



AGRICULTURE AND RURAL PROSPERITY IN THE CARIBBEAN 2013-2014
HIGHLIGHTS OF IICA'S TECHNICAL COOPERATION







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## Recognising a Regional Stalwart in Agriculture

## THE LATE HON. ROGER CLARKE



"We are the voices of the Rural Milieu, our task is clear-cut; Our challenges are enormous. But I am confident that we have the will and fortitude to prevail. Let us pool our talents for the development of our peoples."

Hon. Roger Clarke, Addressing the Opening Ceremony as Chairman of the Alliance, at the 2003 CWA, Guyana

Roger Clarke – a name synonymous with agriculture in Jamaica, in CARICOM and the wider Caribbean Region. The Hon. Roger Clarke was a dedicated son of the soil and a true patriot of the agricultural community. He was

a very close friend of IICA for many years. Minister Clarke was instrumental and worked tirelessly with IICA, CARDI and the CARICOM Secretariat to establish The Alliance for Sustainable Development of Agriculture and the Rural Milieu in the Caribbean (the Alliance) when it was launched in Jamaica in 2000, and was its first Chairman, a capacity in which he served for many years. During his life as Minister of Agriculture of Jamaica, he contributed immensely to the growth and expansion of the Caribbean Week of Agriculture as we see it today.

As Minister of Agriculture of Jamaica, he was a member of the Inter-American Board of Agriculture and participated actively in many meetings of the Board and its Executive Committee for almost fifteen years. He represented Jamaica as well as the Caribbean in these meetings with much distinction and his contributions to the discussions on issues affecting agriculture in the region and in the hemisphere were invaluable. Mr. Clarke died in his capacity as a current member of the Inter-American Board of Agriculture. His absence in the Board's meetings will be very much missed.

IICA pays tribute to this regional agriculture icon and urges that his passion for agriculture, his wisdom for pursuing growth with development, and of course, his endless wit and humour, be remembered as we move forward, together, as development institutions to achieve our shared goal of sustainable agricultural development.



## **FOREWORD**

The period 2013-2014 represented the beginning of a transition process for the Institute into the design and approval of a new 2014-2018 Medium Term Plan (MTP). This plan presents an evolution of our technical cooperation model from the last three decades of experience and defines the institutional arrangements to adopt a more results-based approach for the organization. In order to implement the MTP, IICA has established four new instruments through which it will provide its technical cooperation, and will work closely with the countries to better achieve results related with agriculture and rural milieu transformations in each of the 34 Member States.

In keeping with IICA's strategic priorities, our Offices in the Caribbean were able to complete several important projects over the 2013 to 2014 period, within the key challenge areas for agriculture in their countries.

This Special Report provides a summary of the key results obtained in 2013-2014 by our IICA offices across the 15 Member States in the Caribbean Region, including Belize, which is a CARICOM Member state. The document also reports on results achieved under strategic partnerships, including with the EU through the Intra-ACP Agriculture Policy Programme (APP), which we are implementing in partnership with CARDI and CARICOM, and the SPS capacity-building project, which is aimed at building resilience and competitiveness in agriculture and fisheries to improve access to market opportunities and trade.

In addition to these projects, we are also pleased to report on the success of a training programme tailored specifically for the Caribbean Region, and funded by the Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) of Mexico. To date, 143 Caribbean professionals have received training at technical centres in six courses that were identified as priorities for the Region.

During this second term of my administration, the Institute reiterates its commitment to achieving high quality results in support of agricultural development and rural well-being in the Caribbean and the Americas. The new 2014-2018 MTP clearly defines eleven contributions of our technical cooperation related with public policies, productivity, competitiveness, agricultural health and food safety, value chains, area-based social management, integrated water management, adaptation to climate change, food and nutrition security programs, use of native species, food losses and participation at international *fora*.

We look forward to reaping a speedy and bountiful harvest.

Victor M. Villalobos Director General



# HIGHLIGHTS OF IICA'S WORK IN THE CARIBBEAN COUNTRIES

## **Antigua and Barbuda**

- The capacities of women agroprocessors to manage tax and bulk purchasing of raw material were strengthened through provision of management training. This will help them to reduce their production costs and improve marketability of their product lines. This will also enhance their access to potential sources of funding to improve organizational capacity and delivery of services to members.
- Local producer groups, women and youth in agriculture have an increased interest in the sector as well as a better appreciation of the importance of transparent agricultural market information systems to making good business decisions.
- Public agencies, producers and exporters have updated and accurate information on the state of food safety processes and procedures, with particular reference to food processing and handling. This information will guide the establishment of SPS protocols which are essential to enhance Antigua and Barbuda's access to markets for food products.



#### **Bahamas**

- The Ministries of Agriculture, Health and Environment have completed the design of an AHFS action plan for Food Safety and Monitored Plant Health. This was made possible with the support of IICA and use of its Performance, Vision and Strategy (PVS) tool, with collaboration from the FAO, PAHO and the IDB.
- The Exuma Women Project, funded by UN Women, has significantly improved the skills of women handicraft construction. The women were also provided with equipment and training, which enabled them to introduce new, quality products and enter into supply contracts with hotels and gift shops. This has increased the income of communities in several islands of The Bahamas.
- The community and group support provided by the IICA Office to organized stakeholders have enabled these organizations to improve benefits to their members. Bahamas National Handicraft Association (BNCA) and its members in other islands, are now integrated into CANROP; the capacity of the Bahamas Forum for Youth in Agriculture (BAFY) to organize activities was strengthened. IICA also collaborated with the Ministry of Agriculture to support the Bahamas Agribusiness Cooperative (BABCO) backyard gardening project, including negotiating for local farmers to supply large hotel developments with local fresh produce.
- Two hundred farmers, processors and their organizations benefitted from a comprehensive training program which covered agribusiness and trade, project management, entrepreneurship, food safety, food processing, livestock, animal nutrition, sourcing planting material and aquaponics, among others.



