2007 ANNUAL REPORT

IICA'S CONTRIBUTION TO THE DEVELOPMENT OF AGRICULTURE AND RURAL COMMUNITIES IN BELIZE

IICA OFFICE IN BELIZE APRIL, 2008

INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE

WHAT IS IICA?

The Inter-American Institute for Cooperation on Agriculture (IICA) is a specialized agency of the Inter-American System, and its purposes are to encourage and support the efforts of its Member States to achieve agricultural development and well-being for rural populations.

With more than six decades of institutional life, the Institute is responding to new mandates issued by the Heads of State and Government of the Americas, the General Assembly of the Organization of American States (OAS) and the ministers of agriculture of the Americas, to reposition itself so that it can meet both the new challenges facing agriculture and the requests for support it receives from its member countries. The Institute has its Headquarters in Costa Rica, and Offices in 34 countries of the Americas, an Office in Miami, which is responsible for the Inter-American Program for the Promotion of Agricultural Trade, Agribusiness and Food Safety, as well as an Office for Europe, located in Madrid, Spain. The Directorate for Strategic Partnerships works out of the IICA Office in Washington, D.C.

VISION

To be the leading agricultural institution in the Americas and the partner of choice by virtue of the quality of the technical cooperation it provides in response to the needs of Member States, and its contributions to sustainable agricultural development, food security and rural prosperity.

MISSION

IICA is the specialized agency for agriculture and the rural milieu of the Inter-American System, whose purpose is to provide innovative technical cooperation to the Member States, with a view to achieving their sustainable development in aid of the peoples of the Americas.



IICA Belize Staff (from left to right)

Randy Joseph - Office Assistant Salvador Monge - IICA Belize Representative Elisa Harrison - Secretary/Administrative Assistant Wilmot Garnett – Specialist in Competitiveness

MESSAGE FROM THE REPRESENTATIVE



The Belize Office of the Inter-American Institute for Cooperation on

Agriculture (IICA), office in Belize is pleased to present this National Annual Report 2007 to our stakeholders, collaborators/partners and clients throughout Belize and beyond. This report forms a part of our accountability process informing our clients of the activities executed throughout the year.

Two thousand and seven was an exciting year for us. One of our principal goals this year was to use the integrated approach to maximize both human and financial resources, to be more efficient and effective in our

efforts.

For Belize, 2007 proved to be a favorable year for the agriculture sector. Even though severe weather conditions affected large portions of the country, the major production areas recovered rapidly and generally had a good year. As a result, Belize maintains its import substitution program and export base.

At the IICA office, we work whole-heartedly to help and to support the agricultural and natural resource sectors that forms the bases of our mission. We greatly appreciate the opportunity to serve the farmers, promoting agricultural innovation and technology, and educating citizens on the importance and role of the agricultural industry in Belize.

For the progress achieved here in Belize in such a relatively short time, I applaud and thank the commitment of each one of our stakeholders and friends and we will continue to demonstrate the professionalism and commitment in the execution of our cooperation agenda.

The process of transformation on which our Institute embarked in 2001 is accelerating and is increasingly reflected in our office's results. We constantly adjust our cooperation agenda so as to be flexible to the new demands and changes within the agriculture sector.

I would like to thank stakeholders for the loyalty they have shown. Their continued confidence, coupled with the loyalty of our strategic partners and friends and the initiative and commitment of our employees is fundamental to our transformation for growth. Strengthening agriculture is an important part of our commitment to build a better Belize. By retaining our farms, we can protect the character of our communities and ensure that Belize remains green and productive for generations to come.

The challenges we face are not easy ones, but we will continue to work hard every day to fulfill our mission and keep Belize a safe and prosperous place to live, work, and raise a family.

On behalf of the IICA office staff and myself, I thank you all.

Salvador Monge

Country Representative in Belize

TABLE OF CONTENTS – NATIONAL ANNUAL REPORT 2007

The Contribution of IICA to Agriculture and the Development of Rural Communities in Belize

