

INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE



IICA TECHNICAL COOPERATION STRATEGY IN BAHAMAS 2011-2014



*PROMOTING SUSTAINABLE AND COMPETITIVE
AGRICULTURE IN THE AMERICAS*



IICA Technical Cooperation Strategy 2011-2014

The Bahamas

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Presentation

IICA-Bahamas office is pleased to present its country strategy for the period 2011-2014. This strategy was developed based on the priority needs identified by the Ministry of Agriculture and Marine Resources and stakeholders in the private sector. These were gathered through a consultative process with stakeholders of the agriculture sector in the Bahamas. The outcome of this exercise identified five priority areas, some of which IICA is addressing in this country strategy. These priorities have been launched by the MAMR, signaling its desire to increase the role that agriculture can play in local food production.

- **Strategic Framework for Agricultural Sector**

In the Bahamas, the agriculture sector has declined considerably and contributes less than 3% to GDP. The food imports continue to rise, approaching \$500 million annually. As food prices increase and tourism dollar leakage continues to go up, reaching 85%, there has also been a renewed public interest in agribusiness. In response to the growing demand for local foods, land and information, revitalization efforts both from the public and private sectors to stimulate production have been accelerated. The innovations in support of Family Island agricultural development strategies that tested sustainable development models and management tools for competitiveness are creating opportunities to increase contribution to the tourism sector, strengthen food and nutrition security and help to diversify the economy.

The successive agricultural census for the past 30 years, have shown a continuous decline in the number of farms and farmers. For this reason, agriculture continues to be a small part of the economy. The records show that there has been a decline in the number of farmers in the Bahamas from 36,246 in 1978 to 20,336 in 1994 and in 2000 it was estimated that those in production are just at 10% capacity.

In view of rising food prices, aging farmers and increasing food imports, the public sector is making efforts to revitalize the agricultural sector and has put a number of incentives and programs in place to generate interest among farmers and other potential investors in agri-business. The high potential Family Islands for agri-business, are getting special attention from the public sector along with partners and other stakeholders. Some of the specific actions that the public sector is doing in its revitalization efforts are:

- a. Rapid assessment and Identification of Priorities

The MAMR in collaboration with the Food and Agricultural Organization and other stake

holders including IICA conducted a rapid assessment of the sector in order to identify the challenges, opportunities and priorities. This was a broad-based study that involved producers, transporters, buyers and consumers, who reviewed and participated in discussing the activity plan. This stage brought the farmers, policy makers and agribusiness teams together to agree on the priorities. The study identified 5 key priority areas, which have been grouped into sub-sectors that have since been launched as a five-year ministry plan. The priorities to be addressed are:

- Vegetables, root crops and herbs
- Tree Crops, Ornamentals and Horticulture
- Livestock
- Agro-processing/Value adding
- Land and Water Resources

This initiative for the revitalization of the agriculture sector is an important first step for sustaining improvement of food security, and diversifying the local economy. Given the growing level of food imports, a competitive agri-business sector can contribute to export-led growth, food import substitution, enhanced food security, employment creation, and poverty reduction.

Another priority program that has been launched by the public sector is the “Backyard Farming Program”. This involved the introduction of vegetable seedling package or nursery kits (seeds, seedling trays, medium and drip tubes) for small irrigated units and fruit trees. This food security initiative also involved regular seminars and workshops on site identification, plant pest and nutrition management for interested home gardeners. This initiative is to promote locally produce vegetables in a high-density urban area that can supplement imported ones and to provide year-round availability.

b. Research and outreach

The Government research center of agriculture and animal feed production facility is located in New Providence. This center makes a contribution toward small stock and some crops with emphasis on root crops and hot peppers. The small stock consists of small ruminants (sheep and goats) and pigs involving primarily the supply of breeding stock to producers. Similarly, the main activity for crops involves the supply of seeds and planting material. The government interventions have led to the introduction of pure-bred lines of sheep and goats and selected hot peppers and sweet potato cultivars.

c. Promote the formation or strengthening of producer clusters

The farmers are scattered on their respective Family Island, which keeps them fragmented and the individual farmers weak and not very competitive. Similarly, the

producer cooperatives lack the technical and financial capacity to effectively serve their members. This fragmentation of the small number of farmers is a challenge to implementing the cluster approach.