Entrepreneurship and technical skills for more than 60 members of the Exuma Women Project.



Aquaponics is a food production system that uses waste produced by farmed fish or other aquatic animals to supply nutrients for plants grown hydroponically.



### **Barbados**

Private and public sector persons directly involved in protected agriculture received updated knowledge on best practices and efficient management of protected agriculture systems. Two private sector operators received direct technical support while two Ministry Extension Officers witnessed first-hand, operations of large scale protected agriculture systems in Jamaica.

A 20'x20' greenhouse was erected at Princess Margaret Secondary School.

- The Ministry of Agriculture has placed priority on the development of an Agricultural Market Intelligence Service. IICA is a key partner in this process, providing support to the design of the system and a direct link into the IICA-managed Market Information System of the Americas initiative.
- Thirty-eight persons, including youth, small business operators and members of community-based organizations, increased their knowledge of food safety and good manufacturing practices. IICA supported this capacity building through workshops on SPS and market standards hosted in collaboration with the German Cooperation Agency (GIZ).
- Youth are being well prepared for the agriculture industry. The collaborative efforts of IICA, the Technical and Vocational Education and Training (TVET) Council, the Ministry of Education and Human Resource Development, and the Ministry of Agriculture and Rural Development in delivering an eight-week youth farm program, resulted in certification of twenty-three youth in the National Vocational Qualifications in Amenity Horticulture Level I. The third edition is already subscribed, with thirty-one agri-science students from nine secondary schools already registered.
- IICA partnered with seven agricultural employers in the private sector to provide the Youth Farm candidates with experience in poultry, dairy and pig farming, as well as in ornamental agriculture and sustainable crop farming. Nine candidates (including three women) worked at the Ministry of Agriculture's Greenland Livestock Research Station, and one candidate conducted research alongside the scientists in the Soil Conservation Unit.
- 20 farmers and 15 Ministry officials received training and field demonstrations that improved their knowledge and awareness on alternative forages and feeding practices for small ruminants. This was reinforced with improved access to relevant published information on the Small Ruminant Industry, including Reports on Small Ruminant (Barbados Blackbelly Sheep) Market Study and Suitable Forages for Small Ruminant Production in Barbados.
- Community agro-tourism received a boost with a successful community event showcasing the efforts of the Grapefruit and Molasses Inc. community-based group. This was realized with support from IICA, the Ministry of Agriculture and the Ministry of Tourism and Community Development. Support to publish a technical manual and brochure on citrus pests and diseases also added value to these efforts.



#### **Belize**

- IICA contributed to strengthening the agricultural extension unit of the Sugar Industry Research and Development Institute (SIRDI) of Belize, which established participatory extension methodologies based on farmer field schools involving 1000 sugar cane farmers. This has resulted in an increased area of more than 4000 acres planted with improved sugar cane technologies.
- IICA validated the impacts of the RED-SICTA project, some of which include a 30% increase in productivity of corn and beans, contributing to increased food security and greater income for farmers. Based on these results, support was provided to the Ministry of Natural Resources and Agriculture (MNRA) in developing a strategy for scaling up improved technologies for food security, which will provide direct benefits to 2500 small farmers and 20 communities dominated by indigenous groups in the Southern region of Belize.
- IICA's technical support to develop and implement the Belize Rural Area Development Strategy (BRADS), within the framework of ECADERT, resulted in the implementation of three major projects in the Belize River Valley. Collectively, these projects contributed to improving the livelihoods and prosperity of about 3000 families in fifteen communities.
- A training program for thirty extension field staff and 1200 farmers contributed to the improvement in knowledge and practices in organic farming and commercialization.
- IICA provided technical assistance to the MNRA to develop a framework for a national agriculture and food policy for Belize. The strategic objectives include: food and nutrition security, competitiveness of the agricultural sector, conservation of natural resources and biodiversity, adaptation and mitigation to climate change and rural prosperity.





### **Dominica**

- The Ministry of Agriculture and Forestry was provided with technical advice in its efforts to formulate a policy framework to guide the development of the agricultural sector.
- The Bureau of Standards strengthened its capacity to assist commercial farmers in meeting prerequisites for farm GLOBAL Gap certification through pilot programs, development of codes and training workshops.
- The capabilities of 58 agrifood chain stakeholders (exporters, farmers and packinghouse operators) to respond to market demands and engage more effectively in trade have been strengthened as a result of exposure to training in agricultural commodity standards and quality.
- Through community group training sessions, over 45 rural women, including young women, have increased their autonomy, equipping them to develop successful agribusinesses as a result of the facilitative process introduced by the Self Learning Guide.
- Leadership and entrepreneurial skills of women in agriculture were improved. Twenty-two women received direct training in onion and sorrel production, with three of them benefitting from a study tour in onion in Belize. Increased exposure also stimulated an expanded membership of women in groups, with the Agricultural Women Movement receiving 17 new members.



Three women clusters from agricultural districts have been strengthened to form the local chapter of CANROP.



