



Annual Report
2017



Agriculture
Opportunity
for development in the
Americas

A stylized graphic of a bridge or archway, composed of several curved lines, positioned to the left of the text "Americas".



2017 Annual Report of IICA

Agriculture, opportunity for development in the Americas

March 2018

Inter-American Institute for Cooperation on Agriculture (IICA), 2018



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Message from the Director General

The main message to be drawn from the 2014-2018 Medium-term Plan (MTP) of the Inter-American Institute for Cooperation on Agriculture (IICA) is that agriculture is an activity that creates huge opportunities.

The sector is one of most important sources of employment and income for many of our Member States and the focus of the development cooperation that the Institute provides. Based on the experience it has acquired over the past 75 years, it behoves IICA to continue to generate international public goods and mobilize even more technical and financial resources and knowledge to promote agricultural development and rural well-being across the continent.

In general, the trade negotiations with countries in the region have become very important in the international context, since both North America and South America today play a key role in the production and export of foodstuffs, for which there is great demand in Southeast Asia and Europe.

This scenario offers many opportunities that the countries can tap to become leaders in agricultural innovation; intensify agricultural production in a sustainable way; turn the Americas into a huge factory for producing processed foods, bioenergy, probiotics, nutraceuticals and biomaterials; reduce dependency on fossil fuels; boost agricultural activities as creators of employment; and help alleviate the food and nutritional insecurity that affects more than half of the countries in the Americas.

To take advantage of such opportunities, our efforts should focus on the development of rural areas in the Americas, areas that should be seen as bastions of resilience, hubs of progress and spaces that create wealth and serve as sources of natural resources, ancestral knowledge and decent employment for millions of families.

In getting to grips with the challenge of achieving rural well-being in our countries, we undoubtedly need to focus on the areas of resilience, growth, the sustainability of agriculture in rural areas and efforts to combat the causes of poverty.

IICA has acquired abundant experience in those fields over many years. This annual report for 2017 is a fair reflection of the results obtained by the Institute through its multi-thematic teams and working with its partners in the 34 member countries.

Under the Institute's cooperation model, designed to achieve results of excellence, the organization has used its own resources to consolidate a technical cooperation portfolio comprised of five inter-American projects, three multinational projects, 34 rapid response actions and twelve regional integration mechanisms. That portfolio was complemented with 196 national and international externally funded initiatives worth close to USD 140 million and involving the collaboration of a large number of partners, including the European Union (EU), multilateral banks, cooperation agencies, international research centers and the governments of Argentina, Brazil and Mexico.

Through all these efforts, IICA was able to enhance institutional and individual capabilities in the public and private sectors, promote the modernization of agricultural services (health, extension, research and marketing), foster the competitiveness of agricultural chains and well-being in rural areas, strengthen links between agriculture and the environment to make production systems more resilient, and improve access to markets of agricultural products with ever stricter sanitary and consumption standards.

In view of the above, governments, academia, the private sector and civil society — and IICA as an instrument for all of them — are well placed to make agriculture a positive factor by means of initiatives that resolve the issues on the inter-American agenda, closely aligned with the Sustainable Development Goals (SDG) of the 2030 Agenda.

While the main players in development processes are the countries and their institutions and families living in rural areas, IICA is looking to further develop its technical cooperation model, make even more efficient use of resources, reduce bureaucracy, intensify knowledge sharing and consolidate its strategic partnerships for the benefit of the agriculture sector across the Americas.

Based on the work of previous administrations, on whose best efforts I aim to build, 2018 will mark the start of a new stage in the life of this noble organization. My commitment is to position IICA as the key institution for rural development in the Americas, within the framework of the multiplicity of international cooperation agents that exist today.

Manuel Otero
Director General

Executive summary

As a specialized agency of the Inter-American System, the Institute's mission is to promote agricultural development and rural well-being in the Americas. In 2017, IICA celebrated 75 years of existence and its efforts yielded an abundant harvest of results.

In carrying out its cooperation program, IICA invested the quota resources budgeted for the year in 54 initiatives, broken down as follows: four flagship projects (competitiveness of chains, resilience and climate change, inclusion and family farming); an agricultural health and food safety strategy; three multinational projects on innovation, bioinputs and value added; twelve regional integration mechanisms; and 34 rapid response actions to deal with emerging or short-term situations at the national level. This was complemented with a portfolio of 195 initiatives funded by a wide variety of partners (governments, donors, academia and multilateral banks) that involved the execution of more than USD 140 million over the course of the year.

The main results achieved under the work program were as follows:

- Promotion of **institutional modernization**, including plans, regulations and public policy proposals, and the improvement of processes related to agricultural research services, extension, health, marketing and information. IICA also fostered regional integration and knowledge sharing among countries, serving as a bridge for South-South cooperation.
- More than a dozen **agricultural innovations** implemented with the public institutional framework benefited at least fifteen production chains of interest to Latin America and the Caribbean (LAC). These included biofuels, bioinputs, coffee, cacao, roots and tubers, staple grains, wheat and soybeans, as well as machinery, equipment and information technologies.
- The Institute's 34 member countries were able to address their **plant and animal health** concerns in a timely manner thanks to their participation in international forums, the development of public-private partnerships and training in regulatory frameworks, the Codex Alimentarius and the response to emergencies caused by pests and diseases, among other subjects, which benefited more than 5000 stakeholders.
- In eight countries, the capabilities for the management of ten **agricultural chains** were improved through the application of criteria for increasing competitiveness, sustainability and inclusion, and the use of a set of instruments developed by IICA, which benefited nearly 5000 stakeholders, including, officials, entrepreneurs and producers.
- Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Honduras, Mexico, Peru and Suriname, among other countries, adopted a participatory approach to the implementation of institutional and operational frameworks designed to foster dialogue and political advocacy, **inclusive area-based development and family farming**. The latter's importance was recognized and highlighted by the support for

the Decade of Family Farming 2019-2028 received from a number of international organizations and governments.

- With affirmative actions, IICA implemented projects in at least ten countries that benefitted **women and young** people, under initiatives designed promote the inclusion and development of those segments of the population in the agricultural field.
- Twelve countries enhanced their capabilities for planning for **climate change** in the agriculture sector through horizontal cooperation, training and analyses of processes, while other nations affected by hurricanes Irma and Maria formulated projects to contribute to the recovery efforts and risk management strategies.
- Decentralized management models, systems of indicators and the promotion of innovations demonstrated the countries' experience and IICA's capacity **to foster effective water resource management**. Similar actions were carried out on **sustainable soil** use by means of solutions such as digital platforms.
- Thousands of persons benefited from **training programs** and participation in international forums. In the training area, under the "CONACYT-IICA 100 Scholarships" program, 327 new students (triple the number anticipated) are enrolled in master's degree and doctoral programs at Mexican universities. Some 6643 people took part in IICA's online courses, while more than 30,000 were trained in the large-scale courses organized with Mexican institutions.
- Knowledge outputs that facilitate interaction among experts and information sharing included [The Outlook for Agriculture and Rural Development in the Americas 2017-2018](#), and those produced under the [SIDALC Alliance](#), the [Red Innovagro](#) and the [Agriperfiles platform](#).

As already mentioned, many of these results were achieved through joint efforts carried out with Member States and the cooperation of the collaborative programs of governments such as those of Brazil, Canada, Mexico, Argentina and the United States, as well as on other continents (e.g., Europe, Asia and Oceania). Specific partners were the Inter-American Development Bank/FONTAGRO, the U.S. Department of Agriculture (USDA), the Tropical Agriculture Research and Higher Education Center (CATIE), the French Agricultural Research Centre for International Development (CIRAD), the Caribbean Agricultural Research and Development Institute (CARDI), the International Fund for Agricultural Development (IFAD), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the United Nations Food and Agriculture Organization (FAO), MERCOSUR's Specialized Meeting on Family Farming (REAF) and other national and international research centers.

An important aspect of the work of the governing bodies was the presentation of candidacies for the position of Director General for the period 2018-2022. Dr. Manuel Otero, a citizen of Argentina, was elected to replace Mexico's Dr. Víctor Villalobos.

Finally, in the area of administrative management IICA carried out the different mandates of its Executive Committee (EC) and the Inter-American Board of Agriculture (IABA). The Institute manages its funds, human talent and services efficiently and now

conducts more rigorous monitoring and evaluation processes, in accordance with its culture as an organization geared toward results and continuous improvement.

Further details of the results of cooperation in the countries, including IICA's [publications](#), are to be found at www.ica.int.

About IICA

In 2017, the Inter-American Institute for Cooperation on Agriculture (IICA) celebrated 75 years of existence as the specialized agency of the Inter-American System with a mandate to “encourage, promote and support our Member States in their efforts to achieve agricultural development and rural well-being through international technical cooperation of excellence.”

In carrying out its mission, the Institute’s goal is to realize the following vision:

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

All the services and outputs we provide for the benefit of our 34 member countries are designed to promote a more robust public institutional framework, the development of modern policy proposals and the implementation of innovative projects and actions aimed at improving agricultural productivity, creating more business opportunities within agricultural chains, fostering well-being and inclusion in rural areas, and enhancing knowledge management and the training of human talent.

The main thrust of IICA’s work is summed up in the organization’s delivery of the following eleven contributions to its member countries, aimed at:

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

7. Increasing the capacity of public and private institutions to promote and implement measures for climate change adaptation and mitigation in agriculture, as well as the promotion of integrated risk management in agriculture.
8. Improving the efficacy and efficiency of food and nutritional security programs in the Member States.
9. Ensuring that producers and consumers benefit from greater use of native species, promising crops and native genetic resources with food potential.
10. Improving institutional capacity to reduce losses of food and raw materials throughout agricultural chains.
11. Strengthening the Member States' capacity for interaction and participation in international forums and other mechanisms for the exchange of knowledge and mobilization of significant resources for inter-American agriculture.

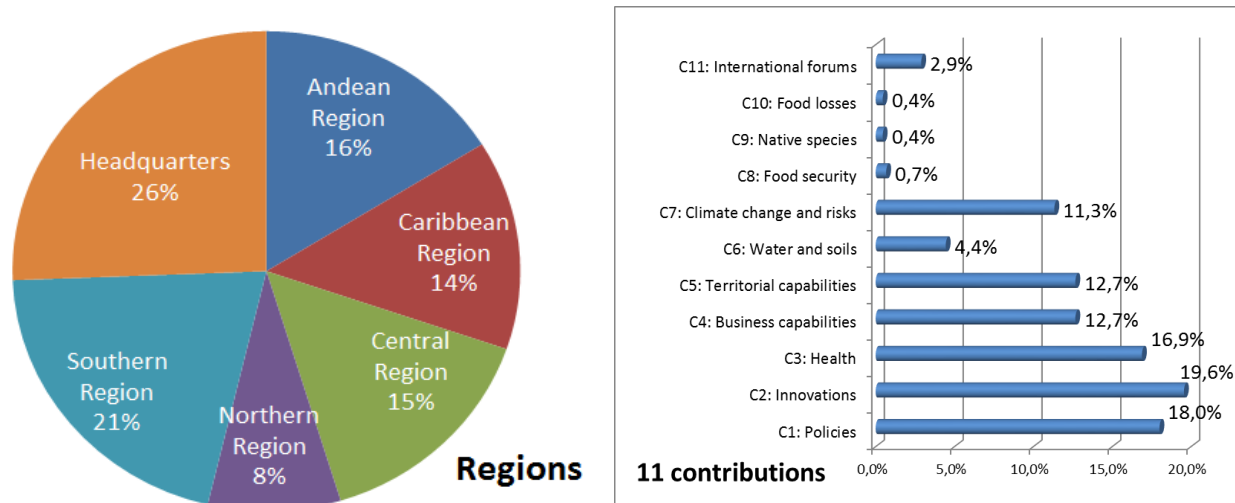
IICA's Headquarters are located in San Jose, Costa Rica. The Institute also has a delegation in the capital of each of its member countries, as well as a Permanent Office for Europe in Spain. Its Director General is Dr. Manuel Otero, an Argentine veterinarian who heads a team of over 300 professionals specializing in agriculture and rural life and drawn from all parts of the Americas.