1.	Introduction	5
2.	Executive Summary	6
3.	The State of Agriculture and Rural Life in Belize in 2007	9
	 3.1. Factors in the National Context 3.2. Changes in Legislation and Policies on Agriculture and Rural Life 3.3. Institutional Reforms in Agriculture and the Rural Milieu 3.4. State of an outlook for Agro-energy and Bio-fuel in Belize 3.5. Belize Agricultural recovery for farmers affected by Hurricane Dean 3.6. Agri-food Trade and the Development of Agribusiness 3.7. Agricultural Health and Food Safety 3.8. Agricultural Innovation and Technology 3.9. Sustainable Rural Development 	
4.	Results of the Implementation of the National Technical Cooperation Agenda in Belize during 2007 4.1. IICA's Contribution to the Repositioning of Agriculture and Rural Life 4.2. Promoting Trade and the Competitiveness of Agribusiness 4.3. Strengthening Agricultural Health and Food Safety Systems 4.4. Promoting the Sustainable Management of Natural Resources and the Environment 4.5. Strengthening Rural Communities Based on the Territorial Approach 4.6. Introducing Technology and Innovation for the Modernization of Agriculture and Rural Life	14
5.	Results of Inter-agency Cooperation	16
6.	Results of Horizontal Technical Cooperation	16
7.	New Opportunities for Technical Cooperation	17
8.	List of Acronyms	18

1. Introduction

The 2007 Annual Report presents the contributions that the Institution has made towards the development of agriculture and rural life in Belize during 2007. The results reported in this document reflect the new integrated approach system that ensures compliance with the hemispheric, regional and national work plan. It also encourages more dialogue with our stakeholders, maximize both human and financial resources, and improve relations with regional and international strategic partners.

The 2007 cooperation agenda was prepared using the Institute's model of consultation, dialogue and consensus building with national authorities and addressed the implementation of aspects of the National Technical Cooperation Agenda in the Institute's five priority areas for strategic intervention: (i) promoting trade and the competitiveness of agri-businesses; (ii) strengthening agricultural health and food safety; (iii) promoting the sustainable management of natural resources and the environment; (iv)strengthening of rural communities based on the territorial approach and (v) introducing technology and innovation for the modernization of agriculture and rural life.

We once again take this opportunity to acknowledge our many Belizean partners in development, both in the public and private sectors, who were involved in the implementation of IICA Belize's technical cooperation activities.

Special acknowledgement goes to the Staff of the Ministry of Agriculture and Fisheries (MAF), Toledo Cacao Growers Association (TCGA), Belize Agricultural and Health Authority (BAHA), Regional Organization on Plant and Animal Health (OIRSA), the Belize Trade and Investment Development Service (BELTRAIDE), Citrus Growers Association (CGA), Citrus Research and Education Institute (CREI), Pan American Health Organization/World Health Organization (PAHO/WHO), Regional Unit for Technical Assistance (RUTA), Caribbean Agricultural Research and Development Institute (CARDI), Cane Farmers Association (CFA), Belize Sugar Industries Limited (BSI), University of Belize (UB), Belize Organic Producers Association (BOPA), Social Investment Fund (SIF), and the Tropical Agricultural Research and Higher Education Center (CATIE). Special thank you to all our colleagues from headquarters and other national offices, whose invaluable support helped to strengthen the level of technical services provided by our office.

The Representative and the staff of this Office are pleased to present the document "The Contribution of IICA to Agriculture and Development of Rural Communities in Belize", which summarizes the results of our technical cooperation in 2007. We welcome feedback from our partners, in order to strengthen future cooperation programs as we strive to improve the level of technical services provided by our Institute.

2. Executive Summary

The year 2007 initiated the second year of the second four (4) year office term for IICA's Director General Dr. Chelston Brathwaite and the implementation of the institute's 2006-2010 Medium-Term Plan. The aim of this plan is to transform IICA into a model modern development institution and implementation of components of the institute's vision for the promotion of sustainable rural development of agriculture, food safety and security and rural prosperity. This plan which clearly defines the guidelines and strategic course of action for the institute during 2006-2010 is integral for the implementation of the national technical cooperation plan for the IICA Belize Office during 2007.

The technical program executed in 2007 is a direct result of the demands and adjustments in the sector for ensuring food safety and security, trade and overall development of the sector. It included technical activities with the public sector along with key interventions in support of major private sector industries.

We express sincere gratitude to our collaborating partners for their support and commitment, especially the Ministry of Agriculture and Fisheries and its technical staff. We are committed to building on our accomplishments as we continue to execute our national, regional and hemispheric agendas of modernization of the agricultural sector and contributing towards the well-being of the inhabitants of rural communities in Belize.

Current Status of Agriculture and the Rural Milieu in the Country

The sector has traditionally exported citrus, sugar, bananas, and marine products through preferential arrangements. Considering the fact that the preferential arrangements are eroding, the sector priority is to develop a diversified agricultural import substitution and export base. Significant progress and expansion was realized in the non-traditional export commodities such as tilapia fillet, and hot peppers in 2007, while the country remained self sufficient in basic crops and livestock products for local consumption. Although the Belizean economy has experienced significant growth in the services sector, mainly in tourism and financial services with agriculture still the pillar of the Belizean economy.