## **Dominican Republic**

- The Ministry of Agriculture has strengthened its capacity to generate and apply public policies of interest to the farming sector. A strategy has also been developed for climate change mitigation with the Ministry of the Environment, supported by IICA.
- Through its project on Strengthening International Quarantine in Haiti and the Dominican Republic, IICA supported the binational dialogue on harmonization of 17 points, shared criteria on agricultural health and quarantine measures, updated legal frameworks, implemented information systems, delivered equipment and improved laboratory services in both countries.
- With Institute support, the Ministry of Agriculture and the Dairy Cattle Breeding Program (MEGALECHE), in coordination with stock-raising organizations and the private sector, carried out training workshops for livestock farmers, selected teaching farms, identified and promoted shrub and tree species by agroecological zones and carried out demonstrations with over 600 producers and technicians from throughout the country.
- The performance of the local small ruminant industry was enhanced through promotion of sheep and goat rearing in elevated corrals and increased use of local feeds, especially forage from trees and shrubs. Through IICA's La Cabrita project (in the town of Pescadería, Barahona province) information and practices for improved management systems were transferred to farmers to improve the health of goat kids with a high mortality rate and zero production. Adopting such improvements would improve their survival rate and milk production. Goat milk is used to make cheese and yogurt.
- In collaboration with ISA University, a School of Inspectors was established for the training of professionals in the area of plant and animal health as well as food safety.
- IICA consolidated efforts to promote the use of technologies for improving food and increasing family farm incomes in the context of an integrated farm strategy, including training about dairy goats; free-range chickens; guinea pigs; covered vegetable gardens; and ponds. In addition, improved *isleña*-type stoves, originally designed for use with twigs in Haiti, were introduced and warmly welcomed by the women who received them.
- In the context of the project on Climate Change for the Caribbean, four Dominican technicians received training on the application of a methodology for identifying appropriate technologies for adapting to climate change (climate lens). The vulnerability of different species and production

systems to climate change was identified and immediate adaptation measures determined.

The Ministry of Agriculture has implemented innovations related to rice production based upon the principles of the System of Rice Intensification. Eight farmers have benefited from this system and others have received information about this technology.





#### Grenada

- Farmers and agro-processors have enhanced their agricultural knowledge and business management capacities through training in preparation of Cost of Production and Financial Statements. This will improve the quality of recording and analysis of the performance of their enterprises.
- The ability of stakeholder groups to manage inter-personal relationships and build leadership skills has been improved through acceptance and application of training in group dynamics and leadership. Groups benefitting included the Clozier Youth Farmers, GAFY, CABA and Grenada Chapter of the Caribbean Network of Rural Women Producers (GRENROP).
- GRENROP's capacity for organizational development and business management has improved significantly through technical advice and support from IICA. The group successfully implemented two complementary income-generating projects: an externally funded project which trained group members and provided equipment to facilitate increased production of quality agro-processed products, and a project which led to the successful conclusion of a "Partnership Agreement" with a local supermarket chain for retailing of a range of agro-processed products, including poultry meat and eggs, produced by group members.
- Stakeholders with an interest in organic production were exposed to information, technical advice and production aspects of organic farming systems.
  - Through the IICA/Ministry of Agriculture workshop on "Establishing an Organic Farm: First Steps", forty-one agricultural technicians, women, youth, farmers and representatives of farmers' organizations, marketing institutions, and the Marketing Access and Rural Enterprise Project increased their awareness of, interest in, and knowledge on requirements for successful organic farming.
  - Through a workshop on "Production and Use of Organic Manure and Other Manures", thirty-six members and potential members of the Grenada Organic Agriculture Movement (GOAM) improved their capacity to produce and use "compost manure". They were also made aware of the advantages of using organic manures and pesticides.
- Grenada's ability to effectively participate in international agricultural trade was enhanced through the active participation of 24 persons in a 1-day IICA/Ministry of Agriculture consultation on "Agricultural Health and Food Safety". Participants were selectively drawn from the Ministry of Agriculture, CARDI, Grenada Marketing and National Importing Board, Ministry of Health, Grenada Bureau of Standards, WINFRESH, and a number of farmers' organizations.



### Guyana

Horizontal Cooperation among Costa Rica, Belize and Guyana was increased as a result of a visit of high-level Guyanese authorities to IICA Headquarters. Genetic material (corn and black eye peas) from Belize was imported by Guyana for establishing research trails, with the objective of commercialization. The country has benefited from specialized training for the coconut industry (genetic improvements, agro-processing and pest management).

Three Practical Institutional Centres (PICs) received technical and financial assistance to facilitate the adoption of shade house technology for vocational institutions. Over 1200 secondary students visited the 4 shade houses constructed at the PICs and benefited from hands-on experience in shade house technology. This was made possible through IICA's collaboration with the FAO and the Ministries of Education and Agriculture.

Two low-cost polyethylene bio-digesters were established on site at the Ministry of Agriculture and at the Guyana School of Agriculture to serve as training facilities for stakeholders. This was done through an IICA-Ministry of Agriculture project to introduce an alternative source of cheap fuel and manage animal waste in an integrated farming system.

The Carambola Fruit Fly surveillance program in interior regions continued and the pest incidence in new areas has decreased.

46 traps are in service.

Six women agroprocessing groups benefited from bulk buying under a revolving fund by IICA. Additionally, a self-learning guide is being used to strengthen the group's capacity in organizational skills and entrepreneurship.

