# Inter American Institute for Cooperation on Agriculture (IICA)

Office in Grenada

THE CONTRIBUTION OF IICA TO THE DEVELOPMENT OF AGRICULTURE AND RURAL COMMUNITIES IN GRENADA

**Annual Report 2004** 

### 1. EXECUTIVE SUMMARY

#### 1.1 Introduction

Some of the agriculture sector's technical cooperation needs were addressed during 2004 by the Inter-American Institute for Cooperation on Agriculture (IICA), in collaboration with Grenada's key agriculture sector institutions. Activities undertaken were based on the Institute's 5-year National Technical Cooperation Agenda (NTCA) for Grenada. The NTCA was developed by IICA in 2002, following consultations with representatives of relevant institutions and agencies. Subsequently, national annual Work Plans were developed to guide implementation of NTCA activities. (The NTCA is revised annually, based on changes in the sector's technical cooperation needs.)

Full implementation of the 2004 Work Plan was hampered by Hurricane Ivan's devastating effect on Grenada, on September 7, 2004. However, in the months prior to the hurricane, significant progress was made towards achieving results programmed for the year. Following the hurricane, limited programmed activities were undertaken as energies were directed towards assisting government in assessing hurricane damage to the agriculture sector, and developing an appropriate Action Plan for the sector's rehabilitation.

#### 1.2 The State of Agriculture and Rural Life in Grenada in 2004

Despite almost two decades of implementing programmes based on agricultural diversification, Grenada's agriculture sector is still being dominated by the traditional export crops (banana, cocoa and nutmeg). The value of agricultural output declined by 2.4 per cent in 2003, and this decline is predicted to be even greater in 2004. The decline in 2003 and (expectedly) in 2004 was due mainly to a significant drop in cocoa and banana production. However, Grenada's agriculture sector remains an important foreign exchange earner, and contributes significantly to Gross Domestic Product (GDP) and employment.

When Hurricane Ivan struck Grenada, it dealt a severe blow to the country's agriculture and rural life: Destruction was caused to 90 per cent of the nutmeg industry on which the livelihoods of more than 30,000 rural inhabitants depend. Also, approximately 90 per cent of short term cash crops and 92 per cent of the forest area and watersheds were destroyed. These losses impact negatively on rural employment, notwithstanding government's post-hurricane implementation of a US\$5.6 million short-term "Agricultural Emergency Rehabilitation Project". Accordingly, the unemployment rate, which prior to Hurricane Ivan was said to be about 12 per cent, rose to approximately 15 per cent after the hurricane and could experience an even more significant rise by mid-2005.

# 1.3 Summary of the National Agenda

The National Technical Cooperation Agenda (NTCA) for Grenada comprises a comprehensive outline of the agriculture sector's key priority issues requiring IICA's attention, and the corresponding actions to be implemented, based on the Institute's six Strategic Areas:

- Sustainable Rural Development;
- Technology and Innovation;
- Trade and Agribusiness Development;
- Agricultural Health and Food Safety;
- Information and Communication; and
- Education and Training.

#### 1.4 Results of Technical Cooperation for 2004

Results obtained through implementation of the NTCA are presented in accordance with the agricultural mandates of the Third Summit of the Americas, and the Bavaro Declaration. They are therefore reported under the following headings:

- Facilitating competitiveness and global trade;
- Promoting food safety and agricultural health;

- Strengthening rural communities;
- Supporting integration and horizontal cooperation;
- Developing human capital;
- Promoting institutional modernization; and
- Environmental management.

Essentially, the results obtained must contribute to increased prosperity in Grenada's rural communities.

# 1.4.1 Facilitating Competitiveness and Global Trade

The technical expertise of the Pest Management Unit's staff was enhanced through the professional support provided by a USDA/APHIS consultant (Dr Feridoon Mehdizadegan) who was brought to Grenada by IICA to assist the Ministry of Agriculture in evaluating its organization structure in plant and animal health, and to enhance local technical capabilities relative to agricultural health and international trade issues. A cross-section of agricultural and trade technicians benefited through participation in a relevant workshop.