Main results in 2017

In 2017, the year in which it celebrated 75 years of existence, the Inter-American Institute for Cooperation on Agriculture (IICA) consolidated its efforts to become a results-based organization focused on the achievement of results through actions implemented under its technical cooperation agenda in the 34 Member States. In doing so, the collaboration of dozens of regional and global partners enabled it to carry out more than 195 externally funded initiatives costing in excess of USD 140 million.

For a third consecutive year, IICA's own resources were used to implement the flagship projects (related to agricultural chains, family farming, social inclusion and resilience), the agricultural health and food safety strategy, three multinational projects financed by the Competitive Fund for Technical Cooperation (FonTC),¹ 12 regional integration mechanisms² and 34 rapid response actions designed to deal with emergencies or short-term situations in the Member States.

Figure 1. Distribution of expected results by region and contribution.



The use of a results-based approach enabled IICA to focus its cooperation agenda more effectively and facilitated the organization's evaluation processes, in which better criteria were applied for continuous improvement and good institutional performance. Having set itself the target of achieving 793 expected results, the Institute enjoyed an 85.10% success rate.

¹ The Fund approved the reactivation of five projects granted resources in previous years so that some of the results could be expanded. The Fund allocated resources to a total of eight initiatives in 2017.

² These are the secretariats that IICA operates on behalf of entities whose work is related to agricultural innovation, such as ICOA, PROMECAFE, PROCISUR, PROCINORTE, and PROCITROPICOS; the Southern Region veterinary and plant health councils (CVP and COSAVE); and the agricultural councils of Central America and the Southern Region (CAC and CAS, respectively), among others.

As shown in Figure 1, results were achieved across the continent and in relation to all 11 contributions established by IICA to support its member countries. This underscores the leading role that the Institute plays as an international organization that supports agriculture and rural life in the Americas.

The principal achievements in 2017 related to the 11 contributions are described below:

Public policies and institutional frameworks

The Inter-American Institute for Cooperation on Agriculture (IICA) promoted the use of good practices and methodologies for the design, monitoring and evaluation of policies, programs and projects for evidence- and results-based public management. For a number of years, it has served as a hub for regional cooperation, as mandated by the ministers of the Southern Agricultural Council (CAS), and the Central American Agricultural Council (CAC), working with the member countries to address regional priorities, especially the promotion of regional public policies and the production of regional public goods in the areas of trade, rural development, animal and plant health and food safety, sustainable agriculture and family farming.

IICA contributed its technical expertise to the efforts of public institutions to devise innovation and extension strategies. Various training events on planning, leadership and work methodologies were held in Argentina,³ Belize, Brazil,⁴ Chile,⁵ Costa Rica, Dominican Republic, El Salvador, Grenada, Guatemala, Mexico,⁶ Nicaragua, Paraguay, Peru and Uruguay.

In Peru, proposals were designed and approved for the implementation of the Agrarian Services Platform of the Agriculture and Irrigation Sector, and the Plan for the Modernization of the Public Management of the Sector, as a means to improve the work of the Ministry of Agriculture. Furthermore, through the dialogue involving the Office of the President of Panama, the Ministry of Agriculture and the leaders of the principal organizations in the country's agricultural value chains, recommendations were implemented for a State policy designed to promote competitiveness and foster a modern, inclusive sector. IICA coordinated and led the First National Meeting for the Modernization of Panamanian Agriculture, which, among other things, equipped the country to implement the *Panama Exporta* seal, promote exports and open trade offices overseas.

³ IICA contributed to the management of public agrifood policies and cooperated with the national programs Asistencia Integral para el Agregado de Valor en Agroalimentos (PROCAL III) and Reconversión y Diversificación de Áreas Tabacaleras (PRAT).

⁴ Working with the Government of Brazil and multilateral agencies that are financing five new projects, USD 20 million in external resources were mobilized for family farming, food security, inclusion in production, water, public procurement, social technologies and rural development.

⁵ Course for the certification of the proficiency of extension workers, which benefited more than 1000 extension workers from La Araucanía and Los Ríos.

⁶ Training events in public policy analysis and evaluation, animal and plant health protection, rural area-based development and agrarian registries.

Through participatory events held to provide an opportunity for dialogue and discussion, the following four countries made progress with the development of differentiated public policies for family farming:

- In Colombia, a document entitled “Strategic public policy guidelines for smallholder, family and community farming” was drafted and used as input for the Smallholder Economy and Family Farming bill.
- In Guatemala, a document entitled “Strategic guidelines for strengthening family farming and inclusion in Guatemala” was produced and presented to the country’s authorities.
- In Honduras, the 2018-2030 National Family Farming Strategy was drafted, publicly unveiled and is now under negotiation with a view to its inclusion on the Government Agenda.
- In Peru, the government enacted Law No. 30355 Promotion and Development of Family Farming and its Implementing Regulations, as well as the National Family Farming Strategy (ENAF).

The Institute helped to improve national innovation systems, especially the technical assistance and rural extension (TARE) services of Belize, Paraguay, Uruguay and Venezuela, enabling them to strengthen their institutional frameworks and technical cadres. In Paraguay and Venezuela, the implementation of institution-building strategies got under way following the application of IICA’s Performance, Vision and Strategy (PVS) tool to their TARE services. In Belize, the Ministry of Agriculture, Fisheries, Forestry and the Environment has a strategy for the modernization of the national innovation and extension service, while in Uruguay, the profile of TARE professionals for family farming was designed and validated with the stakeholders.

IICA-USDA partnership to strengthen market information systems

In 33 countries that are members of the Market Information Organization of the Americas (MIOA), IICA, assisted by the U.S. government, cooperated in building the capacity of agricultural market information systems (AMIS) for the collection, storing, analysis and dissemination of information from agricultural markets. In 2017, an MIOA cloud database was created for the management, storing and dissemination of agricultural price information. This is benefiting the AMIS of Antigua and Barbuda, Bahamas, Barbados, Belize, Costa Rica, Dominica, the Dominican Republic, Grenada, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines. Furthermore, a virtual course (in English and Spanish) was launched for the technical staff of AMIS and the general public. This is an important tool for enhancing the capacity to analyze agricultural prices and includes a manual for enhancing technical capabilities for the basic analysis of agricultural prices for decision-making.

In 13 Latin American countries, the staff members of public and private service providers updated their knowledge of strategies for matching the supply with the demand for services in support of family farming. For example, Ecuador, El Salvador, Honduras, Paraguay, Peru and Venezuela, via their ministries of agriculture, local governments and nongovernmental

organizations (NGOs), pushed ahead with the design of strategies for facilitating the access of family farming organizations to such services.

Technological and institutional innovation

IICA promoted the implementation of at least ten technological options to encourage innovation in primary production and processing in nine chains: flowers in Paraguay; cacao, palm, milk, beef and chayote in Costa Rica; cashew in Honduras; and cacao and coffee in Panama. Other innovations were as follows:

- **Bioinputs:** the public institutional framework in the Dominican Republic improved its General System for the Evaluation, Registration and Post-Registration Control of Commercial Bioinputs for Agricultural Use (Inoculants and Biological Pesticides) by introducing regulations and a procedures manual. In Argentina, the Argentine Chamber of Bioinputs and a concerted development strategy were consolidated.
- **Coffee:** Under the Central American Program for Integrated Coffee Rust Management (PROCAGICA), financed by the European Union (EU), a regional research platform was established within the framework of the Regional Cooperative Program for the Technological Development and Modernization of Coffee Production (PROMECAFE), with stakeholders in seven countries working on the implementation of a regional strategy to bolster research on the monitoring of races of coffee rust. In collaboration with World Coffee Research, PROMECAFE is also conducting an ambitious and complex evaluation of the world's 33 best varieties of coffee. In Jamaica, IICA collaborated in the development of an early warning system for rust management in Blue Mountain communities.
- **Cacao and coffee:** In Peru, 500 family farming units are using solar dryers in their coffee- and cacao-growing activities in Cajamarca, San Martin and Puno, as a result of the project Fund for Sustainable Access to Thermal Renewable Energies, financed by the Energy, Development and Life Project (Endev Peru) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- **Sweet potatoes:** In Barbuda, 22 producers were trained in the use of recycled materials to construct weevil traps, while in Jamaica the effectiveness of fungal biocontrol agents to combat the insect was demonstrated, working with the Ministry of Industry, Commerce, Agriculture and Fisheries (MICAF).
- **Beans:** With the support of the U.S. Agency for International Development (USAID) and Michigan State University, 11,400 families received 206 tons of seeds of improved varieties of beans and their production increased as a result.
- **Potatoes:** The Cooperative Program in Agricultural Research and Technology for the Northern Region (PROCINORTE) helped devise strategies for the management of zebra chip disease in Mexico, which is caused by an alphaproteobacterium.
- **Wheat and soybeans:** The seed funding contributed by the Cooperative Program for Agrifood and Agroindustrial Technology Development in the Southern Cone (PROCISUR) made it possible to establish the physiological and genetic bases of the responses of wheat and soybeans to biotic and abiotic stresses, and to resume the sharing of materials among the Southern Cone countries.

IICA facilitated the exchange of knowledge with the national agricultural innovation institutes (INIA) in order to implement technologies that make it possible to harness biomass as industrial material and for energy use, and thus diversify production and develop agroindustrial value added. Two documents on innovation in biodiesel and biokerosene were published and an agreement was signed with the private sector to promote the application of technical and scientific knowhow to make the use of biofuels and biological materials sustainable.

PROCISUR has a [regional catalogue of machinery and equipment](#) for family farming in the Southern Cone countries that provides a simple, expeditious way of accessing information on the equipment available in Argentina, Brazil, Chile, Paraguay and Uruguay.

In St. Kitts and Nevis, the Institute helped to spur commercial innovation by means of an online farmers' market. The system facilitates electronic sales by 40 producers and processors registered with consumers such as hotels and supermarkets, boosting sales and income and the establishment of links with certified commercial operations. Finally, South-South cooperation made it possible to promote low-cost systems for hydroponic production in Guyana's primary and secondary schools and university.

Agricultural health and food safety (AHFS)

IICA helped the countries that export foodstuffs to the United States to meet the requirements established in that country's Food Safety Modernization Act (FSMA). With support from the Foreign Agricultural Service (FAS) of the United States Department of Agriculture (USDA), workshops were held in Colombia, the Dominican Republic, El Salvador, Guatemala, Paraguay and Peru. Some 178 lead instructors received training in the application of the standard on preventive controls for human food, who then trained more than 1600 other professionals. Through participation in national, regional and hemispheric events, more than 70 actors in Argentina and Brazil enhanced their capabilities in matters related to compliance with the FSMA.