The technical cooperation agenda of the IICA Office in Belize was developed through a series of consultation with stakeholders from the public and private sectors and executed in close collaboration with the Ministry of Agriculture and Fisheries. Specific accomplishments and results for 2007 are detailed below and arranged by strategic areas for intervention of the institute prioritized in the 2007 plan of operation.

Strategic Areas of Intervention

a. IICA's Contribution to the Repositioning of Agriculture and Rural Life

The Agro-Plan 2003-2015 remains a priority for the office and support was provided through the establishment of a monitoring & evaluation mechanism for Agriculture and rural life in order to identify trends, threats, critical emerging issues and opportunities. The Ministerial Delegate received logistical assistance to meet national obligation and prepare the required reports on a timely manner.

In accordance with IICA mandates, the Office reviewed the National Technical Agenda and synchronized it with Belize's Agricultural National Strategy, thereby consolidating the work of the office in accordance with the goals of the Ministry of Agriculture and Fisheries of Belize and the private sector.

IICA participated in a poverty alleviation and community reconstruction project with the SIF through a partnership approach including PAHO, OIRSA, IDB and other government ministries and NGO's. This new approach will maximize the use of resources and strengthened relations with these institutions for future collaboration.

b. Promoting Trade and the Competitiveness of Agribusiness

An export strategy was developed by BELTRAIDE using the 2006 Strengths Weaknesses Opportunities Threats (SWOT) analysis conducted by this Office with technical support of the IICA Office in Miami. A formal presentation was conducted to stakeholders and BELTRAIDE of the results of the SWOT analysis along with recommendations for the implementation of a new structure. The results of this exercise will be used to strengthen BELTRAIDE's capacity for the provision of export promotion services to the private sector in Belize and the implementation of support actions by IICA in 2008.

The Office also collaborated with Belize Chamber of Commerce and Belize Business Bureau providing logistical support in some trade events.

c. Strengthening Agricultural Health and Food Safety Systems

IICA continued to provided logistical support for Belize's participation at the World Trade Organization/ Sanitary and Phytosanitary (WTO/SPS) committee meetings held in Geneva in 2007. Belize's national focal point won a leadership award for her outstanding participation and leadership skills demonstrated at these meetings. The Ministry of Foreign Affairs serves as the secretariat for the national SPS committee and supported two technical meetings to discuss trade related issues with stakeholders. Representation on the national SPS committee has expanded to include the University of Belize and BELTRAIDE. This ensures better participation and dialogue among relevant stakeholders and focuses on the challenging issues. Through technical support from the IICA Canada Office and IICA Headquarters, an expert in Avian Influenza visited Belize to share the Canadian experience with members of the Belize Poultry Association, BAHA, government officials and other stakeholders. Practical sessions and field visits were conducted and recommendations provided.



IICA will be providing support to MAF to establish an Avian Influenza plan.

d. Promoting the Sustainable Management of Natural Resources and the Environment

IICA provided technical support to CATIE in the presentation of the Central American Cacao Project to relevant stakeholders. This project aims to strengthen organizational skills, genetic improvements and field sanitation. The National Cacao Task Force will be managing the project while the TCGA will execute the project.



Members of the National Cacao Task Force discussing the industry expansion with buyers.

e. Strengthening of Rural Communities Based on the Territorial Approach



Integrated approach projects to address agriculture, health and environmental issues in rural communities

IICA has been instrumental in the design of a poverty alleviation project in the village of Dolores, Toledo District (The Dolores Integrated Pilot Project). IICA will support this effort along with the Ministry of Agriculture and Fisheries in technology transfer and adoption to improve agronomic practices. This project is holistic in its objectives and the integrated approach is been used to prioritize, identify roles and responsibilities, and sustainability to maximize limited human and financial resources. In continuing its effort to fight poverty,

IICA is embarking on a new initiative that shifts away from the current practice of implementing single projects in communities. This pilot project seeks to have the participation of various partners involved in a community development and poverty reduction initiatives in developing and implementing coordinated anti-poverty interventions.

f. Introducing Technology and Innovation for the Modernization of Agriculture and Rural Life

The National Bio-safety Committee presented a national Biosafety policy to the cabinet for enactment. This Biosafety policy was the result of extensive national public consultations and consensus building. This Biosafety policy will serve as the foundation for the preparation and implementation of the national framework and strategy for bio-safety measures in Belize.

Work on the preparation of standards and legislation for organic agriculture also continued in 2007. This process has increased awareness in the public sector on this topic and their role in facilitating the environment for development of the organic agriculture program in Belize.