The business management capabilities of rural women and youth involved in agriculture were greatly enhanced through participation in a 1-week intensive agribusiness training course conducted by local and regional Agribusiness Specialists.

# 1.4.2 Promoting Food Safety and Agricultural Health

The operational efficiency of the Pesticides Control Board was increased. A pesticides database was developed, adopted and commissioned, and the Board's Secretary was trained to manage the database.

Because of his participation in SPS training activities in Geneva, the Chairman of the National Agricultural Health and Food Safety Committee developed increased competence and confidence in dealing with agricultural trade issues in the context of the WTO.

#### 1.4.3 <u>Strengthening Rural Communities</u>

Grenada's rural women became more organized and were therefore in a better position to contribute in a more meaningful way to their country's economic development.

The agro-tourism awareness of a wide cross section of the grenadian public was increased. A national "Sensitization Workshop" was conducted, and this resulted in the formation of an active Agro-tourism Committee which developed its Terms of Reference and a draft Action Plan aimed at pointing the way forward for agro tourism in Grenada.

The capability to exploit the livestock development potential in Carriacou was increased, through joint IICA/CARDI action. A visit was made to Carriacou; the livestock development potential was assessed; and a document "An Analysis of the Potential for Establishing a Viable and Sustainable Livestock Industry in Carriacou" was prepared. Included in this document is a relevant Plan of Action....

# 1.4.4 Supporting Integration and Horizontal Cooperation

Grenada's rural women and youth have increased their knowledge and broaden their experiences relative to the potential for and scope of agribusiness activities in the region. They have gained new insights into technological advances made by women in other Caribbean countries, and have become part of a regional network from which they hope to benefit significantly.

Through its commitment to host the Fifth Caribbean Week of Agriculture (CWA) which was scheduled for October 31-November 7, 2004, the Grenada Government demonstrated increased support for regional integration, and its willingness to cooperate with other regional governments and institutions towards focusing regional attention on agricultural and rural development. Although the CWA was cancelled, due to the devastation caused to Grenada's agriculture sector by Hurricane Ivan on September 7, planning of CWA activities, spearheaded by the Ministry of Agriculture, was well advanced prior to the hurricane. Representatives of both the public and private sectors were involved in the planning process, and there was much interaction with representatives from regional institutions interested in agribusiness and agri-tourism

development. Financial and/or technical support for hosting the CWA was pledged by Government of Grenada, IICA, CARICOM Secretariat, CARDI and FAO, but sponsorships for selected CWA activities were being negotiated with the Technical Centre for Agriculture and Rural Development (CTA), the Caribbean Hotel Association (CHA) and a number of local institutions and agribusinesses. The regional status of the CWA, with a national flavour, was evident during the planning process.

# 1.4.5 <u>Developing Human Capital</u>

The income earning potential of local beekeepers was increased through their participation in a hands-on training course on "Production of Beeswax Products".

The capabilities of unemployed youths to earn a livelihood were increased through their participation in a 1-week practical training course in Beekeeping.

The development of local capability to manufacture coveralls for beekeepers was initiated when a young beekeeper participated in a sewing course, and subsequently registered in an Advance Sewing Course, with the aim of establishing an enterprise to manufacture bee suits and other garments.

Local capabilities in farm business planning and management were enhanced through participation in a relevant training course organized by IICA and sponsored by the Canadian International Development Agency (CIDA).

The knowledge and awareness of two representatives from the local rural women's group were enhanced through their participation in an overseas training course in "Organic Agriculture".

The local capability to manage small businesses was increased through agribusiness persons' participation in a 3-day Small Business Management Training Course conducted locally by a management consultant from the Florida Association of Voluntary Agencies for Caribbean Action (FAVA-CA).

The technical competence of seven (7) agricultural health technicians was increased through their participation in seven different overseas training courses, respectively.