In addition, 185 professionals in seven countries were trained in the standard on the safety of fresh produce through workshops held in the Caribbean, Colombia, the Dominican Republic, Guatemala and Peru. Thanks to this initiative, countries have human resources at the local level with the technical training required to assist exporters in complying with the standard.

At least 50 representatives of the official plant health services of 25 countries enhanced their technical expertise through three regional meetings on plant health standards and issues of impact. A further 30 delegates from national veterinary services and 200 from the private sector in 12 countries improved their capacity for assessing the economic impact on animal health, the control of foot-and-mouth disease, veterinary drugs and food safety regulations.

Amid concerns that emerging plant health problems had the potential to affect Nicaragua's production and marketing of agricultural goods, the country received cooperation from the

USDA and IICA designed to build the capacities of the staff of the Agricultural Health and Protection Institute (IPSA) in the area of plant health protection, specifically with regard to the application of international plant health inspection and the certification standards.

Moreover, more than 350 actors, 70 institutions and 20 countries in the Americas, especially Argentina, Brazil, Colombia, Costa Rica, Chile, the Dominican Republic, Mexico, Nicaragua, Panama, Paraguay, Peru and Uruguay, accessed information and acquired new expertise for AHFS conflict resolution and risk communication.

The Institute built technical plant health capacities in the Americas through the following actions: a) promotion in ten Latin American and Caribbean countries of harmonized, science-based sampling and inspection policies and practices; b) strengthening of the technical risk management capabilities of 52 risk assessors and managers, all of whom work for the national plant health protection organizations (NPPO) of 16 Latin American countries; and c) implementation of workshops to review the projects on plant health standards and promote their establishment, which were attended by more than 50 people from over 25 countries.

IICA's relationship with the Standing Veterinary Committee (CVP) and the Plant Health Committee (COSAVE), both in the Southern Cone, helped the Institute's member countries in the Southern Region to meet their targets. Specifically, COSAVE and its member countries (Argentina, Bolivia, Brazil, Chile, Paraguay, Peru and Uruguay) enhanced their technical capabilities for carrying out general and specific phytosanitary surveillance and have a computerized system in place that enables them to systematize information and share it across the region.

COSAVE and the NPPO of Argentina, Bolivia, Brazil, Chile, Paraguay, Peru and Uruguay improved their capabilities for preventing and managing emerging and reemerging pests; increased their knowledge of the impact of climate change on the behavior, population dynamics and distribution of pests in the region, and of forecasting models that relate factors to changing climate conditions; and identified lines of research to help contribute the information needed for pest risk analysis. They also identified lines of action for improving climate change adaptation and mitigation in relation to pest behavior and distribution.

Furthermore, the CVP and the government veterinary services of Argentina, Brazil, Bolivia, Chile, Paraguay and Uruguay now have the knowledge and methodology required for devising a national antimicrobial surveillance plan keyed to the situation and international standards (WHO/PANAFTOSA, OIE). The CVP member countries also have a methodology that enables them to conduct economic evaluations of their sanitary programs and determine the most appropriate intervention strategy.

Under the Greater Caribbean Safeguarding Initiative, IICA worked with the USDA's Animal and Plant Health Inspection Service (APHIS) to enhance technical capabilities in the Caribbean Region for dealing with *Musa* diseases and plant health situations caused by fruit flies and the red palm weevil, and developing and instituting international standards and coordinating actions at the regional level. More than 200 people in 15 IICA Caribbean

member countries benefited from these initiatives. In Jamaica, South-South cooperation with Mexico, Peru, Costa Rica and the Tropical Agriculture Research and Higher Education Center (CATIE) boosted the institutional capacity to deal with *moniliasis* in cacao.

In Argentina, Bolivia and Paraguay, IICA supported efforts to build capacity for the prevention and control of the reemergence of the South American locust (*Schistocerca cancellata*). The Regional Locust Control Plan placed emphasis on training, surveillance, research, control methods and coordination, including the mobilization of international experts and the incorporation of state-of-the-art technology. Similar actions were implemented to integrate criteria and share knowledge of the giant African snail, Huanglongbing (HLB) and *Lobesia botrana*.

With the assistance of USDA/APHIS and World Animal Protection, the Institute enhanced the countries' capacity to draft and manage plans for responding to health emergencies by holding workshops in Chile (20 participants) and the Dominican Republic (30 participants). Furthermore, in collaboration with the United Nations Food and Agriculture Organization (FAO), workshops were implemented in Guatemala and Nicaragua for the drafting of emergency plans, in which people from Costa Rica, El Salvador and Belize also took part.

The National Service for Quality and Animal Health (SENACSA) of Paraguay implemented the National Brucellosis Program with support from IICA, under which the country is investing nearly USD 400,000 with a view to eradicating the disease in cattle and goats.

At least 15 technical events, workshops and conferences were held, in which 2262 people from all parts of the Americas took part, to address issues such as the design of animal health programs; studies and applications on poultry, pig and cattle diseases, traceability and parasitic zoonoses. These activities offered innovative solutions, such as methodological guidelines for the economic evaluation of animal health programs, the design of plant health programs and the implementation of national antimicrobial resistance plans. In Costa Rica, a technical handbook on cacao growing and another on good agricultural practices in strawberry production were produced.

To broaden the scope of its support for the strengthening of food safety control services, IICA began to make its PVS tools available on line, with a view to facilitating their application and expanding their coverage. The online version of the food safety tool was used for the first time in 2017 in Bolivia and Chile, with feedback being received from 143 and 400 professionals, respectively.

IICA, working with Ohio State University, has established itself as a go-to organization for the drafting and implementation of integrated antimicrobial resistance (AMR) surveillance plans in agrifood chains, with three workshops being held in Colombia, Ecuador and Paraguay, and cooperation provided to the CVP countries for the formulation of an AMR strategy.

Business and associative development of chains

In ten agricultural chains⁷ in eight countries, IICA helped to improve management capabilities, competitiveness, sustainability and inclusion through the creation and strengthening of mechanisms for collaboration and the drafting of strategic and business plans, among other tools. Also developed was a chain management methodology that simultaneously addresses economic, environmental, social and institutional issues.

The Institute enhanced the capacity of at least 825 actors in 23 countries to establish commercial links with the agro-export and agro-tourism subsectors, promoted marketing arrangements, boosted support services to strengthen agro-export capabilities and fostered the development of mechanisms that permit the countries' horticultural, flower and cacao chains to interact. It also promoted the establishment of links between agriculture and the tourism sector in the Caribbean; supported the holding of coffee and cacao fairs in Panama; promoted the application of methodologies such as "One people, one product" (OVOP) in Costa Rica; and devised and implemented value added and marketing strategies for goat's milk products in Trinidad and Tobago and cashew by-products in Honduras.

In addition, IICA cooperation aimed at strengthening 48 agricultural chains in 21 countries enhanced the capabilities and updated the knowledge of 730 agents from 145 institutions in business and commercial management, associative enterprises and value added. The Institute also helped develop the capacity for technological innovation of more than 2600 actors working for 230 institutions, specifically in goat production in Trinidad and Tobago, flower production in Paraguay, sweet potato production in Jamaica, good agricultural practices and loss reduction in the horticultural chain in Argentina, cacao production in Costa Rica, fruit production in El Salvador, good manufacturing and food safety practices in Honduras, the control of cacao and coffee pests and diseases in Peru, risk communication, the design and economic evaluation of sanitary programs in South America, animal food safety in Uruguay, good extension practices in the Southern Region and antimicrobial resistance in Venezuela, Uruguay and Paraguay, among other areas.

The Institute organized the event "The Future of Agri-food Trade in the Northern Region: The Voice of the Producer," with speakers and participants from Canada, the United States, and Mexico, which promoted political dialogue on the future of the North American Free Trade Agreement (NAFTA) and its bearing on the private sector of the three countries.

Furthermore, public and private institutions, academia and producers' organizations are taking advantage of the strategies and good practices that IICA promotes for linking smallholders to local markets using the fair trade agribusiness model. Some 25 staff and members of Coopevictoria R. L. (coffee), Agroatirro R. L. (sugarcane) and PROBIO (organic pineapple) in Costa Rica, and 42 staff and members of Coobana R. L. (bananas) and Cocabo R. L. (cacao) in Panama took part in workshops and exchange visits to acquire new expertise related to value added and associative and business management.

⁷ Coffee and cacao in Panama, sheep and flowers in Paraguay, fruit in El Salvador, goat's milk in Trinidad and Tobago, poultry in Venezuela, vegetables in Argentina, sweet potatoes in Jamaica and cacao in Peru.

With the Institute's help, Paraguay's Ministry of Agriculture and Ministry of Labor and El Salvador's Ministry of Agriculture, financial entities and NGOs have a document entitled "Modeling of enterprises for rural youth (MEJOR)," which has been validated as a tool for guiding the development of projects and business plans in rural areas. Furthermore, in Trinidad and Tobago, Suriname and St. Lucia, rural youth organizations improved their productive, commercial and administrative processes, thus making their enterprises more efficient.

Working with the International Potato Center (CIP) and the Caribbean Agricultural Research and Development Institute (CARDI), two joint proposals were produced for the management of germplasm, genetic improvement, production technologies and the strengthening of roots and tubers value chains in the Caribbean region, which were presented to donor agencies for their consideration.

Other results achieved in the area of chains were as follows:

- **Poultry:** the Venezuelan poultry chain took advantage of a set of IICA tools and methodologies with a participatory approach to implement a quality assurance program.
- **Bees:** the Institute consolidated its support for the use of Perone beehives as a means to increase honey production in Grenada, Guyana, St. Kitts and Nevis, St. Vincent and the Grenadines and Suriname. In Chile, capacity building activities were carried out on associative enterprises, risk management and the drafting of area-based development plans for beekeepers affected by fires in the region of El Maule.
- **Organic agriculture:** IICA helped to improve the institutional capabilities of 19 countries that are members of the Inter-American Commission on Organic Agriculture (ICOA) and Spain by conducting training events on competitiveness and accessing the global organic product market. It also promoted the improvement of regulatory frameworks and public policies for the promotion and development of organic agriculture.
- **Goats:** In Trinidad and Tobago, the Institute held a number of training events that enabled 35 producers who are members of the Goat and Sheep Society to increase their capacity to produce quality milk and meet packaging and labeling requirements. It also promoted the use of local forage.
- **Coffee:** As part of a South-South cooperation action, technical personnel from Costa Rica, IICA and CATIE completed an evaluation of the coffee sector in Dominica and submitted to the authorities their strategic recommendations for developing the activity in that country.
- **Flowers:** Technical personnel from the MAG and large- and small-scale flower producers in Paraguay improved their expertise in the use of productive technologies, innovation, marketing and the integration of smallholders into the chain. IICA also helped to strengthen the country's Forum on the Competitiveness of the Flower Chain.
- **Fruits:** IICA provided advice on the creation of a collective brand for nine fruit cooperatives in El Salvador with 462 members.
- **Livestock:** With financing from the private sector, in Jamaica the Institute helped to improve the diversification of cattle farms through more efficient and sustainable silvopastoral and agroforestry systems.