Important interventions through the public sector and donor agencies have provided support in the form of grant funding and capacity building workshops in group strengthening to consolidate cooperative and to form associations or clusters. The public sector, donors, IICA and the groups themselves have made contributions in cash and in-kind to fund the budgetary cost of consolidating the associations. These public inputs have covered the establishment of legal framework, orientation to regulatory issues, funding for infrastructure and seed (venture) funds for operation and new services for members. In addition, equipment for field operations and storage are provided for associations to manage and improve efficiency of service to members.

d. Technology introduction

Along with the formation of the producer groups, is the introduction of technologies for improved productivity. The technologies include new vegetable varieties, livestock breeds, multiplication techniques, greenhouse technology, and cool storage facility for inter-island transportation. The main private sector transporter has joined in this effort by agreeing to reduce the cost of shipping local produce by 40%, to facilitate the shipment of produce from source to market.

In order to facilitate the orientation, capacity building on the new technologies, "Production Bases" were established. This program established production bases in North Andros and elsewhere around the country to capitalize on the different Family Island special advantages in soil, climate, water resource, and other special biophysical and socio-economic characteristics. The production bases include corn mills at special sites, greenhouse structures, on-farm demonstrations of plastic culture, irrigation and storage facilities. These model areas continue to receive special attention and investment funds from the public sector to generate cost of productions studies, and conduct modular training for producers or other interested entrepreneurs and to provide technical assistance. The production base receives adequate infrastructure as well as management teams that are focused on promoting the technology being introduced.

The technologies that have been introduced by the program of "transferring new technology" include new vegetable seed varieties, tissue culture cultivars of vegetative propagated crops such as pineapple, plantain and banana, different greenhouse designs, different breeds of sheep and goats, new varieties of pasture grasses and irrigation technology. In each case when the technology was introduced, the specialist from the source of the technology accompanied the delivery, construction or installation and provided technical support for capacity building of producers or local technicians.

The other facets of the production base are the demonstration farms for fruits, primarily limes and vegetables, improved pastures and herd management. The offer of extension services to producers in the area and regular monitoring by a multi-disciplinary team of technical experts and policy makers is an integral part of the program. The government also provides the coolers, which are used to move products (fruits and vegetables) from production area to the capital. Along with this is the development of the market network and a weekly farmers' market, which is also being managed and sponsored by the (public sector) in cooperation with local producers. This provides the producers an easy outlet for their produce, and increased opportunity to generate cash.

e. Community Awareness Program

The Agricultural Expo (Ag-Expo), an annual event to show-case the output of the sector in the Bahamas has been re-introduced. Food security has remained the central theme of the ag-expos, which have consistently been held for the last 3 years. The Expo is the main forum, where high level policy makers reiterate the state policies that support the multidimensional and multi-sectoral approach towards agriculture and Family Island life.

The expo event involves all stakeholders and from the outset of the event, the representatives of the participating groups are members of the organizing committee. They have a good understanding of the concepts, scope and are partners and owners of the event. The (public sector) takes up the coordination role of the committee meetings and funds the preparation of the show grounds, and sponsors the travel and transportation of products and students from the Family Islands to New Providence.

The cycle of the expo is one year in the capital, Nassau in New Providence and the subsequent year in the Family Islands. Each Family Island selects its organizing committee and suggested time for the event, which is coordinated by the main committee to avoid conflict of dates. The plan aims to boost the strong production point of each Family Island. Schools are sponsored to attend and make displays. The winners of the competition events at the Family Islands all participate in the main expo during the following year in New Providence.

In all cases, the media is fully behind the promotion and publicity of the events. Besides the radio talk shows and news paper articles, and interviews with authorities, huge road side banners and posters are distributed nation-wide.

- **IICA Technical Cooperation Action in The Bahamas**

2.1 Objectives of technical cooperation action

The Ministry of Agriculture and Marine Resources has launched its five-year Agriculture Sectoral Plan that has identified the priorities for action. The plan identified five main

areas, of which four fall within the mandated areas of the Institute. The project activities have been selected in order to contribute to the strengthening of the national institutional capacities that are harmonized and aligned with the national policy and priorities of the sector in the Bahamas.

