including the development of a chat bot on coffee, the IICA Play project and the analysis of the scope of a future museum of agriculture. Two project proposals were also drawn up, the first related to a system of technical assistance for family farmers in Brazil, and the second on climate change adaptation strategies in Argentina, for which
- the IICA-Microsoft-América Movil agreement would be put into effect.
- Working with Mexico's National Council on Science and Technology (CONACYT), for the fourth consecutive year scholarships were awarded under the project that enables professionals to undertake specialized studies and earn master's and doctoral degrees in agriculture at Mexican universities. In 2018, the project exceeded its goal of awarding scholarships to 100 professionals. In addition to the 260 scholarship holders from 18 countries that are currently benefitting from the program with CONACYT, more than 8000 people received training through 17 specialized courses hosted by IICA's virtual training system, in which an estimated USD 1 million have been invested. See Annex 3.

- Through the Agricultural and Fisheries Information System (SIAP) that IICA has been supporting in Mexico, agents in that country's agrifood chains enhanced their expertise in the use of agricultural and fisheries information to design, monitor and evaluate public policies, conduct economic analyses and take decisions.
- In Venezuela, working with the Office of Information and Communication Technologies of the Ministry of Popular Power for Productive Agriculture and Land (MPPAT), the Institute held the Third Meeting on Information and Communication Technologies in Agriculture. The presentations focused on the use of precision technologies, geographic information systems and drones and sensors in agriculture, which will make it possible to advance toward what is known as "Agriculture 4.0."
- With financing from IFAD and working with the CTA and FAO, IICA carried out the Latin American component of the global project "Capitalization of Experiences for Greater Impact in Rural Development." More than 120 public and private sector professionals in Peru, Paraguay, Colombia and Costa Rica were trained in the use of an experience capitalization methodology. The complete course is available on the FAO virtual campus, at www.imarkgroup.org.

Full details of the cooperation that IICA provided in each of its member countries, and the results achieved in 2018, are available in the form of data sheets on IICA's Web page (www.iica.int). A brief list of the Institute's knowledge products is to be found in Annex 2 of this report.



Governance and official meetings

Executive Committee (EC)⁴

At the Thirty-Eighth Regular Meeting of IICA's Executive Committee, held on 17 and 18 July 2018 at IICA Headquarters in San José, Costa Rica, the governing body of the Institute reviewed various matters related to institutional policy and technical cooperation services.

The EC approved the 2018-2022 Medium Term Plan (MTP), which will serve as the guiding framework for institutional actions during this period, and which proposes a new paradigm of cooperation geared toward increasing opportunities for rural communities in the Americas, through hemispheric programs and national, regional, and hemispheric cooperation agendas.

The Committee considered the Director General's proposal to transform IICA, in keeping with a new vision for the future of agriculture, to be congruent with the Institute's mandate and felt that the proposal satisfied the countries' demands for the Institute to be efficient in its provision of cooperation services. Members of the EC analyzed the document that was presented, enhanced it with their suggestions, and approved it unanimously.

The EC also supported the formalization of various cooperation agreements with IICA's strategic partners, which will enable the Institute to strengthen its technical cooperation. It also recognized the importance of strengthening relationships between the public and private sectors and

4. The Committee was comprised of the following Member States: Antigua and Barbuda, Brazil, Canada, Chile, Colombia, Honduras, Mexico, Nicaragua, Panama, Peru, St. Kitts & Nevis, and St. Vincent & the Grenadines.

civil society in international cooperation matters for the benefit of agriculture in the hemisphere, bearing in mind that at this time the countries of the Americas require the involvement of several stakeholders in the development of agriculture and rural well-being.

Moreover, the EC approved the 2019 Program-Budget, which will enable the Institute to execute cooperation activities proposed in the new MTP, by efficiently using available funds. The Committee also believed that the current IICA Administration has managed the financial resources efficiently and transparently, and therefore approved the Institute’s financial statements

and the reports of the external auditors and the Auditing Committee.

Finally, the Committee paid special recognition to IICA’s work with other international organizations, such as the Tropical Agricultural Research and Higher Education Center (CATIE), the Caribbean Agricultural Research and Development Institute (CARDI), and the Food and Agriculture Organization of the United Nations (FAO). This work has enabled the Institute to fulfil the mandate of the Inter-American Board of Agriculture (IABA) to continue strengthening the implementation of strategic partnerships and the development of joint cooperation actions with these and other organizations.