- **Vegetables:** In the province of Corrientes, Argentina, IICA enhanced the capabilities of seven institutions and 262 members of producer' organization in the horticultural chain.
- **Mangoes:** following the good harvest in 2016, the opportunity arose in St. Kitts and Nevis to mechanize operations in order to add value to surpluses. A pulper was provided that ensures that producers have products to sell throughout the tourist season, and allows them to reduce labor costs and boost profits.
- **Black sheep:** with resources from the New Zealand High Commission, IICA helped to enhance the capabilities of sheep producers for herd reproduction and management in Barbados.
- **Roots and tubers:** to support Massy Stores Inc. and the Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives of St. Lucia, IICA promoted local production and its links with retail markets in order to reduce dependency on the importation of roots and tubers.

Finally, IICA designed the Hemispheric Program to Strengthen Business and Associative Capabilities and produced nine handbooks on the subject.

Social management of territories

With interinstitutional mechanisms for dialogue and political advocacy promoted by IICA, the capacity to design and implement institutional, regulatory and operational frameworks that foster the inclusive development of agriculture and rural areas were strengthened in Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Honduras, Mexico and Suriname.

This helped to position policies and actions related to inclusion in agriculture and rural areas as a strategic issue on the political and institutional agendas of the Institute's member countries. In Colombia, Costa Rica, Ecuador, Guatemala and Honduras, progress was made with the consolidation of policies and instruments for promoting an inclusive development strategy. Furthermore, in Brazil, Colombia, Costa Rica, the Dominican Republic, Ecuador, Guatemala, Guyana, Honduras, Mexico and Suriname, inclusive economic initiatives and undertakings were implemented to meet the needs of selected excluded groups.

Creating opportunities for rural women

For many years, rural women have been one of the target population groups that form part of the Institute's work plan. Some of the achievements of the technical cooperation that IICA provided to enhance the capabilities of this group and create opportunities for their development are as follows:

- **Antigua:** in collaboration with the Global Environment Facility (GEF), under the project Solar Energy as an Innovation in Agro Processing, IICA boosted the manufacturing capabilities of the Antigua and Barbuda Network of Rural Women Producers (ANBNROP). It also supported the Ministry of Education's efforts to equip women's groups to take better advantage of cassava and sweet potatoes in bread production.
- **Canada:** working with Canadian partners, the Institute completed a project designed to create opportunities for women cacao producers in Peru and the Dominican Republic by adding value to their production.
- **Chile:** IICA collaborated with the Agricultural Development Institute (INDAP) to bolster the National Rural Women's Forum.
- **El Salvador:** 24 women from the Ciudad Mujer Usulután and Morazán were trained in the Field Schools methodology.
- **Haiti:** in the Departement du Sud, 100 women members of a local organization received training in organization building and animal production.
- **St. Lucia:** the St. Lucia Network of Rural Women Producers (SLNRWP) implemented the first community cacao producers organization, benefiting 20 women agribusiness operators and microprocessors.
- **St. Vincent and the Grenadines:** working with FAO, IICA helped three entities led by women to enhance their governance, planning and financial management capabilities.
- **Suriname:** 22 women producers improved their knowledge of the use of Web 2.0 tools to promote and market the products of the Suriname Network of Rural Women Producers (SUNRWP). Seven cassava-based processed products (cereal, sauces, pulps and breads) were also launched.
- **The Bahamas:** six women's groups received training in strategic planning and project design to enable them to gain access to national and international resources.
- **Venezuela:** with support from the Institute, the coffee and cacao socialist networks for productive innovation in the State of Mérida produced proposals for bridging gender gaps and improving the participation of women in community organizations.

The Institute promoted agricultural and rural development in the following territories:

- Andros, The Bahamas
- Brunca and Central Regions, Costa Rica
- Caquetá, Cundinamarca and Meta, Colombia
- Esmeraldas, Galápagos and Pichincha, Ecuador
- Q'eqchi' indigenous territory and Estor, Guatemala
- Rupununi Region, Guyana
- Belén Gualcho and Yeguaré, Honduras
- Barú, Santa Fe, Río de Jesús and Mariato territories, Panama
- States of Carabobo, Táchira, Mérida, Zulia, Barinas and Miranda, Venezuela
- Northeast Paraguay (departments of Concepción, San Pedro, Caaguazú and Canindeyú).⁸

⁸ Project for Improved Family and Indigenous Production in Northeast Paraguay (IFAD-IICA contract).

With IICA's assistance, Jamaica was able to share its experience in combating farm theft, a problem that affects rural areas in Trinidad and Tobago, Barbados, St. Vincent and the Grenadines and Guyana. Several workshops organized jointly with the Secretariat of the Caribbean Community (CARICOM) and the governments of the countries in question led to the drafting of a set of recommendations and actions required to deal with the issue.

In Colombia, under the IICA training-action program "Unleashing Local Energies," 60 members of excluded groups (women, landless peasants, veterans and young people) improved their capabilities in the areas of organization, empowerment and living conditions.

The focus on family farming

The United Nations General Assembly adopted a resolution establishing the Decade of Family Farming 2019-2028, thanks to the support and efforts of international organizations such as FAO, IICA, the International Fund for Agricultural Development (IFAD) and the International Land Coalition (ILC). IICA has long recognized the importance of family farming in the Americas and our work focused on efforts to:

- Assist Colombia, Peru, Honduras and Guatemala with their strategies for the development of family farming (FF).
- Exchange knowledge based on the experiences of the **Colombian Agricultural Research Corporation (CORPOICA)** and the **Brazilian Agricultural Research Corporation (EMBRAPA)** in relation to innovative methodologies for bridging gaps in FF production and quality.
- Contribute to innovation in the **Argentine institutional framework that supports FF** by means of studies on institutional innovations in agricultural cooperatives, a handbook for facilitators of commercial innovation processes and the www.comercializacionaf.org website.
- Apply the **methodology for the analysis and measurement of the socio-productive and environmental sustainability of farms**, which was tested in Ecuador, Peru, Paraguay and Guatemala, where 225 family farmers in eleven rural communities acquired new expertise related to sustainable production systems.
- Evaluate **the methodology for associative encounters** with the ministries of agriculture and NGOs in Honduras, El Salvador and Nicaragua, and with the ministries of agriculture, regional offices and NGOs in Peru, Ecuador and St. Lucia. The methodology was instrumental in improving the capacity for associative and agribusiness management of FF organizations and their commercial links with markets.
- Working with the ministries of agriculture and other partners in Paraguay, Honduras and Uruguay, disseminate good management practices and promote proposals for the implementation of **FF product differentiation and value added strategies**. Paraguay embarked on the implementation of a pilot plan for the use of the FF seal in supermarket chains.
- Under IICA's partnership with the Southern Common Market (MERCOSUR) and the Specialized Meeting for Family Farming (REAF), formalize the **Regional Exchange and Capacity Building Program for Agricultural Health and Food Safety and Family Farming Services**, which aims to improve the capacity of senior public officials and technical personnel and leaders of family farming organizations to improve product health and safety.
- Hold the **Forum for Dialogue on Public Policies for Small-scale Production**, in order to discuss the issue with decision-makers, technical personnel and FF leaders in St. Vincent and the Grenadines, Trinidad and Tobago, Jamaica, Haiti and Guyana; and document the characterization, dynamics and production strategies of FF in the Caribbean.

IICA contributed to the generation of knowledge by producing a set of documents dealing with FF concepts, methodologies and learning approaches, including 12 workbooks on inclusion and 8 booklets related to other issues. It also designed and implemented the Strategic Management System for Area-based Development and Family Farming (SiGET), consolidated as a platform for debate and the sharing of experiences and knowledge on those subjects.



Capabilities for integrated water management and sustainable soil use

Working with the Ecuadoran authorities, IICA designed and validated a model for decentralized management and forms of extension for irrigated agriculture, a very important benchmark for other water resource management processes in Latin America.

The SEMEAR program supported by IFAD and IICA afforded more than 11,000 farmers and rural entrepreneurs in the semiarid region of Brazil access to a package of knowledge, innovations and good practices in social technologies for the recycling of greywater and the recovery of headwaters and groundwater. As part of the cooperation provided to the Ministry of National Integration for the implementation of its National Dam Recovery Plan (PLANERB), 164 dams were assessed in the states of Alagoas, Bahia, Ceará, Maranhão, Minas Gerais, Paraíba, Paraná, Piauí, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Santa Catarina and Sergipe. Furthermore, work undertaken with the Government of Brazil and the World Bank laid the groundwork for the drafting of a national policy for the reuse of treated sewage effluent in Brazil.

Water for Life Program, IICA-Nestlé Venezuela

IICA contributed to the development of a system of indicators for evaluating the volume and quality of water consumed, and determining actions to reduce consumption and improve the quality of water in places in the states of Aragua and Lara. In addition, the Institute enhanced the skills of 40 facilitators and promoters of the *Nutrir* and *Escuela del Sabor* programs, focusing on the conservation, use, quality and management of this precious resource; and sensitized 350 members of Nestlé's staff and community stakeholders in the same topics.

In the Caribbean region, IICA trained 21 officials and private contractors in the construction of reinforced concrete tanks for harvesting and storing water for agricultural irrigation. This work was carried out in St. Vincent and the Grenadines under the joint IICA-FAO work program. Furthermore, in Suriname 635 residents of six communities now have access to drinking water, thanks to the installation of rainwater harvesting systems financed by Australian Aid, and the establishment of demonstration drip and micro-spray irrigation systems in Weg naar Zee, financed by the Global Climate Change Adaptation Programme.

With regard to sustainable land use, IICA spearheaded a participatory process in the Caribbean designed to strengthen technical capabilities for the recovery of degraded soils using organic matter, thus contributing to the achievement of global desertification and soil

degradation goals. For example, various experiments were carried out in Guyana to determine whether carbon sequestration was needed to improve the chemical and physical properties of degraded soils. In Jamaica, under a public-private partnership, four types of compost were evaluated on land used to mine bauxite, and the AgriNeTT Soils smart phone app developed in Trinidad and Tobago was introduced, which instantaneously detects the characteristics of different types of soils.

The Institute spearheaded the agro-ecological zoning of pastureland in the Central-Southern region of Uruguay, carried out under the aegis of the Forum on Cattle Farming on Natural Pastureland, and contributed to the design of productive conservation policies.

In Costa Rica, the open access digital platform that provides data on the country's soils, developed jointly with the Agronomic Research Center (CIA) of the University of Costa Rica (UCR), the National Institute for Agricultural Technology Innovation and Transfer (INTA) and the Costa Rican Association of Soil Sciences (ACCS), contains 1500 profiles of soils and more than 360,000 items of data on the country's soils, including those of the Central American Dry Corridor. This platform, which could be expanded to include data on the soils of the Central American region, is a public good of great importance for Latin America, where free access to data is limited, since it provides quality information about the taxonomy and the physical and chemical properties of soils that has been used to generate maps of organic carbon, conduct research in the sugarcane sector and develop various apps.