#### 1.4.6 Environmental Management

There was an increased awareness of the need to conserve the countries natural resources. This was facilitated by the execution of activities related to organic agriculture and the more effective monitoring of pesticide usage.

#### 1.4.7 Institutional Modernization

Interest in the implementation of the restructuring plan of the Ministry of Agriculture was renewed.

#### 2. INTRODUCTION

Since becoming a member of the Inter-American Institute for Cooperation on Agriculture (IICA) in 1979, Grenada has been a beneficiary of the Institute's technical cooperation programmes. IICA's Mission is "to support the Member States in their pursuit of progress and prosperity in the hemisphere through the modernization of the rural sector that is competitive, technologically prepared, environmentally managed, and socially equitable for the peoples of the Americas".

Currently, IICA's programme for Grenada is based on a 5-year (2002-2006) National Technical Cooperation Agenda (NTCA) which was developed in consultation with the agriculture sector's major stakeholders. The NTCA is revised annually to reflect changes in the sector's priority technical cooperation needs. Its implementation is guided by an annual national Work plan.

During the first eight months of 2004, good progress was made towards implementing activities programmed in the Work Plan. However, following the devastation caused by Hurricane Ivan on September 7, limited programmed activities were undertaken as energies were directed towards providing emergency support to the agriculture sector. Thus, through implementation of a Short Term Action, IICA provided some material support to Grenada's livestock industry, through the Ministry of Agriculture (MoA). Additionally, IICA assisted the MoA in assessing the damage caused to the agriculture

sector by Hurricane Ivan, and in developing an Action Plan for rehabilitation/reconstruction of the sector.

IICA's emergency support to Grenada's agriculture sector complemented government's initiative in implementing a US\$5.6 million Agriculture Emergency Relief Project which commenced less than two (2) months following the sector's devastation by Hurricane Ivan.

This report highlights results of technical cooperation activities undertaken by IICA in Grenada during 2004. It also gives an insight into the prevailing state of agriculture and rural life in Grenada, and summarizes the National Technical Cooperation Agenda (NTCA).

# 3. THE STATE OF AGRICULTURE AND RURAL LIFE IN GRENADA IN 2004

Notwithstanding the historic economic prominence of the traditional export crops (nutmeg, cocoa and banana), Grenada's agriculture has always been considered highly diversified. Since the mid 1980s, government has been allocating significant amounts of scarce resources towards enhancing the diversification of agriculture. However, in 2004, the traditional export crops remained the main foreign exchange earners for the agriculture sector, with only limited diversification within the respective commodity industries.

More than thirty per cent (30%) of Grenada's population depends on agriculture, directly or indirectly, for a livelihood. Also, besides being a major source of foreign exchange, agriculture contributes significantly to the country's Gross Domestic Product (GDP) and employment generation.

During 2004, the traditional export crops (especially nutmeg and cocoa) continued their dominance of the sector. Banana production was geared mainly for the domestic market; export was minimal, averaging less than twenty (20) tonnes per fortnight. The non-traditional export commodities (especially fruit and food crops) performed relatively well. In particular, the food crops subsector made significant progress due mainly to technical and material support provided through government's Food Security

Programme. However, the livestock industry seemed stagnated or in decline while the agro-processing industry struggled to gain some degree of competitiveness on both the domestic and export markets.

Based on available statistical estimates, the agriculture sector's contribution (including that of Forestry and Fisheries) to GDP in 2004 was 9.71 per cent. This level of contribution was less than the sector's 10.39 per cent and 9.95 per cent contributions made in 2002 and 2003, respectively, and could be attributed to the slower growth rate in the agriculture sector, vis-à-vis the other economic sectors.