Official meetings held in 2018

Official name	Date	Venue	Place and date of publication of the report or proceedings of the event
2018 Regular Meeting of the Special Advisory Commission on Management Issues (SACMI)	9 May 2018	Virtually, from IICA Headquarters in San José, Costa Rica	San José, Costa Rica, 17 May 2018
Thirty-Eighth Regular Meeting of the Executive Committee	17-18 July 2018	San José, Costa Rica	San José, Costa Rica, 17 December 2018



Principal Corporate Management Results

Strategic management

A new team, headed by the Director General, formulated the general guidelines and work structures for 2018. Based on the MTP, which the Member States approved for the 2018-2022 period, the Institute embarked on a modernization process, creating a more operational structure with three directorates: Technical Cooperation, Corporate Services, and External and Institutional Relations - each of them encompassing different divisions and coordinating offices. IICA's organizational chart was streamlined, moving from a vertical structure, with a wide range of positions and persons, to a completely horizontal, flat, and decentralized structure, in a bid to reduce bureaucracy by promoting collaborative work between persons, teams and processes.

Additionally, the Organizational Design Division was created, as one of the first actions implemented under the framework of the "Improving Institutional Efficiency through a Process Culture" project, which is geared toward increasing effectiveness, decreasing bureaucracy and driving organizational change, thereby encouraging collaborative

work. An analysis and assessment of the current situation was undertaken, with the support of external consultants and the extensive involvement of staff, which included gathering information on processes at Headquarters, and conducting a survey in the IICA Offices in member states with respect to improving their relations with Headquarters. This enabled the Institute to define its value chain, which includes 13 macro processes, and the streamlining of the respective processes is now 80% complete.

In order to facilitate and streamline processes, multidisciplinary work teams reviewed institutional regulations such as Executive Orders 33/2018, "Procurement of Consultants", and 31/2008, "Policies and Procedures on the External Resources Mobilized by IICA". The ensuing recommendations will be implemented in 2019. Through the establishment of working groups, several efforts were made to improve control mechanisms, sustainability strategies and staff well-being, among other elements.

The various technical and administrative units presented proposals for their 2018 work plans via

the planning, programming, monitoring and evaluation systems, all of which were then reviewed. The real-time monitoring exercise enabled follow-up of projects, actions and units, and 87.01% of the goals set for 2018 were achieved. IICA's entire agenda was rigorously monitored on a monthly basis, using modern mechanisms, including "business intelligence", which enabled the operational units to receive information on a timely basis.

In its quest for excellence in the provision of technical cooperation and continuous learning, the Institute incorporated the concept of experience capitalization, developing a new methodological tool to provide feedback on projects and for knowledge management, thus complementing the Institute's evaluation policy.

Within this framework, the Agricultural Health and Food Safety Program and the Center for the Promotion of Technical Capabilities and Leadership were evaluated. Additionally, through the FAO-CTA-IICA project, funded by the International Fund for Agricultural Development (IFAD), more than 30 IICA specialists were trained in the application of this methodological tool. The internal self-evaluation exercise of cooperation initiatives produced a total of 84 analyses.

The IICA Brazil, Mexico, and Paraguay Offices, as well as Headquarters shared experiences, best practices and success stories in using information systems, to enable their use by the Delegations, without the need to acquire new systems.

On the other hand, the Unified Information Management System (SUGI) was updated based on guidelines in the new MTP, thus enabling the monitoring of programmed results and indicators, in alignment with the five hemispheric programs and two cross-cutting themes defined in the MTP. The upgrades in the SUGI system yielded positive results in the program activities from as early as the latter half of 2018, even ahead of the proposed 2019 roll-out of the system.

The approval of the MTP, which was designed to respond to the needs and expectations of the countries, facilitated adjustments in planning exercises for 2019 at the hemispheric, regional, and national levels, as well as a more accurate assessment of roles, levels of completion, procurement of resources and capabilities of each technical and administrative unit in the countries and at Headquarters.