Climate change adaptation and mitigation, and risk management in agriculture

In 12 countries,⁹ the capacity to plan for climate change adaptation (CCA) was developed in the agriculture sector by means of training activities, technical assistance and South-South exchanges. IICA also undertook a participatory analysis of the processes involved in the design, implementation and evaluation of planning instruments for CCA in agriculture in Central and South America; and identified challenges, lessons learned and areas of opportunity, which are set out in the publication "[Planificando para la adaptación al cambio climático en la agricultura: análisis participativo del estado actual, retos y oportunidades en América Central y Sur.](#)" Furthermore, the Institute collaborated with the Ministry of Agriculture and Marine Resources of The Bahamas in the development of a sectoral policy on CCA; carried out a process of climate-proof projects with the National Agricultural Technology Institute (INTA) of Argentina; and modernized the Risk Management Unit of Paraguay's Ministry of Agriculture and Livestock (MAG).

Under the project to supply the Galapagos Islands with pine nut oil from Manabí, which IICA is implementing with Ecuador's Ministry of Electricity and Renewable Energy (MEER), 174,108 pine nut stakes were planted along 220 km of fencing, resulting in the sequestering of 1024 tons of CO₂ and producing more than 9500 gallons of vegetable oil. In Mexico, the

⁹ Costa Rica, Guatemala, Honduras, Nicaragua, Panama, Argentina, Chile, Colombia, Paraguay, Uruguay, Peru and The Bahamas.

2018-2030 Climate Change and Agrifood Production Agenda was designed and promoted jointly with the GIZ and the national public and private institutional framework.

The Caribbean Forum on Climate-Smart Agriculture, whose sessions involved Antigua and Barbuda, Barbados, Belize, Dominica, Grenada, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, The Bahamas and Trinidad and Tobago, promoted innovative technologies, good practices and strategies for creating resilience in production systems, fine-tuning climate change concepts and securing financial resources.

IICA channeled budgetary and technical resources into the recovery of productive capacity in the Caribbean islands devastated by hurricanes Irma and María in September 2017. The Institute's different teams of specialists in the Eastern Caribbean States coordinated actions to assess the situation and implement recovery projects, making it possible to take the first step in the discussion of a risk management and disaster response strategy for the region. The Caribbean Forum on Climate-Smart Agriculture has a key role to play in supporting that discussion and the efforts to reach agreement on risk management and disaster response actions in 2018.

The experience in coffee

Through PROCAGICA, financed by the EU, model coffee production units were established in El Salvador, Guatemala, Honduras and Nicaragua on 1371 ha., where technological models for sustainable production are being applied aimed at increasing the productivity and income of family farmers. In partnership with CATIE, the CAC, and the French Agricultural Research Centre for International Development (CIRAD), agreement was reached on efforts to boost the region's capacity in the design and implementation of policies, programs and measures to improve the coffee sector's adaptation, response capacity and resilience.

Furthermore, an assessment of technology transfer systems and extension materials was carried out in Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras and Nicaragua.¹⁰ Also drafted was a regional plan to strengthen national early warning systems for coffee rust, coordinated with the national institutions responsible for the coffee sector in El Salvador, Guatemala, Honduras and Nicaragua, national meteorological institutes and PROMECAFE. The latter is a key player in the Central American coffee sector, as it coordinates research aimed at raising productivity, lowering production costs and improving quality. PROMECAFE organized the 23rd Latin American Symposium on Coffee Cultivation, consolidated cooperation ties with FAO, CAC, the International Regional Organization for Plant and Animal Health (OIRSA), World Coffee Research (WCR), Catholic Relief Services and the UTZ Certification Program, among others. In addition, the process of Mexico's incorporation into the program as a partner country was completed.

¹⁰ PROCAGICA enhanced the capabilities of 429 coffee producers in seven provinces of the Dominican Republic.

The experience in rice

In Chile and Venezuela, plots were established to validate the System of Rice Intensification (SRI) and 134 people were trained in its use. This system increases resilience to climate change, productivity and the economic return for producers, while at the same time reducing greenhouse gas emissions in rice production. The actions were implemented with the national agricultural research institutions, which drew up work plans to monitor the use of the SRI, given the promising results (for example, yields of 11+ t/ha on plots where the SRI was used, compared with 2+ t/ha on control plots). This initiative gives further traction to the actions of an IICA-led project financed by the Regional Fund for Agricultural Technology (FONTAGRO) aimed at adapting, validating and promoting the SRI so that small-scale rice farmers in Colombia and the Dominican Republic¹¹ can adapt to climate change.

Other outputs that IICA has made available to the countries are as follows:

- The Observatory on Integrated Risk Management and Agricultural Insurance in the Americas, implemented in partnership with the Latin American Association for the Development of Agricultural Insurance (ALASA) and the Inter-American Federation of Insurance Companies (FIDES), was consolidated as a center for information and analysis.
- Distance learning course in integrated risk management for Latin America (second edition), in which more than 460 people in 15 countries have participated since 2016, operated in tandem with ALASA, FIDES, the World Bank (WB), the Center for Insurance and Risk Management Studies (GESER) of the University of São Paulo, Brazil, and universities in Argentina, Colombia and Paraguay.
- Interactive online platform to support the design, evaluation and implementation of national programs and plans on good agricultural and environmental practices for resilient agriculture, and to promote public policy-making on the subject, designed and implemented jointly by IICA and EMBRAPA, with the participation of Brazil, Costa Rica and Honduras.

At least 3422 professionals in the Americas enhanced their expertise in various subjects: integrated risk management, the application of geographic information systems (GIS) to sustainable soil management, fertigation and good practices for efficient water use and soil conservation, the development of sectoral adaptation plans, use of the SRI, ecosystem services, bioinputs, animal and plant health risks associated with climate change, droughts and water management, climate change in the coffee value chain, geospatial images for monitoring and providing early warnings of droughts and floods, protection of animals in disasters, water security and the sustainable intensification of agricultural systems, among others.

¹¹ 150 producers and Dominican technical personnel were trained in the application of this new technology.

Interaction with and participation in international forums

IICA's links with, and participation in, international forums include the meetings of the Committee on Agriculture and Committee on Sanitary and Phytosanitary Measures (SPS Committee) of the World Trade Organization (WTO), MERCOSUR and Codex Alimentarius. Thanks to the Institute's close ties with such organizations, more than 1700 development actors and agents who work for 132 public institutions and agricultural organizations in IICA's 34 member countries increased their knowledge of international standards governing pesticide use and food registration, the negotiation and administration of international agricultural agreements, rules of origin, dispute settlement, agricultural health and food safety, good agricultural practices, trade and food security, among other subjects.

IICA has become a strategic partner of countries in the region in their dealings with the forums of the multilateral trading system, especially the meetings of Codex Alimentarius. The participation of the Institute's member countries in those meetings resulted in contributions to the negotiation and approval of international standards that impact the countries' trade and consumer health. All this was possible thanks to 49 grants that IICA provided to enable representatives of 22 member countries to take part in nine different meetings of Codex Alimentarius committees.

The collaboration of the governments of the United States and Canada enabled the Institute to promote capacity building, equipping the countries to make better use of multilateral forums. As a result, more than 70 representatives of 17 countries were able to take part in each Codex colloquium. In addition, four member countries that have acquired considerable expertise in Codex-related issues supported five other countries under the twinning program implemented by IICA to foster communication and the sharing of technical criteria for each meeting of Codex Alimentarius.

The representatives of the NPPO of 17 Latin American countries, observer organizations (COSAVE, CAN, OIRSA, IICA) and the Secretariat of the International Plant Protection Convention (IPPC) took part in the IPPC Workshop for Latin America, which IICA helped to organize. Participants had the opportunity to learn how to analyze draft international standards for phytosanitary measures (ISPM), formulate observations on 2017 draft ISPM, build plant health capacity, improve their knowledge of the IPPC's activities and share experiences at the regional level. This activity enabled the Latin American countries to influence draft ISPM, defending their national and regional interests, and increase their technical capacity to prevent the entry of pests and negotiate matters related to their agricultural exports.

In addition, delegates from 29 countries in the Americas attended a meeting, the first of its kind, to harmonize their positions on animal health and enhance their participation in the process of establishing international standards under the aegis of the World Organization for Animal Health (OIE). The meeting helped clarify the process of reviewing standards and provided an opportunity to compare points of view and agree on common positions that will enable the region to have a bigger impact when voting on standards. The countries of the

Americas presented five positions during the OIE's World Assembly of Delegates, the first time they had presented positions as a group.

The cooperation agenda with strategic partners was consolidated, as reflected in the following achievements:

- Under the aegis of PROMECAFE, the Regional Program to Support Projects for the Promotion of Domestic Coffee Consumption in Central America, the Dominican Republic, Jamaica and Peru was approved. The project is receiving institutional and financial support from the International Coffee Organization (ICO).
- Through the Global Forum on Agricultural Research (GFAR), funds were secured from the EU for the project “Strengthening FORAGRO Capacity as a Multi-Stakeholder Regional Forum on Research and Innovation for Development.” As a result, the Forum for the Americas on Agricultural Research and Technology Development (FORAGRO) has a model of governance that guarantees the representativeness and inclusion of actors from across the continent, including an assembly of members, by-laws and a steering committee, and identifies priority areas on which its actions will focus.
- The Central American Integration System (SICA) and its eight member countries acknowledged IICA's contribution under the IICA/CAC agreement, financed by the Spanish Agency for International Development Cooperation (AECID) and the Andalusian Agency for International Development Cooperation (AACID) via the Spain-SICA Fund.
- The Institute promoted implementation of the Agriculture Sector Master Plan for Western Panama, designed by the Institute and financed by the Latin American Development Bank (CAF), which will benefit 15,000 producers directly. A similar plan is being executed in the country's Azuero region, where a further 8000 producers will benefit directly.
- A project costing € 2.3 million was successfully negotiated with the EU, Belize's Banana Growers' Association and the University of Belize, aimed at raising the productivity of the country's banana plantations.
- The project “Sustainable Intensification of Livestock Systems with Legumes: Platform for Latin American and Caribbean Cooperation” was approved. Financed by FONTAGRO and PROCISUR, the counterparts will be the national agricultural research institutes of the participating countries. Under this project, Southern Cone countries, Ecuador, Nicaragua and the Dominican Republic will work together to improve livestock systems through the adoption of forage legumes.
- IICA submitted a successful bid to implement the IFAD project “Knowledge Management for Adaptation of Family Farming to Climate Change” (INNOVA-AF). The project will cost USD 3.1 million and cover eight countries, with implementation getting under way in the first half of 2018. CATIE and the CIRAD will take part in the project as partners of IICA.
- In Honduras, the Sustainable Rural Program for the Southern Region (EMPRENDESUR), IFAD and the Secretariat of Agriculture and Livestock (SAG) approved the technical proposal for the leadership training initiative, “Unleashing local energy” and the systematization of experiences. Implementation will begin in the first half of 2018 and the cost involved is USD 84,500.
- IICA promoted the strengthening of FORAGRO through a prospective study, and work programs were agreed that include collaboration with CATIE and CARDI, in order to

create opportunities for coordinating the Institute's technical cooperation with the regional integration mechanisms.

IICA also forged partnerships with USAID, REAF, CATIE, FAO, IFAD, CARDI, CIRAD, CIP, the Inter-American Development Bank (IDB), the Technical Centre for Agricultural and Rural Cooperation (CTA), the Centro Latinoamericano para el Desarrollo Rural (RIMISP) and the Economic Commission for Latin America and the Caribbean (ECLAC), dozens of universities across all the countries of the Americas and the cooperation agencies of Germany, Spain, Australia, Mexico and Canada.