More than 50 new young bee keepers were trained, instructional materials were designed and distributed, while the Guyana Apiculture Society continues to expand its membership. This was facilitated under an IICA-Partners of the Americas (Guyana Office), project on "Promoting Alternative Income Generation in Hinterland Communities", which focused on beekeeping in Aliki on the Essequibo River and Lake Mainstay Village on the Essequibo Coast.

The Institute, through its project "Modernizing Tertiary Education in Guyana", supported the Faculty of Agriculture and Forestry of the University of Guyana in its Curriculum Reform Process. It will be incorporated into a larger university project supported by the World Bank.

Guyana, as the Host IICA Office for the 2013 CWA, supported the pre-planning and facilitation of participants and in the various workshops and other activities, and provided general support to the CARICOM Secretariat, Ministry of Agriculture and Alliance Secretariat partners in the overall coordination and management of the event. The Office was also instrumental in the completion of an official CWA Technical Report that clearly identified the recommendations and follow-up required by regional and international organizations.



#### Haiti

- Yam production has increased in the Salagnac region of the Department of Nippes as a result of the introduction of the minisett yam technique for revitalizing the «Ginen» variety, which had been disappearing from the region. (Roots and Tubers Project-MARNDR, IICA, CFC, CARDI)
- The capacities of Haitian agribusinesses in two geographical divisions of the country were strengthened as a result of the intervention of 10 Technical Management Advisers and a new cadre of professionals was introduced in Haiti under the SYFAAH project. (IICA-DID-FADQDI consortium-MARNDR)
- Support was provided for the development of the mango production chain with workshops on production, post-harvest techniques and food safety, through an exchange visit by members of the public, private and technical cooperation sectors, a technical mission to Puerto Rico and the preparation, in collaboration with the Ministry, of a document to seek funding for the National Fruit Programme.

The Ministry of Agriculture improved its sufficiency in seed production with silos to store 6.5 metric tons, while farmers have achieved this with their capacity to produce bean seeds.

- Under the Protected Agriculture project (CFC-CARDI), greenhouse cultivation was developed with IICA's installation of six 540 m² greenhouses in four geographical regions of the country: the South, West, Artibonite and Central Plateau. Additionally, 44 persons were trained in this technique and the Association of Haitian Greenhouse Farmers was created.
- The Community of Arreguy was introduced to the use of «Isleña» wood-preserving stoves that were promoted and distributed (Bilbao CARITAS Diocese-IICA project), resulting in a reduction of the need to cut wood, and therefore reducing deforestation of the community. Thirty-three thousand forestry and fruits trees were planted in the area.
- The country's quarantine capabilities were strengthened through the organization of training sessions for quarantine inspectors from the Ministry of Agriculture and the rehabilitation of four quarantine posts at the ports and at the airport. (USDA-Ministries of Agriculture of Haiti and Dominican Republic-IICA)
- The agricultural research capability of the Ministry was strengthened with the establishment of the first Scientific Council in Haiti, under the CORDAH project. (CRDI-IICA)

330,000 doses of anti-Teschen vaccines were purchased and are being tested in USDA labs in the US to be delivered to the Haitian authorities.



#### Jamaica

The small ruminant industry benefitted from a number of initiatives to strengthen industry performance in Jamaica. Through IICA's Small Ruminant and Commercialization Project, executed from the office in Jamaica, and which also included Barbados, stakeholders in Trinidad and Tobago were trained in meat fabrication and improved their knowledge through direct access to technical material, including a manual on the production and dissemination of a hygienic slaughter.

The capacities of individuals and community groups to access grant funding, execute funded projects and successfully operate businesses were strengthened through training conducted by IICA on behalf of the Social Development Commission (SDC). Over 80 participants from community groups in three parishes were trained in project proposal writing, project management and business plan writing.

IICA facilitated horizontal cooperation training in proper nutrition for small ruminants and selected forages to small ruminant farmers and representatives of the Research and Development Division of the Ministry of Agriculture and Fisheries facilitated by a project executed from the IICA Office in the Dominican Republic. During the visits by a mission from Dominican Republic, four forage plots were established at two of the Ministry's research stations.

A series of activities conducted by IICA contributed to enhanced marketing capabilities of agriculture stakeholders, including professionals from the Ministry of Agriculture and Fisheries and its sister organizations, participants in the Buff Bay Valley Agro-Tourism Programme and women agro-processors. IICA's interventions:

- helped to improve the capacity of marketing officers from the Ministry, Rural Agricultural Development Authority (RADA), Jamaica Agricultural Society and the Jamaica 4-H Clubs to conduct market research and analyze the data gathered via the Statistical Package for Social Sciences (SPSS).
- supported the successful staging of the inaugural Jamaica Ackee and Cultural Festival in the Valley.
- enhanced awareness of the demand for products offered by female agro-processing groups under the IICA's Rural Women Working Capital Project and the government's pilot school feeding programme, leading to an increase in these products.

The College of Agriculture, Science and Education (CASE) received a donation of agricultural materials and equipment from IICA to help with the college's recovery from the destruction caused by Hurricane Sandy. The Institute provided inputs such as seeds, agro-chemicals, greenhouse plastic, shade netting and galvanised piping to assist with

the restoration of CASE's teaching facilities in ornamental horticulture and protected agriculture, which had suffered extensive damage from the hurricane.

The two-year project also included a study mission to Fort Valley State University in Atlanta, USA, to examine good management practices for rearing small ruminants.