Finally, the Institutional Pre-investment Fund for the Management of External Funding Opportunities (FONPRI) was established to support efforts to secure external resources through strategic alliances that will strengthen the technical cooperation provided to member countries.

Budgetary and financial matters

The Institute executed institutional resources (quotas, miscellaneous income and ICR/INR), in keeping with the criteria of quality, effectiveness, rationality, equity, and transparency. The total amount executed increased to USD 38 651 836, distributed as follows: USD 27,277,067 from quotas, USD 2,341,482 from miscellaneous resources, and USD 9,033,287 from the ICR/INR. The amount executed in externally funded projects was USD 154,270,157.

Measures that were implemented to rationalize the process of approving both internal and external budgetary resources enabled a decrease in response times. These measures were introduced in tandem with the application of a "zero paper" policy, which encouraged the use and exchange of digital files and online work.

IICA authorities and governing bodies were advised of the status of Member States with respect to the payment of quotas for and prior to 2018. Measures adopted to facilitate the collection of quota contributions, resulted in the collection of USD 27.6 million of quota resources, amounting to 93.01% of the annual budget for these resources.

The fact that all units operated in strict compliance with U.S. Generally Accepted Accounting Principles (USGAAP) ensured the reliability of financial information and institutional financial statements. On the other hand, further to a recommendation by the external auditors, a specialist firm was hired to conduct actuarial studies on specific employee termination benefits.

The institutional risk assessment matrix was also reviewed and updated, thus adding to IICA's control mechanisms for mitigating potential risks.

There were also improvements made in the SAP system at the hemispheric level and in relation to its use by the Delegations, with the successful configuration of two important, new reports and the integration of the Brazil Delegation's portal into the system, respectively. Work also began on a process to assess the feasibility of CATIE using SAP to strengthen its financial and accounting administration.

Efficient and timely administration of funds for the operation of the Offices and units of IICA ensured the timely delivery of cooperation services and optimum use of the capabilities of the Institute.

Human talent

During 2018, the Institute's Headquarters initiated a labor mobility process, thereby reducing operational costs and facilitating a more efficient use of human resources.

The Human Talent Division also embarked on an important restructuring exercise, relying on the support of consultants who assessed the current situation and designed and developed a strategy to strengthen this unit, which is now in its implementation phase.

A roadmap was developed for the introduction of a new individual performance management model in 2019 that will transform the organizational culture, develop leadership within IICA, and foster its adoption of the best practices in the market.

Services

The Institute continued to rationalize its processes to respond to requests submitted to the Corporate Purchasing Committee. Notwithstanding the specified five-day grace period, 24% of the requests were resolved within 24 hours. In this way, Delegations and other operating units were offered immediate solutions, thereby improving the efficiency of the technical cooperation provided.

Surveys were conducted on the entire spectrum of administrative services, providing valuable information that served as input in improving the delivery of services and adding value at Headquarters. For example, the survey on the services provided by the medical unit identified areas for improvement, such as the need to increase the duration of visits and the range of services, and to compile a database of patients with high risk conditions who require continuous follow-up.

Furthermore, equal opportunity measures were strengthened at Headquarters for persons with disabilities, in accordance with the Republic of Costa Rica's Law No 7600. Two of these measures included the installation of a service lift/ elevator and the creation of a lactation room for employees and visitors. Similarly, extensive effort was made to implement environmental measures towards gaining certification in Costa Rica's Blue Flag Ecological Program (PBAE).