Knowledge-intensive agriculture

IICA's efforts to promote knowledge-intensive agriculture have gathered pace and are becoming more evident. During the third consecutive year of implementation of the grants program implemented with Mexico's National Council for Science and Technology (CONACYT), three times the expected number of professionals received grants for specializations and master's degree and doctoral programs in agriculture at Mexican universities (327 grants were awarded in 2017). This was complemented the more than 6643 participants in the different courses offered on IICA's Virtual Campus. Over 30,000 people took part in the Institute's training events, including activities carried out in collaboration with partner institutions.

In Canada, IICA oversaw implementation of the Research and Internship Assistance Program, which provided resources to enable six researchers and interns to conduct studies on the control of invasive species and food security among indigenous communities in Mexico.

The ministers of agriculture and other agricultural stakeholders had access to the latest information about the state of agriculture and rural life in the Americas thanks to a joint report on those subjects prepared by FAO, ECLAC and IICA and the launch of the www.agrirural.org platform.

The Institute responded to 27 requests for training in biotechnology and biosafety from 14 countries. As a result, more than 2500 people from various sectors had access to scientifically validated information on those subjects, and their applications and consequences.

Within the framework of the Network for Innovation Management in the Agrifood Sector (Red INNOVAGRO), which receives support from IICA, meetings, dialogues, information and technical exchanges and knowledge management activities were held. The results of these efforts were as follows:

- More than 15,000 people enhanced their expertise through massive open online courses (MOOC) on innovation and food security, courses and workshops for the wine sector, virtual and in-person international seminars, a diploma course in innovation management and a master's degree program in food security.

- A strategic capacity building plan for Mexico’s wine sector was drafted after the country rejoined the International Organisation of Vine and Wine (OIV).
- The INNOVAGRO Prize was awarded for the fourth time, after 43 technological, institutional, social and mixed innovations submitted. The winning institutions were: EMBRAPA (Brazil), for a strategic intelligence system; Mexico’s School of Graduate Studies (COLPOS), for a rainwater harvesting program for Latin America and the Caribbean; the Office for the Coordination of Research and Development (CID) of the National Autonomous University of Mexico (UNAM), for the development and marketing of the first 100% Mexican biofungicide; and the Agricultural and Fisheries Management Agency of Andalusia, for a price and market observatory.
- Leading Mexican extension workers benefitted from a program of technological visits to Argentina and Brazil, facilitated by INTA and EMBRAPA, respectively, to observe innovative rural extension models first hand, with a view to detecting useful practices that could be introduced in Mexico to help make national producers more competitive.
- The Seventh Meeting of the Members of Red INNOVAGRO took place at IICA Headquarters and the Sixth INNOVAGRO Assembly was also held.

Other contributions

IICA’s technical cooperation helped to promote food security, the use of native species and a reduction in food losses. Some of the most important actions were as follows:

- Promotion with CARDI in Trinidad and Tobago of an action plan for food security involving the provision of better quality plant material in crops such as coconuts, citrus fruits, avocados and breadfruit.
- Completion of the process of disseminating the methodology for the evaluation of agrifood chains for the identification of problems and projects (MECA). In particular, 30 public- and private-sector professionals were trained in the methodology in Argentina. The document *Abordaje integral sobre las pérdidas de alimentos en la cadena de verduras de hoja del Cinturón Verde de la ciudad de Corrientes* was also produced.
- As many as 1500 representatives of family farming, technical officers and authorities of 13 Latin American countries enhanced their expertise in relation to local knowledge and traditional practices, in order to promote the use of species with potential as food, and methods for increasing the productivity and sustainability of family production systems and improving the marketing of their products.
- Conclusion, within the framework of the Cooperative Program for Agricultural Research, Development and Innovation in the South American Tropics (PROCITROPICOS), of the effort to characterize genetic resources and promote agricultural heritage systems.

Details of the more than 300 national actions implemented by IICA in all its member countries are to be found at www.iica.int.

Governance and official meetings

Executive Committee (EC)¹²

The Executive Committee held its Thirty-seventh Regular Meeting in San Jose from 18-19 July 2017, during which it adopted a series of agreements.

- The EC approved the [2016 Annual Report of the Inter-American Institute for Cooperation on Agriculture \(IICA\)](#), which contains a summary of the main cooperation activities carried out by the Institute during the year in question.
- Pursuant to Resolution No. 615 adopted at the EC's Thirty-sixth Regular Meeting (2016), a report was submitted on the relationship between IICA and the United Nations Food and Agriculture Organization (FAO). The EC decided to convene a special meeting, to be held one day before the Nineteenth Regular Meeting of the Inter-American Board of Agriculture (IABA).
- The EC recommended that the IABA approve the expenditure budget for 2018 and that, at the next meeting of the Committee, the Director General present a proposed program budget for 2019 aligned with the Institute's Medium-term Plan (MTP) for the period 2018-2022.
- The Committee approved IICA's financial statements for 2016 and the report of the external auditors, emphasizing that the documents attested to the good management of the Institute's financial resources and were fully compliant with the regulations.
- The EC studied the report on the collection of the Member States' annual quota contributions and appointed Ms. Ana Marissa Díaz Román, of Panama, to serve as a member of the Audit Review Committee (ARC) for the period 2018-2023.
- The Committee welcomed the biennial reports of the Tropical Agriculture Research and Higher Education Center (CATIE) and the Caribbean Agricultural Research and Development Institute (CARDI) for the period 2015-2016, and urged IICA to continue to strengthen the implementation of joint cooperation actions.

Furthermore, at the Thirty-seventh Regular Meeting of the EC, the two candidates for the position of Director General of IICA for the period 2018-2022, Mr. Manuel Otero, of Argentina, and Mr. Carlos Furche, of Chile, presented their proposed work plans, in accordance with the institutional regulations.

¹² The Committee was comprised of representatives of the following Member States: Antigua and Barbuda, Argentina, Colombia, Costa Rica, Dominica, Ecuador, Mexico, Nicaragua, Panama, Paraguay, Saint Lucia and the United States of America.

In addition, the First Special Meeting of the Executive Committee was held in San Jose, Costa Rica on 24 October 2017¹³ to revisit the question of the strengthening of IICA and FAO's joint cooperation activities. As a result, the EC endorsed the signing of a memorandum of understanding between the two institutions and instructed that a draft resolution on the subject be submitted to the IABA.

Inter-American Board of Agriculture (IABA)

The Nineteenth Regular Meeting of the IABA was held in San Jose, Costa Rica from 25-26 October 2017,¹⁴ chaired by Mr. Luis Felipe Arauz, Minister of Agriculture and Livestock of Costa Rica. Ms. María Lourdes Cruz, Director of International Relations of Mexico's Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) served as the rapporteur.

During the meeting, Mr. Manuel Otero, of Argentina, was elected to serve as Director General of IICA for the period 2018-2022.

The IABA adopted agreements on the following subjects:

- *Institutional policy and technical cooperation services:* Two reports were presented during the meeting. The first of these was "The Outlook for Agriculture and Rural Development in the Americas: A Perspective on Latin America and the Caribbean 2017-2018," prepared jointly by the Economic Commission for Latin America and the Caribbean (ECLAC), FAO and IICA. The second was a report on the management of IICA during the period 2010-2017. The IABA also authorized the EC to approve the Institute's MTP for the period 2018-2022.
- *Signing of a memorandum of understanding between FAO and IICA:* FAO's Assistant Director-General and Regional Representative for Latin America and the Caribbean, Mr. Julio A. Berdegué, and the Director General of IICA, Mr. Víctor M. Villalobos, signed a memorandum of understanding on behalf of the two institutions aimed at stepping up their joint cooperation activities. The memorandum calls for coordinated actions in areas of importance to the Member States, such as: a) the Central American Dry Corridor, b) the peace process in Colombia and c) agricultural and rural development in the Caribbean. By means of its Resolution No. 508, the IABA instructed the IICA Director General to proceed with the operational implementation of the memorandum and to present, together with FAO's Regional Representative, a joint report on the progress of IICA and FAO's joint cooperation actions at the next meeting of the Executive Committee.

¹³ The following members of the EC took part in the meeting: Antigua and Barbuda, Argentina, Colombia, Costa Rica, Ecuador, Mexico, Nicaragua, Panama, Saint Lucia and the United States of the Americas. Brazil, Canada, Chile, the Dominican Republic and Haiti took part in an observer capacity.

¹⁴ The representatives of 32 IICA Member States took part.

- *Budgetary and financial matters:* The IABA approved the report on the collection of Member States quota contributions, the report on IICA's financial statements for 2015 and 2016, and the report of the external auditors. It also welcomed the twenty-second and twenty-third reports of the ARC and instructed the Director General to present a proposed expenditure budget for the funds approved for the 2019 program budget at the next meeting of the EC.
- *Matters related to IICA's governing bodies:* The IABA appointed Dr. Víctor M. Villalobos Arámbula Director Emeritus of the Institute; studied Chile's report as the IABA's Representative on CATIE's Governing Council and Board of Directors for the period 2015-2017; approved the progress made with implementation of the resolutions of the Eighteenth Regular Meeting of the IABA and the thirty-sixth and thirty-seventh regular meetings of the EC; and approved the table for the rotation of Member States on the EC for the period 2019-2033.

Official meetings held in 2017

| Official name | Date | Place held | Place and date of publication of the report or proceedings of the event |
|--|--------------------|--|---|
| 2017 Regular Meeting of the Special Advisory Commission on Management Issues (SACMI) | 24 April 2017 | Virtual meeting coordinated from IICA Headquarters in San Jose, Costa Rica | IICA, San Jose, Costa Rica, 8 June 2017 |
| Thirty-seventh Regular Meeting of the Executive Committee | 18-19 July 2017 | San Jose, Costa Rica | IICA, San Jose, Costa Rica, 25 September 2017 |
| First Special Meeting of the Executive Committee | 24 October 2017 | San Jose, Costa Rica | IICA, San Jose, Costa Rica, 31 January 2018 |
| Nineteenth Regular Meeting of the Inter-American Board of Agriculture (IABA) | 25-26 October 2017 | San Jose, Costa Rica | IICA, San Jose, Costa Rica, 16 February 2017 |

Main results of corporate management

Strategic management

The management team carried out the mandates issued by the Executive Committee (EC) and the Inter-American Board of Agriculture (IABA). Specifically, a baseline study was conducted entitled “Proposal for strengthening the financial and strategic structure of IICA,” as requested in resolutions IICA/JIA/Res. 501 (XVII-O/15) and IICA/CE/Res. 615 (XXXVI-O/16). The Institute also updated and provided follow-up to the IICA/CATIE Program of Joint Action (PJA) through the Coordinating and Follow-up Committee (in accordance with the bilateral agreement signed), in order to strengthen the relationship between the two institutions and carry out the mandates issued by the respective governing bodies.

A document was drafted on a proposed partnership with the United Nations Food and Agriculture Organization (FAO) that would respect the characteristics of each institution and establish mechanisms for joint work on a common technical agenda, avoiding duplications and complementing each other’s areas of expertise. Furthermore, the letters of understanding signed with the Tropical Agriculture Research and Higher Education Center (CATIE) made it possible to modernize the Orton Commemorative Library and implement joint activities in Bolivia, Colombia and Mexico. Master’s degree programs in food security and integrated watershed management were also developed with CATIE.