#### Saint Kitts and Nevis

- The knowledge and capacities of farmers and agro-processors have been enhanced and they are now recording and analyzing the performance of their enterprises, which includes profit and loss accounts, cost of production and financial statements. In addition, through the provision of training in group dynamics and leadership, interpersonal relationships and leadership skills within the various groups have been enhanced.
- Farmers were able to adopt good management principles for the production of wholesome and safe food for human consumption. In addition, agro-processors are now able to identify critical safety points in the handling, preparation and serving of food and concentrate their resources on activities that are critical to ensure food safety.
- The value of the tourism product has been enhanced through the preparation of a project that developed a unique product mix, which includes a petting zoo, farm tour, nature and heritage trails, organic produce and donkey rides.
- IICA continued to focus its efforts on increasing youth engagement in agriculture. In this regard, a third shade house was constructed and has been operational at one of the High Schools in Saint Kitts. This effort has led to the development of a cadre of innovative youth leaders who will ultimately be able to address the nutritional concerns of the School's Feeding Programme.
- An improved strategic framework (2013-2016) and the development of the Annual Work Plan for 2014 were developed through a consultative process for the Department of Agriculture, with IICA's assistance. As was done for 2013, the Institute also assisted the Department in the development of a Plan of Work for 2014.



The project provided jobs and income for a number of young persons and the numbers, of visitors have increased.

#### Saint Lucia

131 farmers received material support for the rehabilitation of their agribusinesses following a low level trough disaster, enabling them to return to production and, in some cases, with expanded capabilities that re-established their income streams.

Productive capacity in the vegetable sub-sector was increased through the entry into operation of two fully automated protected agriculture facilities supported by the Government of Mexico, with contributions from IICA, the Government of Saint Lucia and the two main beneficiaries, Sir Arthur Lewis Community College and Ebenezer Farms. The technicians received specialized training sessions in protected agriculture which were held in Saint Lucia and at the Regional Centre for Integrated Services for Protected Agriculture in Guadalajara, Mexico.

Production and marketing systems were enhanced for pineapple agribusinesses through the establishment of a Dialogue Platform among stakeholders in the pineapple industry. Additionally, a strategic development plan was put in place to oversee the management of the pineapple value

IICA is implementing two projects to enhance the productivity of the small ruminant and pineapple chains, with financial support from the Australian High Commission.

chain for the next five years.

Saint Lucia Small Ruminant Cooperative Society Limited received support for the procurement of 12 pure bred goats and sheep originating from the USA.

The knowledge capacities of 40 members of the Saint Lucia Network for Rural Women Producers were strengthened through training in business skills. Additionally, the business activities of the members were expanded through IICA's cooperation in the use of semi-industrial as well as packaging and labeling techniques to improve product quality and standards.

IICA implemented four phases of the Helping Out Our Primary and Secondary Schools (HOOPSS) Project, in partnership with SLAFY and Consolidated Foods Limited, as a direct mitigating response to the decreasing participation of youth in agriculture, and to the need to address the nutritional concerns of school feeding programs through the encouragement of cultivation and consumption of fresh, wholesome foods.

In response to technical advice and material delivery by IICA, producer groups, agricultural technicians and agribusiness continue to diversify into crops such as vegetables, cocoa and plantain, thus moving away from banana production.



The Saint Lucia Pineapple Cooperative Society Limited received financial support for the procurement and installation of an irrigation pump to supply water to its pineapple demonstration plot.



#### Saint Vincent and the Grenadines

- Through IICA's intervention, St. Vincent and the Grenadines now has new institutional mechanisms for the development of the pork industry and provision of direct technical support and training to officers of the Ministry of Agriculture in the use of the CADIAC methodology for participatory dialogue and action. Pork producers discussed the state of the pork industry and finalized their action plan.
- The St. Vincent and the Grenadines Network of Rural Women Producers has a new instrument designed to strengthen the institutional structures and transform its operations, as a result of IICA's development and delivery of a four-year (2013-2016) Medium Term Plan for the Organization, including its by-laws.
- Twenty-two members of the Women in Agriculture for Rural Development are positioned to benefit from the development of a new diversification alternative in vegetable production as a result of the work of the Institute in the formalization of a project proposal for vegetable production, funded by the Government of Australia.
- The Rose Hall Development Organization received a grant from the Global Environmental Facility resulting from a project written by IICA for agro-enterprise development.
- The Ministry of Agriculture, in collaboration with IICA, enhanced technical competency in climate resilient vegetable production among stakeholders on 50 rural, family operated farms. Additionally, the Institute provided the Ministry with an assessment report of the country's Agricultural Market Information System.



Seventy vegetable farmers received inputs from the project, which is designed to hasten the recovery of the sector from the December 2013 disaster by supporting the recovery of affected farmers, with emphasis on women and youth.