Annexes

Annex 1 21 rapid response actions implemented in 2018

Year	Name	Country	Amount (USD)
2017	Catalyzing a multisectoral program to support water and soil management in the face of climate change in the Dominican Republic	Dominican Republic	5135.61
2017	Supporting the development of a coffee industry in St. Vincent and the Grenadines and the Commonwealth of Dominica	Saint Vincent and the Grenadines	4193.00
2017	Surveying of local initiatives aimed at reassigning value to and marketing family farming products, and a study of opportunities for coordination and synergies	Uruguay	8000.00
2017	Development of the Plan to Monitor Antimicrobial Resistance in Animal Health for Chile, Ecuador and Colombia	Headquarters	7498.00
2017	Transferring knowledge & skills through the Canadian Seasonal Agricultural Workers Program (SAWP)	Canada	1677.00
2017	Phase 2: Gradual implementation of the Program for the Post-emergency Reactivation of Agricultural and Other Production in the Province of Esmeraldas	Ecuador	36,900.00
2017	Updating of Ecuador's National Irrigation and Drainage Plan	Ecuador	50,000.00
2017	Preparation of a domestic agenda (roadmap) for the development of the bioinput sector, agreed upon by stakeholders	Argentina	8350.00
2017	Regional Strategy to Control the Reemergence of the Locust	Headquarters	-
2017	Rehabilitation of the rural agricultural communities of Antigua and Barbuda	Antigua and Barbuda	13,878.00
2017	Agricultural sector rehabilitation initiatives	Dominica	6500.00
2017	Proposal to support the rehabilitation of agriculture in Saint Kitts and Nevis post Hurricane Irma	Saint Kitts and Nevis	2831.22
2017	Strengthening territorial capabilities for the implementation of the General Agreement for the Termination of the Conflict and the Construction of a Stable and Lasting Peace in the Territory of the Ariari in Colombia	Colombia	9873.96
2018	South-South cooperation process between Argentina and the Caribbean Region	Argentina	50,000.00
2018	Developing appropriate CLR management recommendations based on the genetic make-up the rust population in Jamaica	Jamaica	6780.00
2018	Support for the process of constructing the National Epidemiological Surveillance Plan in the Pig Production Chain	Uruguay	6799.00
2018	Agricultural Master Plan for the Western Region (PMARO)	Panama	28,172.00
2018	Support for 13th CaribVet Steering Committee Meeting & 18th CARICOM Chief Vet. Officers Annual Meeting	Antigua and Barbuda	5000.00
2018	Agricultural awareness	Uruguay	7000.00
2018	Participatory drafting of development projects for agricultural and rural departments, with a territorial focus and emphasis on the strengthening of FF and productive partnerships, together with the Ministry of Agriculture and Livestock as well as the governments of selected departments	Paraguay	5000.00
2018	Strengthening of national technical cooperation during Mexico's governmental transition process	Mexico	25,748.00
Total amount of IICA resources invested:			USD 289,335.00

Source: Programming, Budgeting and Control Division (PBCD).

Annex 2

IICA knowledge products

IICA Virtual Campus	The 17 available courses have benefited close to 8,000 participants, of which 2125 completed at least one course.
Alliance of Agricultural Information Services - SIDALC www.sidalc.net	The alliance, comprised of 178 institutions in 22 countries, facilitated access to 3.12 million references and 271,903 full-text documents, archived in 350 databases. The latter were accessed 5.5 million times, with 863,333 million recurrent users signing in on two or more occasions. Users shared 52,000 articles and documents, which represented the mobilization of USD 2 million through knowledge sharing.
INFOAGRO www.infoagro.net	The system's platform, INFOTEC, was fully renovated in order to share information on innovation and technology. The delivery of periodic newsletters to subscribers was relaunched.
AgriPerfiles http://agriperfiles.agri-d.net/	The Institute spearheaded the adaptation and operation of the VIVO system in Latin America and the Caribbean, whose database of information about agricultural professionals and specialists in the Americas was expanded. The platform currently contains 2901 profiles of professionals related to more than 2895 organizations, which represent increases of 35% and 50%, respectively, compared to 2017.
Network for the Management of Innovation in the Agrifood Sector – INNOVAGRO Network www.redinnovagro.in	The network, which contributed content for the training of at least 15,000 people in innovation and food security, has a web portal that registered 38,044 visits as well as social networking pages on Twitter and Facebook with 4815 and 1588 followers, respectively.
IICA Website www.iica.int	In 2018, IICA published 50 books and technical documents, all available in digital format and under the system of Creative Commons licenses.

Examples of recent publications:



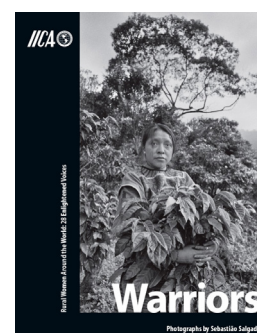
Guía de capacitación para agricultores familiares dedicados a la producción lechera



MEJOR: Modelación de Emprendimientos para Jóvenes Rurales: manual para el diseño e implementación de un ejercicio participativo



Manual: El plan de negocios y la gestión operativa



Warriors: Women Around the World

Source: Center for Knowledge Management and Horizontal Cooperation Services.