The technical and administrative interdepartmental teams reviewed 97% of the work plans proposed for the year, all of which were subject to a timely process of follow-up, monitoring and self-evaluation via the Unified Institutional Management System (SUGI). In accordance with the institutional evaluation policy, intermediate evaluations of the flagship projects were carried out, leading to the identification of good practices, lessons learned and opportunities for improving the Institute’s technical cooperation. As an internal exercise designed to contribute to the efforts for continuous improvement, our personnel conducted 77 self-evaluations of the cooperation initiatives that concluded in 2017.

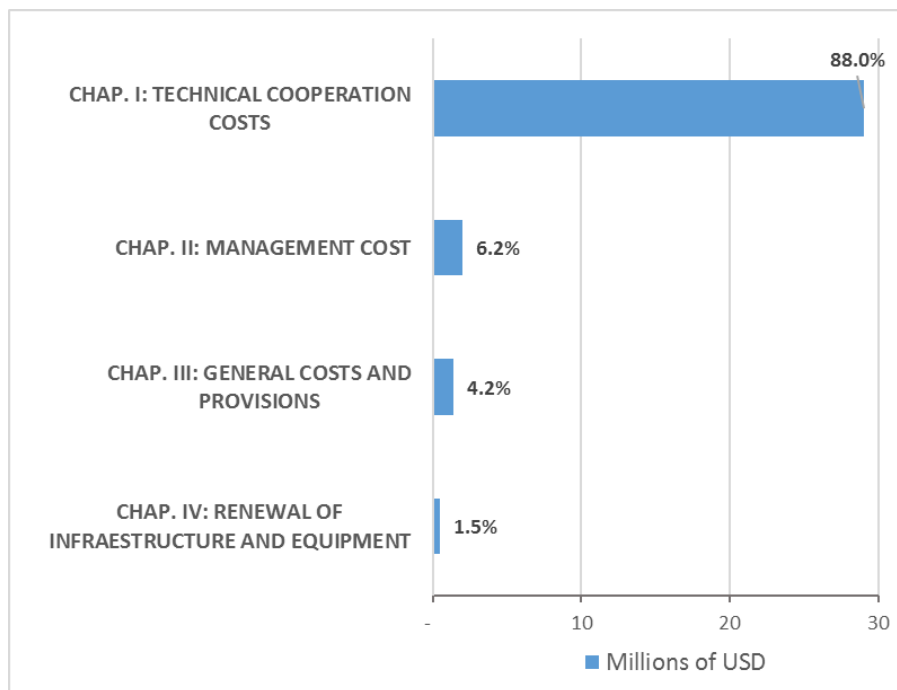
The Institute’s operations and the organization’s ability to work as part of a team and interact with partners all across the continent was underscored by the 19,236 transmissions involving the use of remote presence technologies. As a result of these, and for the first time since IICA implemented web streaming services, in 2017 at least 20,000 people followed live webcasts of technical events promoted by the Institute.

Through our virtual campus and the IICA Academy, 6643 people took part in 18 online courses hosted on our servers, more than six times the number of participants targeted by the Institute. Courses were designed with the National Autonomous University of Mexico (UNAM), Mexico’s School of Graduate Studies (COLPOS) and the Centro Geo, among other institutions. The coverage of these courses was expanded through the Coursera and IDX platforms, enabling more than 30,000 people to participate.

Budget and Finance

The Institute's budget was executed in accordance with the 2014-2018 Medium-term Plan (MTP). The amount of Regular Fund resources executed was USD 32 972 003, distributed as shown below:

Figure 2. Distribution of the execution of the Regular Fund by chapter in 2017 (in millions of USD).



The relevant authorities and IICA's governing bodies were informed of the status of the Member States with regard to the payment of quotas for 2017 and previous years. As a result of the efforts to secure payment, USD 29.3 million in quota resources were collected, 97.73% of the amount budgeted for the year.

The different units' use of the SAP system for accounting and control under US Generally Accepted Accounting Principles (US GAAP) ensured the reliability of the Institute's financial information and financial statements. Furthermore, a specialist firm was hired to prepare actuarial studies on some staff termination benefits, as recommended by the external auditors.

The SAP system and its use in the delegations was optimized by providing advice, carrying out training actions, implementing modules and creating forms tailored to the delegations' requirements. IICA set up a new system of human talent management, linked on line to the payroll process and with accounting entries integrated into the SAP system, affording greater security and control in that area. The Institute also optimized the generation of reports through this system and improved the linking of financial reference information with the SUGI.

The efficient management of funds for the operation of IICA's delegations and units made it possible to ensure the timely delivery of cooperation services and make optimum use of the Institute's capabilities. Specifically:

- The Institute supported the financial-accounting control of externally funded projects by establishing master data to ensure the individualized control of 176 new projects; reviewed financial reports requested by counterparts and partners to ensure that they presented the information required; and promoted compliance with important aspects of the projects.
- IICA took advantage of the network of delegations to make the delivery of services more efficient across the continent by coordinating 870 processes for the contracting and payment of services between Headquarters and the delegations.
- As many as 5491 payments were made to suppliers, officials and public and private entities, ensuring that Headquarters had the goods and services it required.

Human talent

The Institute updated and expanded its regulatory framework by issuing the Executive Order on Consultants (33/2017), which called for the implementation of a module for consultants in the SUGI. Training activities were held in a number of delegations to ensure correct implementation of the regulations. The manual on visiting professionals and practices was also published and put into effect.

In relation to the development of human resources, the Institute launched the IICA Academy, a virtual platform that makes online courses available to all staff members. A total of 264 people took part in the courses, which focus on three areas: institutional knowledge, soft skills and technical and administrative skills. In addition, IICA carried out 37 training actions (with 360 participants) and redesigned the induction course for administrators and aspects of the courses related to staff recruitment and selection protocols. The Institute also revamped both the online and in-person courses that form part of its English language program, with 105 people taking part in 18 delegations.

In the area of recruitment, IICA identified new, free sources of information about potential professionals and implemented the the Dominance, Inducement, Submission and Compliance (DISC) methodology¹⁵ to complement decision-making for the selection of skills of suitable candidates.

To promote the long-term well-being of its staff, IICA consolidated the Esplendor Program, inviting new participants to sign up and following up on people close to retirement who had already taken part. The Institute also conducted a series of health and disease prevention campaigns at Headquarters and in all the delegations. In addition, it produced a Guide to the Preparation of Emergency Plans and a Emergency Procedures Manual, designed to enable Institute units to prepare their own emergency plans. In the area of insurance, the coverage for preventive medical examinations and dental costs was improved.

¹⁵ This methodology makes it possible to study the natural behavior of people in different situations.

The Institute mapped 13 internal staff management processes with a view to identifying areas in need of improvement and then standardizing them and disseminating the results. Also identified were the roles that staff members play as members of their respective teams and the value added that their positions contribute to the results of the Division of Human Talent Management.

Services

The budget resources allocated in 2017 were used efficiently, thanks to the greater awareness of service providers and the staff of practices that reduce the negative impact on the environment, such as the use of natural light and paper containers, recycling and the treatment of polluting waste (toner cartridges and electronic items, among others).

By adopting such responsible practices, IICA's operations made optimum use of the budgetary and financial resources available, which in turn made it possible to improve the water chlorination equipment, update the IT platform for the control of assets, properly maintain the *Centro de Reacondicionamiento Físico-Laboral*, celebrate the 75th anniversary of the Institute's founding, improve the appearance of some areas (the main lobby, for example) and the infrastructure (e.g., the Orton Commemorative Library in Turrialba, the Financial Management Division and the Services and Administrative Support Division), enter into new corporate contracts with airlines and hotels, and purchase equipment that will generate even more savings in 2018.

The revolving budget fund, created in 2017 to cover infrastructure maintenance expenses, proved to be a successful tool that made it possible to cover all existing needs, applying the criteria of reasonability, equity and sustainability. The fund for the self-financing of services generated USD 43,000. Furthermore, the Corporate Purchasing Committee processed every request submitted by the delegations and Headquarters in less than five days. The amount of funds involved topped USD 8 million.

Annexes

Annex 1

List of projects of IICA's Competitive Fund for Technical Cooperation (FonTC) implemented in 2017

| Name of project | Countries involved | Amount allocated in 2017 (USD) |
|--|--|--------------------------------|
| Extension strategies: family farmers and their adaptation to climate change in selected territories of the Southern Cone | Argentina, Chile and Uruguay | 5000 |
| Agricultural innovation for the sustainability of the biodiesel and biokerosene value chain | Brazil, Colombia and Mexico | 4500 |
| Development of institutional capabilities in participatory approaches, strategies and methodologies for optimum inclusion of young people in agriculture and rural territories in Costa Rica, Honduras, the Dominican Republic, and Brazil | Costa Rica, Honduras, Dominican Republic and Brazil | 6856 |
| Strengthening the agribusiness and associative capabilities of smallholder organizations in order to link them to local markets using the fair trade (FT) agribusiness model | Nicaragua, Costa Rica and Panama | 5000 |
| Strategic management system for area-based development and family farming | Brazil, Guatemala, Ecuador, Honduras, Mexico, Paraguay, Peru, Dominican Republic and Venezuela | 5000 |
| Enhancing value-added opportunities of small-scale cacao producers in Peru and the Dominican Republic | Peru and Dominican Republic | 32,286 |
| Development of the institutional framework for the subsector of commercial bioinputs for agricultural use (inoculants and biological pesticides) to promote cleaner agriculture in Paraguay, the Dominican Republic, and Guyana | Paraguay, Dominican Republic, and Guyana | 101,178 |
| Strengthening innovation processes in family agriculture in Southern Cone countries | Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay | 131,500 |
| Total allocated | | 291,320 |

Source: Technical Secretariat of the FonTC and the Directorate of Programming, Budgeting and Control (DPPC).