2.2 Summary of technical cooperation actions

IICA will implement its technical cooperation actions within the framework of the Medium Term Plan 2010-2014. This will be done in collaboration with the public sector partners. IICA has facilitated the access of regional specialists for advice and as resource persons for capacity building, and introduction of technologies. Technical support from the Bahamas office will aim at contributing to the major activities that the MAMR will undertake from the five-year plan. In addition, IICA will contribute to the schools' agriculture programs and provided support to young entrepreneurs, women's arts and crafts businesses and dissemination of information from the library. The objectives of the technical cooperation agenda have been rolled-out into one project profile, consisting of five activities.

a. Objectives of Technical Cooperation Agenda

The general objective is to strengthen the institutional capacity of the Ministry of Agriculture and Marine Resources' Bahamas Agricultural Industrial Corporation to support increased food production, develop value chains and strengthen competitiveness in the Bahamas. To achieve this goal the following specific objectives will be addressed:

1. Strengthen the technical capacity of BAIC to support agricultural development and food production
2. Promote improved techniques to increase productivity of small ruminants
3. Provide support to some of the AHFS Program initiatives.
4. Enhance the capacity of producer associations to establish market information and platforms
5. Support capacity building of youth in agriculture

1. The five key objectives are within the projects aligned with the Medium Term Plan:

Competitiveness, production and agricultural markets

Project I – Institutional support to the MAMR's /BAIC to improve capacity to promote value chain development and strengthen agri-business

Food crops have shown an increase in imports, even though there is capacity to produce a wide range of produce. The adoption of greenhouse technology, particularly in tomato, lettuce and green peppers and the possibility for expansion to other high-value vegetable crops augers well for enhanced productive capacity.

There is an unaccountable amount of crop losses due to pest and diseases prior to harvest, much of the post-harvest losses occur during transportation to New Providence. Some of the most significant challenges identified by the rapid assessment of the agriculture sector include lack of equipment and improved technology, lack of finance, limited knowledge of the market. The study's conclusion for the crops and livestock sub-sector stated that efforts must be made to develop national programs and projects to improve the effectiveness and efficiency of the agriculture sector. The activities of this project are some of the steps being taken to address these challenges.

National Plan for the Sub-sector	Activities
<p>Objective:</p> <ol style="list-style-type: none"> 1) Provide technical support to BAIC to strengthen its capacity to train producers in agriculture-business and develop value chains 2) To build technical capacity of producer groups through regional & horizontal technical cooperation to share successful lessons/improved technology, improve risk management and best practices. 	<p>Conduct a national consultation, diagnostic assessment using output data and develop strategic plan with BAIC for the strengthening of producer groups within The Bahamas.</p>

Expected Results

MAMAR & BAIC's capacity to provide the technology needs for increased food production capacity on the main agricultural Family Islands (Andros, Abaco, Eleuthera, Grand Bahama) will be strengthened. Develop the strategies needed to address the technology gaps within the value chain.

Mode of Cooperation

The IICA's office national specialist along with national collaborators/partners, regional and hemispheric specialists will support the implementation of the technical cooperation plan by means of capacity building workshops on technology transfer and for institutional strengthening on matters addressing competitiveness, such as good agricultural practices.

b. Summary of Technical Cooperation Action

The needs that were identified and short listed for action are listed below. IICA's response to the needs will be through direct technical cooperation, training for capacity building and specialized technical services.

1. Agricultural sector revitalization drafted with supporting operational plan for implementation by the Ministry of Agriculture and Marine Resources and Bahamas Agricultural Industrial Corporation
2. Development of improved management practices to enhance performance of livestock and crops producers
3. Strengthening agricultural and food safety initiatives
4. Support to capacity enhancement for market information system in agriculture
5. Enhancement of training capacity at schools to increase youth participation in agriculture

In Annex 1 is the project profile developed to implement the actions required to meet the objectives identified:

The summary of the technical cooperation action is shown in Annex I

III. ACCOUNTABILITY AND EVALUATION OF RESULTS

The implementation of the present IICA Technical Cooperation Strategy will be subject to an ongoing process of monitoring, follow-up and evaluation, intended to make sure that the available technical and financial resources are allocated strategically in implementing the technical cooperation projects and activities approved and validated by the senior authorities of the Ministry of Agriculture.

IICA, by monitoring the progress of the projects, following up on implementation throughout the life of the project and evaluating the expected results will generate information which, in turn, will also serve as feedback for the key national counterparts.

To this end, the ***Integrated System for the Monitoring and Evaluation of Technical Cooperation (ISME)*** has been created. This system will make it possible to evaluate, in stages, the completion of technical cooperation actions, contribute to the achievement of the Institute's objectives and report to the Governing Bodies.