#### **Suriname**

- The Carambola Fruit Fly Project improved the technical capacity of the country's plant protection services to eradicate the pest. The main objective achieved was in supporting the control and eradication of the carambola fruit fly. This resulted in the integration of the countries into a regional effort to combat the pest and prevent it from spreading and leading to direct damage and loss of external markets.
- National food safety capabilities were enhanced through training in Good Manufacturing Practices (GMPs), Good Agricultural Practices (GAPs), crop control and improved participation in *Codex alimentarius* WTO/SPS fora. Also farmers, food handlers, agroprocessors and extension workers from the districts of Marawijne, Para and Wanica received training to improve their knowledge and build capacity in food hygiene, adding value (pineapple & cassava) and good manufacturing practices.
- Rural communities Powakka and Klein Powakka were introduced to aquaponic systems, while Powakka, Pierre Kondre, Redi Dotti and Casipora increased their capabilities in greenhouse production. In the Para District, the indigenous population has increased its participation in agrotourism plans and community development.
- Training in organics, fruits and irrigation toke place as part of improved innovation systems in the country. Additionally, 85 extension workers from different regions were trained in the introduction of irrigation systems for field crops, composting and greenhouses in order to mitigate the negative impact of climate change, improve water management systems in agriculture and increase productivity by eliminating seasonable variations.
- Training activities were conducted for 20 animal husbandry technicians, veterinarians, Ministry of Agriculture extension workers and farmers in small ruminant production systems in the use of feed to enhance the efficiency and viability of cut-and-carry and grassing systems.
- Various crops, such as moringa, *Tithonia*, mulberry, *Teucaena* and *Gliricidia*, were introduced and nurseries developed at three resorts (Commewijne, Kwatta and Houttuin) in two districts. Approximately 20 animal husbandry technicians, veterinarians, Ministry of Agriculture extension workers and farmers participated in a session on this topic.



A CARTfund Project, in collaboration with Equal Chances @ Green Development, is empowering the forest-dependent indigenous communities in the Carolina area (Para district); Powakka, Pierre Kondre, Redi Doti and Cassipora.



## **Trinidad and Tobago**

Several stakeholders in the food chain enhanced their knowledge and understanding of market access issues related to agricultural health and food safety. This included:

improved in production
management models, forage
production and nutrition
based on local feedstuffs.
and
s of

Capacity of small ruminant

farmers and technicians

- Sixty-five stakeholders who increased their capabilities in food safety principles such as GAPs, GMPs, public health, and packaging & labeling, allowing them to be more prepared and to market food safely. This was achieved through a series of workshops and dissemination of relevant information designed specifically to enhance their awareness and understanding of trade-related requirements.
- a wider group of local stakeholders who also received information and exchanged knowledge on emerging developments in AHFS issues through seminars designed to enhance their capacity to respond.
- four officials from the Ministry of Health (The Codex Focal Point) who were sponsored by IICA to attend various codex committee meetings.
- The capacity of agricultural planners and decision makers within the Ministry of Food Production (MFP) and the Tobago House of Assembly (THA) was strengthened through workshops that demonstrated the use of an IICA-developed model, which can be used for strategic planning, guiding investments and policy making decisions.
- IICA, in collaboration with MFP, conducted studies on the profitability of cassava production as an input for incorporation into the Ministry's strategic plan for development of the Cassava Industry in Trinidad and Tobago.
- The capacities of 45 persons from 20 farmer and community based organizations have been strengthened through a series of training workshops addressing issues relating to entrepreneurship, business planning, marketing and events management.
- The Institute collaborated with the MFP in capacity building for young professionals/interns of the Agricultural Professional Development Programme, and assisted students of the University of the West Indies (UWI) in preparation of final-year projects.



Capacity of youths was strengthened in product development skills, while the Network of Rural Women Producers was trained in project proposal preparation.

## STRATEGIC PARTNERSHIPS FOR THE REGION

## Mexico and the Caribbean: Specializing competencies in agriculture

At the meeting of the Inter-American Board of Agriculture and Meeting of Ministers in Buenos Aires (October, 2013), the Undersecretary of Agriculture from Mexico reported on discussions with IICA towards the development of a training program to improve national technical capabilities of the farm sector in the Caribbean. As part of Mexican horizontal cooperation, the Secretary of Agriculture of Mexico formalized the agreement with IICA to launch the program and initiate a review of themes with Caribbean authorities based upon their needs. Eight programs were defined to benefit CARDI, 14 countries in the Caribbean and Belize.

The program included protected agriculture, rural tourism, family farming & backyard agriculture, soil & water protection, plant pathology using molecular techniques, and sheep production.

The first course started in Puebla and culminated with a course in Merida. At the end of two months, 6 courses were conducted with the participation of 143 Caribbean students.

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Figure 1: 143 Participants from the Region

#### High- level professionals from the Caribbean

By the end August, 2014, the scholarship program for graduate studies in agriculture, implemented by IICA and the National Science and Technology Council of Mexico, had enabled 14 professionals from 6 Caribbean countries to pursue their Specialist Masters and PhD programmes in Mexican institutions of higher education.

## **EU & the Caribbean: Enhancing production and trade capabilities** in CARIFORUM

#### The Agriculture Policy Program (APP)

The CARICOM Secretariat-led Component **on Strengthening Policy and Strategy Implementation** is redefining the operations of some key existing mechanisms for coordinating regional and national policies. This is being done through meetings of the CARICOM Agriculture Food and Nutrition Cluster, the Steering Committee for the Caribbean Week of Agriculture (CWA), and with Member States. A key function of the reorganized mechanisms is regional coordination of thematic activities related to trade and transportation, finance of small enterprises and agricultural policy.



#### What is the APP?

The Agriculture Policy Programme (APP) is part of a wider Intra-ACP cooperation under the 10th European Development Fund. The aim is to increase the capability of Regional Agricultural Development Organizations of the Caribbean and Pacific regions to address the development needs of smallholder agriculture. In the 15 member CARIFORUM region, the APP, with a budget of 8.6m Euro, is being implemented by IICA, in partnership with the Caribbean Agricultural Research and Development Institute (CARDI) and the Caribbean Community (CARICOM) Secretariat.