Members of the Annual National Agriculture and Trade Show Judging team meeting female farmer of the year

g. Other Technical Programs

The IICA Belize Office continues to support the Document Centre at the University of Belize, this is a partnership between IICA, CATIE and the University of Belize.

IICA is represented on the technical committee of the Global Environmental Facility (GEF) which funded a Persistent Organic Pollutants Project designed to develop a National Implementation Plan to deal with this reality. The technical committee works along side national and international consultants and provides recommendation to the Project Steering Committee for effective administration of the project.



Stakeholders participating at the Central American Agricultural Policy (PACA) workshop to make recommendations to the process

The office participated in the selection of the Farmers of the year and had a display booth, showcasing IICA and the technical coor

and had a display booth, showcasing IICA and the technical cooperation programs executed in Belize, at the Annual National Agriculture and Trade Show 2007 in Belmopan.

3. The State of Agriculture and Rural Life in Belize in 2007

3.1 Factors in the National Context

During 2007 Belize's total domestic exports experienced a decline from BZ\$ 536.40 million to BZ\$ 507.90 million as presented in Table 1, with the agriculture sector, including fisheries accounting for approximately 62% (BZ\$ 315.27 million), a decrease from 70% (BZ\$ 376.67 million) in 2006. Sharp decline was noticeable in Bananas which was down 18% due to eroding market value; Grapefruit Concentrate experienced a decline of 29% despite an increase in price per box, but low volume. Marine products had a sharp decline of 51% due to Hurricane Dean's damage, shrimp diseases, the closure of a few shrimp farms and poor financial management of fishing cooperatives. Papaya experienced a 16% decline due to hurricane Dean, but should recover in 2008. Sugar also experienced a decline of 12% due to a reduction in preferential

prices from the EU. This situation will continue as the preferential treatment for Belize will continue to be removed over the next few years. Garment was down 50% due to the down sizing from Dickies Garment factory due to its inability to compete with its neighboring



Local variety of banana being produced for sale at market

countries. Orange Concentrate, Petroleum and Other Value experienced increases, 17%, 61% and 7% respectively. Crude petroleum remained the highest export earner and is expected to continue to increase due to global trends. Belize largest export by destination is now Central America because of petroleum, followed by the United States of America. Belize will need to diversify its export base to include more non-traditional commodities, reduce cost of production to remain competitive, establish niche markets, strengthen and participate in SICA to purchase inputs as a region at reduce cost, increase affordable credit access to producers, increase agro processing to reduce waste and value add and prioritize to increase efficiency and impact in the agriculture sector.

As part of the Ministry of Agriculture import substitution program Belize remains self sufficient in most staple food products such as corn, rice, beans, bananas, plantains, root crops, fruits, poultry, eggs, pork, beef, aquaculture and marine products. Vegetables such as tomatoes, lettuce, broccoli,

carrots, celery and cabbage are generally produced seasonally as a result of the improvement in irrigation technology and the availability of improved genetic material.

Over production of seasonal fruits such as mango, cashew, guava, papaya and pineapple is off set by a steady increase in agro processing, mainly canning and dehydrating. The Ministry of Agriculture maintains a children feeding program that includes the distribution of dehydrated fruits to selected school children. The growing expansion in the tourism industry has created an outlet for locally processed products. The livestock industry has also diversified from the sole marketing of fresh meat cuts to meat processing and export of cattle on the hoof. This has resulted in the availability of a wide variety of high quality processed meats such as hams, sausages and bologna on the local market throughout the year.



New variety of tomato with higher yield and more disease resistance

Table 1: Major Domestic Exports 2001-2007 (BZ\$ million)

Commodity	2001	2002	2003	2004	2005	2006	2007
Banana							
Tonne	50.14	41.83	73.02	79.43	76.08	72.50	58.93
Value	42.80	33.50	52.58	52.99	51.08	50.59	41.46
Garments							
Tonne	1.38	1.42	1.44	1.77	1.57	1.62	0.76
Value	31.01	30.44	30.91	37.10	34.56	36.59	18.79
Grapefruit Concentrate							
Mil. Gals	0.81	0.73	0.77	1.81	1.24	1.25	0.79
Value	15.70	13.95	12.52	23.82	19.31	22.81	16.27
Marine Products							
Tonne	4.07	3.33	7.74	8.34	9.25	7.98	3.08
Value	66.42	70.36	110.16	107.33	85.74	86.02	42.16
Orange Concentrate							
Mil. Gals	4.90	3.62	4.92	6.45	8.40	6.42	4.67
Value	68.85	53.49	66.24	55.49	87.81	86.17	101.17
Papaya							
Tonne	11.10	16.57	25.22	17.14	34.59	34.47	25.24
Value	15.51	16.75	22.82	26.87	31.01	31.01	26.07
Sugar							
Tonne	95.51	104.94	100.15	113.93	79.47	97.85	84.47
Value	59.37	65.98	73.75	81.53	69.90	100.07	88.14
Other Value	31.03	33.44	21.73	29.04	39.20	29.14	31.20
Petroleum Mil. Gals Value	N/A	N/A	N/A	N/A	N/A	29.98 88.54	40.14 142.62
Total	325.45	316.67	381.41	410.13	413.27	536.40	507.90