Internally, the monitoring, follow-up and evaluation process will be the responsibility of the Offices, in coordination with the Directorate of Management and Regional Integration (DMRI) and the Secretariat of Planning and Evaluation (SEPE). The three processes will focus on:

- a) **Monitoring**: This will identify relevant elements or signs during implementation of technical cooperation projects and actions. They will be detected on a monthly by the DMRI and the SEPE.
- b) **Follow-up**: This will focus on analyzing progress in the implementation of activities programmed for the life of the project, through: 1) regular reports, starting at the beginning of each activity of the projects; 2) quarterly reports on the physical and financial execution of the activities; 3) regular reports on the conclusion of activities; and 4) the fourth quarterly report, to be submitted in December of each year at the close of the Annual Action Plan and used as the basis for preparing the annual report presented at the annual accountability seminar. The Offices will follow this procedure in contributing to the ISME, based on the attached matrix.
- c) **Evaluation of Results**: This will take place at the close of the project cycle, based on the expected results of the projects, and will provide information to consider in evaluating the medium-term focus of the Technical Cooperation Strategy.

One of the main goals is to generate useful information for refocusing the resources and actions, and by so doing ensure that the technical cooperation provided to the countries has the greatest possible impact.

- **Project financed with IICA's regular resources implemented by the Bahamas office**

BAHAMAS COUNTRY STRATEGY 2011 -2014

PROJECT PROFILES

Project 1

1.Name of program or project:	Support the MAMR's/BAIC technical capacity in good production practices for greenhouses and for commercial production supporting the organization of the value chain for each commodity.
2.Predominant Line of Action of the 2010-2014 MTP:	<p><u>Center for Strategic Analysis for Agriculture (CAESPA)</u> -: Institutional framework for agriculture and investment for its revitalization</p> <p><u>Innovation for Productivity and Competitiveness</u> : Regional and international cooperation for technology innovation</p> <p><u>Innovation for Productivity and Competitiveness</u> -: National innovation systems</p>
1. Level:	National
2. The problem:	The strategic capabilities and varied technical capacities that the public sector and BAIC need to meet the new clustering and marketing demands disseminate technology to producers requires strengthening. Significant gaps exist along the value chain, particularly in the use of productivity driven technology (improved varieties, production practice, post-harvest handling). Institutional capacity for responsive outreach is also weak. Many farmers have voiced concern about the extended period in waiting for technical support, inputs and services. This has hindered producers from building the necessary capacity to meet the local demand.
3. General objective:	To enhance productivity through the strengthening of public and private capacities to access new technology and provide improved services to producers for increasing their production and competitiveness.
4. Specific objectives:	<ol style="list-style-type: none"> 1. To strengthen institutional capacity to provide support to producer groups through regional & horizontal technical cooperation to share successful lessons/technology, improve risk management and best practices. 2. To increase knowledge about market information and risk management of the agriculture sector. 3. To enhance the skills of technical & extension personnel for effective delivery of production and greenhouse technologies and services to producers for improved competitiveness.

5. Beneficiaries:	Ministry of Agriculture and Marine Resources/Bahamas Agricultural Industrial Corporation, Producer associations, Agricultural and Fisheries Cooperatives, agro-processors and, private sector distributors
6. Duration:	2011 – 2014

1. Description of activities, outputs, results, and achievement indicators	ACTIVITY	OUTPUTS	EXPECTED RESULTS	ACHIEVEMENT INDICATORS
	Activity 1. National consultation and output data review to develop an agriculture strategic plan	1.1. A draft strategic plan developed through stakeholder participatory by end 2011	ER 1.1: The Bahamas Agricultural Industrial Corporation has a draft agriculture sector strategic plan to improve support to producers and Family Island agriculture development	AI 1.1: Twenty-five % staff members engaged and trained in development of a strategic plan AI 2: Draft agriculture strategic plan endorsed by stakeholders and ready for review by BAIC Board and parliament AI 3: One activity report available

	<p>Activity 2:</p> <p>To Develop a strategy for the implementation of recommendations of the market information specialist to the Bahamas and to train in gathering market information /risk management, value chain and market platform development</p>	<p>2.1 List of trainings and sampling sites for data collection and processing established in the Bahamas by end 2011</p>	<p>ER2.1:Agriculture sector stakeholders are knowledgeable and make use of market platform & information</p>	<p>AI 2.1: List of data collection strategy & sites for public information available</p> <p>AI 2.2: report of market information distributed bi-weekly</p> <p>AI 2.3: One activity report on market platform development available</p>
<p> </p>	<p>Activity 3:</p> <p>Conduct a diagnostic assessment of greenhouse facilities and capacity building on greenhouse management</p>	<p>3.1 List of technical, managerial and operational assistance required by greenhouse cluster of owners by end 2011</p>	<p>ER3.1: Greenhouse association have increased their capacity and understanding of protected agriculture and how to increase output and incomes from improved management</p>	<p>AI 3.1: Technical visit to at least three greenhouse and model facilities by end 2011</p> <p>AI 3.2: At least four workshops (30 participants) conducted on good management by end-of 2012</p> <p>AI 3.3: One report of technical, managerial and operational assistance required,</p>