The **Technology Transfer and Adoption** component led by CARDI has initiated the preparatory work for documenting field activities, farmer traditional knowledge and innovative practices that support sustainable development. There is a particular focus on expanding production of resilient varieties and upgrading farming practices as a strategy to deal with adverse climate change impacts. The IICA-led Component on **Linking Markets to Enterprises**, held a Food Buyers Executive Forum in February

2014 in Georgetown, Guyana. Over 18 executives of major private food buyers, retailers, processors, exporters and hoteliers in Caribbean food industries shared information

Buyers at the Executive
Forum found that they were
regular consumers of each
others' products. At the
supermarket, Buyers saw their
own products on display and
learned more about capturing
consumer equity.

on the current features, trends and requirements of Caribbean food markets, their operations and best practices that could inform food chain upgrade/ development initiatives under the APP.

#### The Sanitary and Phytosanitary Measures (SPS)

After establishing the governance structure and implementation mechanism geared towards the strengthening of agricultural health, food safety and fisheries (AHFS) systems in the Region, the project has been able to:

- Identify AHFS and fisheries priorities for CARIFORUM countries
- Develop workplans to address priority needs of CARIFORUM Countries
- Support the strengthening of Regional Technical AHFS groups such as the Caribbean Plant Health Directors
- Build the capacity of plant health professionals in the international standard-setting process.



The SPS project has trained seven plant quarantine professionals through their participation in a course hosted by the Faculty of Food and Agriculture of the University of the West Indies, in collaboration with the USDA, IICA and the FAO.

#### What is the SPS Project?

This project on Sanitary and Phytosanitary Measures (SPS) is one component of the 10th EDF Programme titled "Support to the Forum of Caribbean States in the implementation of the commitments undertaken under the Economic Partnership Agreement (EPA)". The overall objective of the SPS project is to facilitate CARIFORUM States to gain and improve market access by complying with Europe's SPS measures and to help CARIFORUM states to better develop their own regionally harmonized SPS measures. It is jointly implemented by CARICOM, Caribbean Regional Fisheries Mechanism (CRFM) and the SPS committee of the Dominican Republic.

## **CARICOM Secretariat & IICA: Supporting regional integration for repositioning agriculture**

IICA has maintained an open, supportive and responsive relationship with the CARICOM Secretariat (CCS), with respect to region-led initiatives in policy and development efforts for agriculture in CARICOM. This relationship has:

- allowed IICA to 'be at the table' and contribute to important regional dialogue and decision-making for developing regional policies and strategies for agriculture, food and nutrition security, climate change resilience, agricultural health and food safety, among other areas of shared interest with CARICOM. These include the Council for Trade and Economic Development (COTED), The Alliance for the Sustainable Development of Agriculture and the Rural Milieu (The Alliance), in which IICA was instrumental in its formation, and the annual Caribbean Week of Agriculture (CWA), as well as Policy Technical Working Groups for the formulation of the Regional Food and Nutrition Security Policy and Action Plan, and the CARICOM Community Agriculture Policy;
- sustained the inclusion of IICA in key regional coordinating mechanisms designed to
  accelerate and foster more efficient implementation of regional policies and strategies, such
  as the Plant Health Directors forum, the CaribVet forum, the Technical Management and
  Advisory Committee and the Agricultural Institutional Cluster, and to be part of technical
  teams constituted in response to emergency situations such as periodic hurricanes, and
  pest and disease outbreaks.

The recent signing of a Partnership Agreement between IICA, as the Executing Agency, and CCS for joint implementation of the APP and the SPS, has deepened the opportunities for more direct collaboration on behalf of stakeholders in the Caribbean.

## **CARDI & IICA: Collaborating in agricultural research, development and innovation**

Since 1989, IICA and CARDI have maintained a long-standing partnership for promoting improved science, technology and innovation in agriculture, and for working together to provide more effective contribution to agricultural research and development in CARICOM.

The focus has been on commodity development, providing improved varietals and field support to farmers of herbs, condiments and beverages, root crops, livestock, cereals and grains. To this end, CARDI has collaborated with IICA in achieving positive results in the small ruminant and roots and tubers industries, which are priority areas for CARICOM.

The organizations collaborated in the area of Protected Agriculture (PA) which, in CARICOM, is being promoted as an appropriate and effective innovation to reduce the vulnerability of open field farming, thus enhancing livelihoods and food and nutrition security, and sustaining food production in an era of climate change. IICA itself has benefited from this collaboration in PA, and has exposed these systems to youth in agriculture. Primary and secondary schools in countries in the OECS sub-region have received PA systems for supporting their agricultural science and business curricula, in addition to the extra benefits of supplementing school income from the sale of produce and contributing to household food access.



Other institutional synergies in common interest areas include:

- building critical mass in the media for coverage of agriculture. Collaboration with a mutual partner, the CTA, on the Agriculture Round Tables (ART) at the Caribbean Week of Agriculture (CWA) and the IICA-CARDI Project Media Awards for Excellence in Agricultural Journalism in Trinidad and Tobago.
- implementing, as partners, externally funded projects to increase root and tuber crop
  production through the introduction of improved marketing and production technologies, as
  well as increased vegetable and herb production through the use of PA.