Source: CSO; Belize

3.2 Changes in Legislation and Policies on Agriculture and Rural Life

The Ministry of Agriculture and Fisheries is the lead public sector institution with the direct responsible for formulation, execution, coordinating, and monitoring and evaluation of the government policies for the agriculture sector. The MAF has conducted numerous sector policy development and strategic plan exercise along with partners in development, beneficiaries and other government ministries to ensure that a common goal is identified, agreed to and attained. The result through consensus building has identified seven strategic objectives that are listed below:

- To create and enable a favorable environment to increase the efficiency, productivity, profitability and competitiveness of the agriculture, fisheries and cooperation sectors.
- Accelerate the diversification in production, processing and exports.
- Improve access to productive resources and services and create economic opportunities for small/young farmers, women and indigenous people, particularly in poorer marginal areas.
- o Increase food production, enhance food security and improve the nutritional status of the population as well as increasing farm incomes.
- o Improve and conserve the natural and productive resource base to ensure long-term sustainable productivity and viability.
- Strengthen inter-sectorial linkages, in particular with the social sectors of health and education, as well as with the strategy and action plan for poverty eradication.
- Strengthen the institutional capacities to provide effective support in marketing and trade, research and extension as well as relevant education and training.

3.3 Institutional Reforms in Agriculture and the Rural Milieu

Traditionally, the MAF executed its work program independent from that of other ministries of government and with selected partners in development; however the new integrated approach encourages ministries and partners in development to work closely together. MAF introduced partners in development quarterly meetings to foster participation, dialogue, and recommendations to improve effective and timely assistance to the sector.

This new integrated approach streamline the priority list, strengths and weaknesses in the planning and execution, commitment from the partnership, alliances with the beneficiaries and meet the objectives of the agriculture policy in a timely manner.



Presentation at the IICA accountability seminar to report on IICA's activities to clients/beneficiaries

3.4 State of an Outlook for Agro-Energy and Bio-fuels in Belize

The development of Agro-energy and Bio-fuels is a relatively new concept in Belize. However, this is gradually changing as policy makers and key actors in the private sector aggressively explore alternative sources of energy that would be cheaper and more sustainable than the currently used fusel fuels. This effort is being led at the national level by the Belize Sugar Industries (BSI), who is now forced to explore diversification initiatives that would help to make the industry more competitive for long-term sustainability.

Belize does not have any policies or legislation related to agro-energy or bio-fuels so during 2007, the public sector entity involved with the discussions between BEL and BSI is the Public Utilities Commission, which is a public sector body involved with the regulatory aspect of all utilities in Belize. The government is aware of the need for development of policies and legislation and has in the interim established some basic guidelines that will govern any investments in this area.

The most outstanding development on the use of agro-energy and bio-fuels in Belize has been the signing of an agreement between BSI and BEL for establishment of a 32.5 Megawatts power plant at BSI. This plant will be used to burn bagasse to generate electrical power to meet BSI needs for operation of its sugar mill with the excess being sold to BEL for supply to its national grid. Belize relies heavily on fossil fuel energy generation and imports 40% of national energy needs from Mexico. This project is expected to reduce the Mexican power import by a minimum of 50%.

The overall outlook for agro-energy and bio-fuels in Belize seems to be favorable. Policies that would favor investments in this area along with the corresponding enforcement of environmental laws would ensure that the interest of Belizeans and the investors are protected. Financial feasibility as determined by lower energy costs to the Belizean public will be a key determining factor.

3.5 Belize Agricultural Recovery for farmers affected by Hurricane Dean

Belize at different times in its history has been affected by hurricanes of varying categories and magnitudes of damage. The last hurricane that hit Belize was Iris that caused substantial damages to the southern districts. The most recent hurricane to make landfall on Belize was Dean that damaged severely the northern districts in the early morning of 21 August, 2007.

Hurricane Dean made land fall and its ravaging winds and exceeding rainfall that accompanied this category five hurricane destroyed a larger segment of the agriculture sector and hundreds of houses in northern Belize. The crops hardest hit were papayas, sugarcane and corn. The direct loss to the agriculture sector has been estimated at US\$ 28million and the economic loss has been estimated at US\$ 44 million.