Annex 3

Number of scholarship recipients studying for master's and doctoral degrees at Mexican universities under the CONACYT-IICA 100 scholarships program (class of 2018)

In 2018, the number of scholarship recipients reached 260, once again doubling the expected number of beneficiaries. This demonstrates the growing demand for and relevance of this type of program. Since 2012, the Program has benefited 1440 persons; additionally, 544 students have graduated or are in the process of graduating.

Country	Specialization	Master's degree	Doctorate	Total
Bolivia		1	3	4
Brazil		3	4	7
Canada		1		1
Chile		4	4	8
Colombia	4	100	51	155
Costa Rica		4		4
Ecuador	3	9	6	18
El Salvador		3		3
United States			1	1
Guatemala		7	2	9
Guyana		1	0	1
Haiti		8	1	9
Honduras		7	3	10
Nicaragua		2	3	5
Paraguay		3		3
Peru		6	2	8
Uruguay			1	1
Venezuela	1	6	6	13
Total	8	165	87	260

Source: Center for Knowledge Management and Horizontal Cooperation Services.

Acronyms

AeA	Ayuda en Acción Foundation
AECID	Spanish Agency for International Development Cooperation
AHFS	Agricultural health and food safety
AMR	Antimicrobial Resistance
CAC	Central American Agricultural Council
CAN	Andean Community
CATIE	Tropical Agricultural Research and Higher Education Center
CIRAD	Agricultural Research Center for International Development (France)
CONACYT	National Council on Science and Technology (Mexico)
COSAVE	Plant Health Committee of the Southern Cone
CTA	Technical Center for Agricultural and Rural Cooperation
CVP	Standing Veterinary Committee of the Southern Cone
EC	Executive Committee (IICA)
ECLAC	Economic Commission for Latin America and the Caribbean
EMBRAPA	Brazilian Agricultural Research Corporation
ePhyto	Electronic phytosanitary certification
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDA	Food and Drug Administration (United States)
FECALAC	Central American Dairy Federation
FF	Family Farming
FILAC	Fund for the Development of Indigenous Peoples of Latin America and the Caribbean
FONTAGRO	Regional Fund for Agricultural Technology
FORAGRO	Forum of the Americas for Agricultural Research and Technological Development
FSMA	Food Safety Modernization Act (United States)
GAP	Good Agricultural Practices
GVS	Government veterinary service
ICO	International Coffee Organization
ICOA	Inter-American Commission on Organic Agriculture
ICR/INR	Indirect cost recovery/institutional net rate (IICA)
IDB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
IICA	Inter-American Institute for Cooperation on Agriculture
INIA	National Agricultural Research Institute
INIFAP	National Forestry, Agriculture and Livestock Research Institute (Mexico)
INNOVAGRO	Network for Innovation Management in the Agrifood Sector
IPPC	International Plant Protection Convention
LAC	Latin America and the Caribbean
MTP	Medium-term Plan (IICA)
NOP	National Organic Program

NPPO	National plant protection organization
OIE	World Organization for Animal Health
PROCAGICA	Central American Program for Integrated Coffee Rust Management
PROCINORTE	Cooperative Program in Agricultural Research and Technology Transfer for the Northern Region
PROCISUR	Cooperative Program for Agrifood and Agroindustrial Technology Development in the Southern Cone
PROCTROPICOS	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
PVS	Performance, Vision, and Strategy
REAF	MERCOSUR Specialized Meeting on Family Farming
Red PP-AL	Network for Public Policies and Rural Development in Latin America and the Caribbean
SAWP	Seasonal Agricultural Worker Program (Canada)
SENASA	National Service of Agri-Food Health and Quality (Argentina)
SENASICA	National Service for Agrifood Health, Safety and Quality (Mexico)
SRI	System of Rice Intensification
STDF	Standards and Trade Development Facility
TARE	Technical assistance and rural extension
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
WFP	World Food Programme
WTO	World Trade Organization