IICA has supported better linkages between CARDI and international research centres, such as the International Potato Centre (CIP), CLAYUCA and CIAT, as well as the research institute EMBRAPA in Brazil. This is aimed at strengthening systems for networking in research and development for a more effective transfer and adoption of appropriate applied technology and innovation within CARICOM.

## CTA & IICA: Collaborating for the benefit of agriculture

The collaboration between two well-established agricultural development organizations such as CTA and IICA has benefitted agricultural stakeholders in the Caribbean region, notably policy planners and agripreneurs, including women and youth, and has increased regional institutional capacity.

Agricultural policy development has been a long-standing area of collaboration through the Caribbean Agricultural Regional Policy Network (CaRAPN), initiated in 2003 by the CTA, with continuous support over a seven-year period. This has resulted in increased awareness among a wider cross-section of stakeholders, both within agriculture and between agriculture and allied sectors and industries, of the importance of actively engaging in policy dialogue and agendasetting processes at both the national and regional levels.



CTA and IICA have organized a series of events to develop IT solutions for agriculture in the Caribbean, under the concept of "hackatons". Similar competitions have been held for film production.

Positive impacts in Information and Communication Technologies (ICT) and Knowledge Management (KM) have been evident. Through the CaRAPN project, substantial increase in published materials on agriculture in the Caribbean occurred, including performance reports, success stories and educational documents disseminated worldwide. With the framework of an international effort to develop information sharing, communication and knowledge management inside www. imarkgroup.org, IICA and CTA have developed a KM curricula course and are exploring ways of strengthening Caribbean knowledge centres and libraries.



For women and youth networks in particular, knowledge management is a top priority and institutional strengths were combined to expose CANROP and CAFY to new IT tools that have enhanced their access to the Internet, have expanded networking and enabled them to develop websites for greater connectivity in the agri-food economy.

The institutional interactions in value chain development - a common area for technical cooperation and a priority for agriculture in the Caribbean, have contributed to previous

efforts by a number of organisations, including IICA's own regional Program for Agricultural Competitiveness. This has also strengthened the platform for moving forward with the previously-mentioned European Union-funded Agriculture Policy Program (APP) for CARIFRORUM.

The IICA-CTA collaboration also extended to the APP, through participation of IICA's Component 3 in the CTA Fin4ag Conference in Nairobi, Kenya. Accompanied by a contingent of regional stakeholders in financing and agribusiness development, the learning experiences gained from exchanges with Africa and the Pacific, as well as from tools and resource persons to support agri-financing activities, proved valuable to the Caribbean effort.



## **FINAL REMARKS**

The Americas are faced with challenges and opportunities related to productivity and competitiveness, as well as sustainability of its resources within a context of climate change impacts, with implications for social inclusion and food and nutrition security.

Recognizing the need to work together to effectively address these challenges, the Member States of IICA have reaffirmed the mission of the Institute in the new 2014-2018 Medium Term Plan: to encourage, promote and support their efforts to achieve their agricultural development and rural welfare by means of international technical cooperation of excellence.

That is our business: aiming for a more competitive, inclusive and sustainable inter-American agriculture that will feed the hemisphere and the world and, at the same time, create opportunities to reduce hunger and poverty among producers and rural dwellers.

Innovation must be part of the solution, and if properly promoted and managed, will enable member states to capitalize effectively on new and emerging opportunities in order to address these challenges and contribute meaningfully to agricultural and rural development.

The Caribbean region, as indicated in this report, is a good example of opportunities seized: actions geared toward women and youth in agriculture; innovations in good agricultural practices; protected agriculture, agrotourism and aquaponics; specialist training for young professionals abroad and the region's vast experience in overcoming natural disasters.

For the period 2014-2018, IICA has established innovative instruments to better deliver its technical services and take advantage of its 72 years of expertise. Committed to 11 broad technical cooperation contributions<sup>1</sup>, IICA will tackle its strategic objectives through four flagship projects related to:

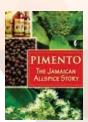
- Value chains in agriculture
- Social inclusion
- Family farming
- Resilience in agriculture

The flexibility of our work will also be boosted by a strategic mechanism of Rapid Response Actions (RRA) in order to deal promptly with non-programmed issues for which the countries will require our cooperation. Significant importance is given to the development of strategic partnerships, including forging more effective alliances with the private sector toward achieving relevant results.

IICA's Medium-term Plan as well as its continuous, fruitful relations with partners such as the CTA, CARDI and CARICOM over many decades, will act as a firm foundation for raising the level of involvement with the Caribbean, especially within the region's own processes of strategic repositioning. We are excited about this joint collaboration, as well as the implementation of our plan for the next four years as we continue to showcase agriculture as the best investment possible for the development of our nations.



## **Recent publications from the Caribbean**



#### Pimento: the Jamaican allspice story

John R. Gayle
Available at:
http://repiica.iica.int/docs/b3329i/b3329i.pdf



## Roots and tubers processing in the Caribbean: status and guidelines

IICA, CARDI Available at: http://repiica.iica.int/docs/b3244i/b3244i.pdf



### Choices Caribbean agriculture: our way

CARAPN, CTA, IICA Available at: http://repiica.iica.int/docs/b2997i/b2997i.pdf



Farming change, growing more food with a changing resource base: critical issues, perspectives and options

IICA, CARDI, CTA Available at: http://repiica.iica.int/docs/b2960i/b2960i.pdf



The agriculture, food and health challenge critical Issues, perspectives and options

IICA, CTA
Available at:
http://repiica.iica.int/docs/b2017i/b2017i.pdf



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