Papaya plantations suffering damage by hurricane Dean

Papaya losses represented 44% and sugarcane losses represented 40%. Furthermore, many farms houses also sustained partial or complete damage to their roof. Out of 70,000 people living in the region, about 15,000 were significantly affected by the wrath of Hurricane Dean. Those severely affected were those in the direct path of the hurricane and lost homes and livelihoods which sustained them, within or adjacent to their dwellings.



Families and communities devastated by hurricane Dean

The entire population that was impacted by Hurricane Dean and these areas had to be in a state of emergency. The winds exceeded 150 mph and the rainfall recorded was 12 inches within an 8 hour period.

Many of the crops destroyed were staple crops that generated income for the farm to sustain it self. This unfortunate situation has substantially increased the risk of food insecurity.

3.6 Agri-food Trade and the Development of Agribusiness

BELTRAIDE in consultation with the business community has developed an export platform to identify potential investments, orient businesses with respect to the requirements necessary to do business in Belize highlighting available fiscal incentives , and a network to maintain dialogue and data base. The Ministry of Agriculture and Fisheries and the ROC along with the Belize Marketing Board continues to promote international standards processing techniques, improved packaging and distribution of fresh and processed food products for the local markets.

IICA in collaboration with BAHA will conduct several train the trainer workshops to certify processors in Good Agricultural Practices (GAP) and Hazard Analysis Critical Control Point (HACCP) along the food chain. Several private sector meat processors in collaboration with BAHA have developed a traceability system to increase consumer trust and market share. This initiative from the private sector is encouraging and greatly increases the relationship between the producers and the regulatory agency. The government is involved and committed to the SPS initiative creating and managing a secretariat that dialogues, builds consensus, and inform relevant stakeholders.

3.7 Agricultural Health and Food Safety

The Belize Agricultural Health Authority (BAHA) is a statuary body that was established by the government in 2000. BAHA has the mandate to provide and manage the Plant Health, Quarantine, Animal Health, and Food Safety services throughout the country. BAHA has a highly competent and experienced staff and have consistently upgraded the quality of agricultural health services provided at the national level, and assist with export requirements and permits. In 2008 IICA will conduct an assessment of the administration and services of BAHA to use as a management tool to ensure that international standards, recognition, and credibility is maintained. The BAHA model continues to be respected in the region, and the results of the assessment will be used to provide information to other countries interested in providing efficient and effective agricultural health services.



Typical ranchero style breakfast using locally grown produce.

3.8 Agricultural Innovation and Technology



Good Agricultural Practice (GAP) being used in the poultry industry.

The National Coordinating Committee for Agricultural Research and Development (NCCARD), which represents both public and private sector research institutions, has the mandate to coordinate all agricultural related research in Belize. This effort is to ensure research in priority areas, documentation and dissemination of the results, and technology transfer and adoption. The Ministry of Agriculture and Fisheries is represented by a national focal point on the Central American System for Integration of Agricultural Technology (SICTA). This network of professionals provides current information on research activities in the region so as to reduce duplication of efforts.

3.9 Sustainable Rural Development

The last poverty assessment conducted by the Government of Belize in 2002 indicated estimates that some 33.5% of the population of Belize was poor and that some 10.8% were classified as indigent. The population of Belize as of September 2007 was 314,300 with 44.3% of the population under the age of 18. The average household size was 4.2 persons with rural household size being slightly larger than urban households. The national unemployment rate was 12.1% of which youth unemployment rate was 24.0% and 1.4 employed persons per household. The female unemployment rate was 18.6%, more than twice as high as the 8.4% recorded for males. The median household income was US\$ 546 per month. 82.9% of households had access to piped water yet 32.2% of households use pit-latrine.



Stakeholders discussing the Central American Agricultural Policy (PACA

Belize has made significant progress in providing utilities to both urban and rural areas, all weather roads to all forms of settlement. Construction is currently underway for a major international standard highway in the Toledo District to link Belize with Guatemala and the Pan American highway. The Social Investment Fund (SIF) has provided significant funding for education, water and sanitation projects, social services, organizational strengthening to NGO and community groups, health facilities and improve entrepreneurial skills to local artisans.

The Belize Rural Development Project (BRDP) which is financed with grant funds of approximately US\$ 8 million from the European Union and US\$ 2 million from the government of Belize and the

beneficiaries. The project started in 2006 and is expected to terminate in 2010. The objective of this project is to support sustainable economic growth in rural Belize through identifying priority projects, community involvement and co-financing, and co-management to develop ownership by the beneficiaries. The Cooperative Department also provides training in business management and organizational skills to compliment the efforts provide by the other agencies. The Ministry of Rural Development (MRD) concentrates mainly in health and gender issues.