Annex 2

34 rapid response actions implemented in 2017

| Year commenced | Country | Short name | Amount allocated in 2017 (USD) |
|----------------|---------------------|---|--------------------------------|
| 2017 | Antigua and Barbuda | Rehabilitation of the agricultural rural communities of Antigua and Barbuda in the aftermath of Hurricane Irma | 9122 |
| 2017 | Argentina | Preparation of a domestic agenda for the development of the bioinput subsector agreed upon by the stakeholders | 0 |
| 2016 | Belize | Developing capacities in farmer field schools for improving the livelihood of six indigenous communities in Southern Belize | 13,460 |
| 2017 | Belize | Project planning and preparation support for the implementation of activities aimed at improving the efficiency of the banana industry | 16,095 |
| 2017 | Bolivia | Technical risk communication strategy in support of the campaign to control the South American locust (<i>Schistocerca cancellata</i>) | 9900 |
| 2017 | Canada | Transferring knowledge and skills through the Canadian Seasonal Agricultural Workers Program (SAWP) | 8322 |
| 2017 | Chile | Recovery of beekeeping affected by fires in the region of El Maule, Chile | 9999 |
| 2016 | Colombia | Strengthening the technical and business capabilities of small-scale agricultural producers in areas prioritized by the WFP | 21,559 |
| 2017 | Colombia | Support for the implementation of the Subsector National Plan to Monitor and Control Veterinary Drug Residues and Chemical Contaminants in Dairy Cattle to facilitate access to EU markets | 18,235 |
| 2017 | Colombia | 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 | 49,997 |
| 2017 | Dominica | Agricultural sector rehabilitation initiatives for rural communities of Dominica in the aftermath of Hurricane Maria | 9400 |
| 2017 | Ecuador | Emerging reactivation of production activities in the Province of Esmeraldas - Phase I | 26,512 |
| 2017 | Ecuador | Proposal for the consolidation of the “Zero fossil fuels Galapagos” government initiative | 0 |
| 2017 | Ecuador | Phase 2 – Gradual implementation of the Program for the Post-emergency Reactivation of Agricultural and Other Production in the Province of Esmeraldas, through the area-based enterprises initiative | 11,500 |
| 2017 | Ecuador | Emerging updating of Ecuador’s National Irrigation and Drainage Plan and design of operating models to promote irrigated agriculture within the framework of the Great National Agricultural Minga | 0 |
| 2016 | El Salvador | Support to associations of coffee producers to reactivate the coffee-growing sector in El Salvador | 6450 |
| 2016 | Jamaica | Developing chocolate-coated Blue Mountain coffee beans of Jamaica | 1230 |

| | | | |
|--------------|--------------------------------|--|----------------|
| 2016 | Jamaica | Population structure of the coffee leaf rust pathogen (<i>Hemileia Vastatrix</i>) in Jamaica | 515 |
| 2016 | Mexico | Activation of the Nopal - Tuna Localized Agrifood System (LAS) in the State of Hidalgo, Mexico | 29,000 |
| 2017 | Mexico | Climate change and agrifood production agenda | 25,000 |
| 2017 | Multinational | Capacity building in agricultural health and food safety for family farming production | 14,500 |
| 2017 | Multinational | Development of the Plan to Monitor Antimicrobial Resistance in Animal Health for Chile, Ecuador and Colombia | 11,476 |
| 2017 | Multinational | Support for the construction of a regional strategy to boost the response capability for the plant health emergency caused by the reemergence of the South American locust (<i>Schistocerca cancellata</i>) in Argentina, Bolivia and Paraguay | 47,169 |
| 2016 | Panama | Support to the Agricultural Master Plan for Repositioning the Agricultural Sector in the Western Region of Panama | 19,686 |
| 2016 | Peru | Modernization of policy management at the Ministry of Agriculture and Irrigation | 25,000 |
| 2017 | Peru | Risk management plan for dealing with extreme climatic events for livestock in Peru | 20,500 |
| 2017 | Caribbean Region | Support for the CaribVet Annual Meeting | 17,500 |
| 2017 | Dominican Republic | Catalyzing a multisectoral program to support water and soil management in response to the climate change threat in the Dominican Republic | 32,000 |
| 2016 | St. Kitts and Nevis | VRO AgroCommerce Online Farmers Marketplace | 0 |
| 2017 | St. Kitts and Nevis | Proposal for support in the rehabilitation of agriculture in St. Kitts and Nevis post Hurricane Irma | 11,400 |
| 2017 | St. Vincent and the Grenadines | Supporting the development of a coffee industry in St. Vincent and the Grenadines and the Commonwealth of Dominica | 32,017 |
| 2017 | Uruguay | Opinion study on the Uruguayan agricultural sector | 10,000 |
| 2017 | Uruguay | Support for the process of constructing Uruguay's National Antimicrobial Resistance Plan | 9000 |
| 2016 | Uruguay | Survey of local initiatives on the assessment of family production products and study on possible synergies and ways of linking them | 2000 |
| Total | | | 518,544 |

Source: Directorate of Programming, Budgeting and Control (DPPC).

Annex 3

IICA knowledge products

| | |
|--|--|
| <p>IICA Virtual Campus</p> <p>Alliance of Agricultural Information Services - SIDALC</p> <p>www.sidalc.net</p> | <p>The 18 available courses have benefited 30,000 participants.</p> <p>The alliance, comprised of 177 national institutions in 22 countries, facilitated access to 3 million references and 240,154 full-text documents, archived in 347 databases. The latter were accessed 4.9 million times, with 1.3 million recurrent users signing in on two or more occasions. Users shared 59,928 articles and documents, which represented the mobilization of more than USD 2.4 million through knowledge sharing.</p> |
| <p>Collection of information management resources - IMARK</p> <p>www.imarkgroup.org</p> | <p>Working with FAO and other international organizations, a platform is in place that offers 9 courses in English, 6 in French and 4 in Spanish. A total of 6508 users engaged in 8281 sessions.</p> |
| <p>AgriPerfiles</p> <p>http://agriperfiles.agri-d.net/</p> | <p>The Institute spearheaded the adaptation and operation of the VIVO system in LAC, whose database of information about agricultural professionals and specialists in the Americas was expanded. The platform currently contains 2145 profiles of professionals related to more than 1933 organizations.</p> |
| <p>Network for the Management of Innovation in the Agrifood Sector - INNOVAGRO Network</p> <p>www.redinnovagro.in</p> | <p>This network contributed content for the training of at least 15,000 people in innovation and food security. It also facilitated the sharing of experiences through four technological visits and evaluated and published 31 member innovations, 1 methodology, 1 proceedings and 2 books. The Web portal registered 38,044 visits and the social network pages have 4262 (Twitter) and 1360 (Facebook) followers, respectively.</p> |
| <p>IICA Website</p> <p>www.iica.int</p> | <p>In 2017, IICA published 65 books and technical documents, all available in digital format and under the system of Creative Commons licenses.</p> |

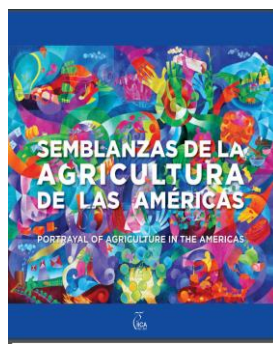
Examples of recent publications:



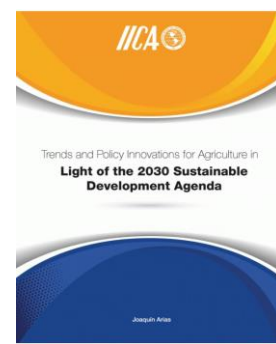
[Estado actual sobre la producción, el comercio y el cultivo del cacao en América](#)



[Caficultura: panorama actual en América Latina](#)



[Semblanzas de la agricultura de las Américas / Portrayal of Agriculture in the Americas](#)



[Trends and policy innovations for agriculture in light of the 2030 sustainable development agenda](#)

Source: IICA's Inter-American Center for Information and Editorial Production.

Annex 4

Number of scholarship holders studying for master's and doctoral degrees at Mexican universities under the CONACYT-IICA 100 Scholarships program (class of 2017)

For the third consecutive year, the number of new scholarships awarded under the CONACYT-IICA agreement in Mexico was three times the expected figure (327 in 2017).

| Country | Master's degree* | Doctorate | Total |
|--------------------------|------------------|-----------|------------|
| Argentina | 8 | 4 | 12 |
| Belize | 4 | 1 | 5 |
| Bolivia | 8 | 1 | 9 |
| Brazil | 4 | 2 | 6 |
| Chile | 8 | 2 | 10 |
| Colombia | 253 | 18 | 271 |
| Costa Rica | 14 | 4 | 18 |
| Dominica | 2 | 0 | 2 |
| Dominican Republic | 11 | 0 | 11 |
| Ecuador | 36 | 4 | 40 |
| El Salvador | 7 | 3 | 10 |
| Grenada | 1 | 1 | 2 |
| Guatemala | 16 | 0 | 16 |
| Guyana | 1 | 0 | 1 |
| Haiti | 11 | 1 | 12 |
| Honduras | 26 | 3 | 29 |
| Nicaragua | 12 | 2 | 14 |
| Panama | 6 | 1 | 7 |
| Paraguay | 8 | 0 | 8 |
| Peru | 14 | 2 | 16 |
| Saint Lucia | 2 | 1 | 3 |
| Uruguay | 2 | 0 | 2 |
| United States of America | 1 | 0 | 1 |
| Venezuela | 17 | 6 | 22 |
| Total | 472 | 56 | 527 |

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

* Specializations and master's degree courses added together.

** Since the program began, 527 students have graduated or are nearing graduation.

*** Since 2012, the program has benefited 1288 people.

Acronyms

| | |
|----------|--|
| AHFS | Agricultural health and food safety (IICA) |
| ALASA | Latin American Association for the Development of Agricultural Insurance |
| AMIS | Agricultural market information systems |
| AMR | Antimicrobial resistance |
| APHIS | Animal and Plant Health Inspection |
| CAC | Central American Agricultural Council |
| CARDI | Caribbean Agricultural Research and Development Institute |
| CAS | Southern Agricultural Council |
| CATIE | Tropical Agriculture Research and Higher Education Center |
| CCA | Climate change adaptation |
| CIP | International Potato Center |
| CIRAD | French Agricultural Research Centre for International Development |
| CONACYT | National Council for Science and Technology (Mexico) |
| COSAVE | Plant Health Committee |
| CVP | Standing Veterinary Committee |
| EC | Executive Committee (IICA) |
| ECLAC | Economic Commission for Latin America and the Caribbean |
| EMBRAPA | Brazilian Agricultural Research Corporation |
| EU | European Union |
| FAO | United Nations Food and Agriculture Organization |
| FF | Family Farming |
| FONTAGRO | Regional Fund for Agricultural Technology |
| FORAGRO | Forum for the Americas on Agricultural Research and Technology Development |
| FSMA | Food Safety Modernization Act |
| GIZ | <i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i> (Germany) |
| IABA | Inter-American Board of Agriculture (IICA) |
| ICOA | Inter-American Commission on Organic Agriculture |
| IFAD | International Fund for Agricultural Development |
| IICA | Inter-American Institute for Cooperation on Agriculture |
| INTA | National Agricultural Technology Institute (Argentina) |
| IPPC | International Plant Protection Convention |
| MAG | Ministry of Agriculture and Livestock (Paraguay) |
| MERCOSUR | Southern Common Market |
| MIOA | Market Information Organization of the Americas |
| MTP | Medium-term Plan (IICA) |
| NGOs | Nongovernmental organizations |
| NIMF | International standards for phytosanitary measures |
| NPPO | National plant health protection organizations |
| OIE | World Organization for Animal Health |
| OIRSA | International Regional Organization for Plant and Animal Health |

| | |
|---------------|---|
| PROCAGICA | Central American Program for Integrated Coffee Rust Management |
| PROCINORTE | Cooperative Program in Agricultural Research and. Technology for the Northern Region |
| PROCISUR | Cooperative Program for Agrifood and Agroindustrial Technology Development in the Southern Cone |
| PROCITROPICOS | Cooperative Program for Agricultural Research, Development and Innovation in the South American Tropics |
| PROMECAFE | Regional Cooperative Program for the Technological Development and Modernization of Coffee Production |
| PVS | Performance, Vision and Strategy |
| REAF | Specialized Meeting on Family Farming |
| Red INNOVAGRO | Network for Innovation Management in the Agrifood Sector |
| SRI | System of Rice Intensification |
| SUGI | Unified Institutional Management System (IICA) |
| TARE | Technical assistance and rural extension |
| USAID | U.S. Agency for International Development |
| USDA | United States Department of Agriculture |