				<p>endorsed by greenhouse cluster by 2012</p> <p>AI 3. 4: Project proposal developed for external funding by end 2012</p>
	<p>Activity 4: Support Family Island school garden programs to produce nutritious vegetables for year round consumption & strengthen instruction on food security</p>	<p>4.1: Gardens increase in diversity of crops & serve as model training facility conforming to CXC standard of school gardens</p>	<p>ER 4.1 Increased knowledge of students about diverse crops/livestock, food security and improved nutrition & agricultural practices</p>	<p>AI 4.1. Report of activity available</p> <p>AI 4.2. All schools that offer agriculture science participating in national program from 4 Family Islands by 2014</p> <p>AI4.3 At least two schools participate in national Ag Expo every other year in New Providence</p>
	<p>Activity 5: Provide assistance on group strengthening to producer associations to develop capacity for improved production/productivity in root</p>	<p>5.1 Document the assessment of small ruminant production practices and record performance of local breeds</p> <p>5.2 Develop the</p>	<p>ER 5.1: Members of the associations and extension service have increased their knowledge of herd management and, producers adopt improved feeding practice</p>	<p>AI 5.1: One report of technical, managerial and operational assistance endorsed by MAMR/BAIC/ and producers</p> <p>AI5. 2: Project proposal</p>

	crops and small ruminants.	value-chain for sweetpotato targeted for import substitution and food security	ER 5.2: Sweet potato producers increase production and adopt good agricultural practices	developed for investment funding by end 2011
	Activity 6: Provide support to some of the AHFS Program initiatives	6.1 Deliver training on SPS and Codex Regulations using video conferencing	ER 6.1: Producers improve knowledge of agricultural health regulations for export	AI 6.1: Producers compliant with standards for export by 2012

2. Project budget

It is an IICA project that will include the Regular Fund resources (quota contributions and mis income) specified in the following table:

ANNUAL DIRECT COSTS OF THE IICA PROJECT						
1. PERSONNEL						
1.1. Office personnel (the substantive contribution to the project)						
		% of Time				
Name	Position	2011	2012	2013	2014	
Marikis Alvarez	Representative	60	60	60	60	
Astrid Cleare	Sustainable Agriculture & Information Development Technician	100	100	100	100	
Flossamae Curling	Administrative assistant	100	100	100	100	
Anthony Plakaris	Office assistant	100	100	100	100	
1.2. Personnel of the Technical Concentration and Cross-cutting Coordination Programs, CAESPA, and other units (the complementary contribution to the project)						
Name		Position	% of Time			
Carol Thomas (Good practices)		Regional Specialist AHFS	5	2	2	2
Greenhouse specialist		Regional Specialist in	10	5	5	5

	Agribusiness					
Fruit crops & greenhouse specialist (to be determined)	National Program Specialist	10	5	5	5	
Specialist in small ruminants	Regional	10	10	5	5	
2. DIRECT OPERATING COSTS (US\$)						
ITEM	QUOTA CONTRIBUTIONS	MISCELLANEOUS INCOME	REGULAR FUND			
			2011	2012	2013	2014
MOE 3: Training and Technical Events			3000	3000	3000	3000
MOE 4: Official Travel			19310	19310	19310	19310
MOE 5: Publications and Materials and Inputs			4120	4120	4120	4120
MOE 6: Equipment and Furniture						
MOE 7: Communications, Public Utilities and Maintenance			8000	8000	8000	8000
MOE 8: Service Contracts			6500	6500	6500	6500
MOE 9: Insurance, Official Hospitality and Others			1500	1500	1500	1500
TOTAL DIRECT OPERATING COSTS OF THE PROJECT			42430	42430	42430	42430
CONTRIBUTIONS OF PROGRAMS OR PROJECTS TO OPERATING COSTS (THESE ARE OTHER THAN IICA. CONTRIBUTIONS OUTSIDE IICA SHOULD BE CONSIDERED HERE)						
Contributors: BAIC			5000	5000	5000	5000
Contributors: BCLL			2000	2000	2000	2000
GRAND TOTAL OPERATING COSTS			49430	49430	49430	49430