4. Results of the Implementation of the National Technical Cooperation Agenda in Belize during 2007

4.1 IICA's Contribution to the Repositioning of Agriculture and Rural Life

Support for implementation of the Agro-Plan 2003-2015 continued in 2007 and the Minister and his Delegate had timely access to information and relevant documentation to meet national obligations and commitments for this Plan. The Ministerial Delegate also participated at different meetings as part of the preparatory process for the Twenty-seventh Regular Meeting of IICA's Executive Committee.

4.2 Promoting Trade and the Competitiveness of Agribusiness

BELTRAIDE's capacity for implementation of its strategic plan and service to the private sector was strengthened through this intervention which will continue with the provision of specific training activities. BELTRAIDE is a semi-autonomous institution that implements the policy of the government for promotion of investment for entrepreneurial development for local products and facilitates the process for the movement of these products to the export market. IICA also facilitated a visit to the IICA Miami trade facilitation Office for the General Manager of BELTRAIDE who

received valuable insights on the avenues and networks required for importation and distribution of goods from the Caribbean and Central America to the United States.

4.3 Strengthening Agricultural Health and Food Safety Systems

Belize continued to provide leadership at international meetings of WTO/SPS committee in Geneva. The Ministry of Foreign Trade serves as the SPS secretariat and with the assistance of the national focal point and the national SPS committee, organized and conducted stakeholder meetings to reach consensus on issues of national interest that is put forth at the SPS meetings in Geneva. The national focal point and IICA conducted a national accountability workshop to report to the national authorities and stakeholders on the results of the participation of the SPS meeting held in Geneva and to reach a consensus on a work plan for 2008. Furthermore participation at these meetings has facilitated the establishment of networking for sharing of information and experiences with other developing countries and to dialogue with developed countries in a neutral environment. This experience has allowed Belize to voice its opinions at this world forum on important issues and limitations that impacts its ability to comply with WTO/SPS regulations.

IICA in collaboration with the USDA also sponsored a regional AI simulation exercise to present countries AI plan and to identify its strong and weak areas. This exercise is a significant component of a series of activities being implemented by the government to minimize the potential impact and risk that can be associated with the entry of AI into Belize. IICA participates in a national committee that is responsible for development and coordination of all AI response mechanisms.

4.4 Promoting the Sustainable Management of Natural Resources and the Environment

Through the national cacao task force, the TCGA continues to benefit from technical contribution in field sanitation, project formulation and execution, and organizational strengthening. CATIE will implement a regional organic cacao project to improve orchard management, distribution of improved genetic material, farmer organization, and diversity within the farm. The TCGA has recognized the impact of the spread of monilia throughout the cacao producing areas and in collaboration with the task force will implement a permanent surveillance program to reduce the incidence and control the fungal disease.



The Toledo Cacao Growers Association continues to benefit from improved orchard management practices targeted at eradication of monilia

4.5 Strengthening Rural Communities Based on the Territorial Approach

IICA in collaboration with OIRSA, BAHA, MAF, and the Ministry of Health sponsored a series of public awareness campaign to promote Good Agricultural Practices for backyard poultry in Belize. The objective was to educate the general public on the importance of keeping healthy poultry and reduce the introduction and possible spread of Avian Influenza in Belize. Printed material and DVDs were distributed and presentations on the possible effects of AI in Belize with respect to potential losses to the poultry industry and humans were well received and understood by the general public. This education campaign will continue, especially in the rural communities with the assistance of the Ministry of Health nurse's aid program.

4.6 Introducing Technology and Innovation for the Modernization of Agriculture and Rural Life

The National Bio-safety Committee prepared the National Biosafety policy and presented it to cabinet for approval. Draft legislation has been developed and will be presented for input and enactment by the legislative body. The Bio-safety committee is chaired by IICA and includes representation from key public and private sector organizations. Work towards the completion of the national standards and legislation for organic agriculture also continued in 2007.

The NCCARD remains active and concentrated its efforts on building consensus to identify priority areas for research and development. It also engaged regional research institutions to maintain an updated data base for research activities in the region that Belize can benefit from. The norm in Belize is to introduce new technology from the region rather than investing in research that is specific to the country demands; this approach is because of lack of local funding for research and development both in the public and private sectors.

The BOPA continues to educate the general public through agriculture fairs and open days. The final draft of the organic agriculture policy will be presented to cabinet for enactment fallowed by legislation. A local system for inspection and certification of locally produced organic products on the local market is being developed to facilitate potential businesses, especially with the growing health foods market.

The Belize Poultry Association (BPA) benefited from a regional initiative to assesses the current situation of the national poultry industries in the Central American region, and provide technical and financial support to improve competitiveness. The chain analysis approach was used to assess the eggs and broiler component of the poultry industry. Participants from the agro chain and BAHA provided valuable information that will be used to develop and implement a regional strategy to improve competitiveness for the poultry industries in the region.



Poultry producers participating in the Rapid Poultry Sector Analysis.

5. Results of Inter-agency Cooperation

In 2007 the IDB facilitated the collaboration and participation of the Central American countries in developing the Meso-America Fruit Crops regional project. This project was agreed to by the heads of state of Central America and will be funded by the IDB. The Belize stakeholder Chain Analysis Fruit Crops Workshop held in 2006 resulted in the prioritization of four crops to be developed in Belize. These four crops selected included the agro-processing of cashew nuts and false fruit and the introduction of pineapple germplasm suited for agro-processing, small machinery for bottling of fresh coconut water and the introduction of pitahaya germplasm to meet the demands of the US market.

6. Results of Horizontal Technical Cooperation

The Citrus Industry in Belize benefited from horizontal technical cooperation sourced through IICA from the visit of the El Salvador Fruit Industry representatives. A delegation of fifteen industry officials specializing in citrus nursery and certification, orchard management, pest control, agribusiness and coordinators from the El Salvador IICA office FRUTALES Program, visited key citrus industry sites and shared experiences and exchanged recommendations. In 2008 a delegation from

Belize will visit El Salvador to gain first hand experience on the development of the El Salvador Fruit Industry.

7. New Opportunities for Technical Cooperation

There are several new initiatives underway that offer new opportunities for technical cooperation in 2008. Firstly, the Ministry of Agriculture and Fisheries requested IICA assistance to provide an assessment of the Belize Marketing and Development Cooperation (BMDC) to identify ways to increase its services to the agriculture sector and rural communities. The focus of the BMDC in recent years has shifted from market intelligence to more a retail outlet for local and imported agriculture commodities. Secondly, funds from the Red-SICTA regional project has been identified to assist small corn and bean farmers in the border communities of Belize with much needed input to increase and improve yields. A market for the corn and beans exist in neighboring Guatemala and El Salvador. The BLPA with assistance from IICA will prepare an assessment of the livestock industry in Belize and prepare a strategy document to improve its organization and operation, increase membership participation and benefits and management services provided to its members. In collaboration with the IICA Caribbean region, we will assist the CGA/CREI in the development of an agro-tourism business plan and facilitate the execution of this project along with the IDB and other donors.



Presentation at the IICA accountability and transparency seminar

8. List of Acronyms

Al Avian Influenza

BAHA Belize Agricultural Health Authority

BEL Belize Electricity Limited

BELTRAIDE Belize Trade and Investment Development Services

BMDC Belize Marketing and Development Corporation

BLPA Belize Livestock Producers Association

BOPA Belize Organic Producers Association

BPA Belize Poultry Association

BRDP Belize Rural Development Project

BSI Belize Sugar Industries

CARDI Caribbean Agricultural Research and Development Institute

CARICOM Caribbean Common Market

CATIE Tropical Agricultural Research and Higher Education Center

CFA Cane Farmers Association

CGA Citrus Growers Association

CREI Citrus Research and Education Institute

EU European Union

GAP Good Agricultural Practices

GDP Gross Domestic Product

GEF Global Environmental Facility

GMO Genetically Modified Organism

HACCP Hazard Analysis Critical Control Point

IDB Inter-American Development Bank

IICA Inter-American Institute for Cooperation on Agriculture

MAF Ministry of Agriculture and Fisheries

MRD Ministry of Rural Development

NCCARD National Coordinating Committee for Agricultural Research and Development

OIRSA Regional Organization for Plant and Animal Health

PAHO/WHO Pan American Health Organization/World Health Organization

Red-SICTA The Agricultural Innovation Network Project

ROC Republic of China

RUTA Regional Unit for Technical Assistance

SICA Central American Integration System

SICB Sugar Industry Control Board

SIF Social Investment Found

SPS Sanitary and Phytosanitary

SICTA Central American System for Integration of Agricultural Technology

SWOT Strength Weakness Opportunities Threat

TCGA Toledo Cacao Growers Association

UB University of Belize

USDA/APHIS United States Department of Agriculture/Animal and Plant Health Inspection Service

WTO World Trade Organization