Production of two of the major export crops (nutmeg and cocoa) during the first six months of 2004 was significantly greater than in the corresponding period of 2003, as indicated in the following table:

**TABLE 1: Cocoa and Nutmeg Production (January-June 2003 and 2004)** 

MONTH	COCOA PROI	OUCTION (kg)	NUTMEG PRODUCTION (kg)			
	2003	2004	2003	2004		
January	94,170.0	189,801.8	226,294.1	238,907.7		
February	98,423.3	225,734.2	277,535.8	167,261.2		
March	115,580.5	123,824.0	337,737.0	172,007.1		
April	110,126.5	58,762.8	215,720.2	348,160.2		
May	70,439.5	50,245.4	190,296.4	539,973.1		
June	43,540.7	56,437.2	199,216.3	482,636.2		
TOTAL	532,280.5	704,805.4	1,446,799.8	1,948,945.5		

Of the three major export crops (cocoa, nutmeg and banana), nutmeg is by far the most dominant, not only in terms of quantities produced but also in terms of quantities exported and foreign exchange earned. The export volumes and values of those crops for the period 1999-2003 are shown in table 2.

TABLE 2: Volumes and Values of Cocoa, Nutmeg and Banana Exported

	1999		2000		2001		2002		2003	
CROP	Vol. ('000	Value (US\$	Vol. ('000 kg)	Value (US\$	Vol. ('000	Value (US\$	Vol. ('000	Value (US\$	Vol. ('000	Value (US\$
	kg)	'000)		'000)	kg)	'000)	kg)	000)	kg)	'000)
Cocoa	939.7	1,416.2	1,043.1	1,597.7	723.4	1,207.1	845.8	1,445.2	553.3	1,233.2
Nutmeg	2,664.4	14,998.9	1,707.5	14,591.4	2,494.3	13,726.7	2,297.1	12,491.6	1,786.8	10,025.3
Banana	566.9	132.4	705.2	223.2	562.4	171.1	507.9	197.2	401.4	169.3

Despite the apparently consistently good performance by the traditional export commodities (especially nutmeg), there has been great concern about the decreasing levels of production efficiency and consequential threat confronting those commodities in the global economy. There has therefore been much discussion (but limited action), at both the national and sectoral levels, aimed at increasing labour efficiency, increasing research capabilities, enhancing policy formulation and planning function, and expediting the process towards production and commercialization of new value added secondary products.

During 2004, government continued to give consideration to the restructuring of the Ministry of Agriculture, based on proposals submitted separately by IICA and FAO. The need to strengthen the Ministry's planning function has also been considered. Attention is drawn to the following relevant statement contained in the Governor General's Throne Speech of January, 2004: "The European Union has committed 1.3 million dollars, over the next two years, to strengthen the Ministry's planning capacity."

Generally, Grenada's agroindustrial subsector showed limited progress during 2004. However, one of two medium size agroprocessing plants, established in 1992, made good strides in terms of increasing its production as well as its market share locally and regionally; the other seemed to have encountered management problems and was in decline. Also, a state-of-the-art fruit processing plant, established in 2002, made significant inroads on the local market and was aggressively tackling the regional market. However, Hurricane Ivan caused significant damage to the plant which has been out of operation following the hurricane on September 7<sup>th</sup>. In terms of adding value to the traditional export crops commodities, the Grenada Cooperative Nutmeg Association (GCNA) is yet to implement its plan to manufacture value added products (myristic acid, trimyristin, nutmeg grease and nutmeg soap), as stated in its 5-year Strategic Plan (2001-2005).

When Hurricane Ivan struck Grenada on September 7, 2004, it dealt a severe blow to the country's agriculture and rural life: ninety per cent (90%) of nutmeg trees were uprooted; sixty per cent (60%) of cocoa fields, ninety per cent (90%) of short term cash crops, and ninety-two per cent (92%) of forests and watersheds were destroyed. Also, the

agricultural infrastructure islandwide was badly damaged, and the livestock subsector suffered significant loss of stock and, where they existed, housing facilities.

The devastating effects of Hurricane Ivan on Grenada's agriculture sector impacted negatively on rural employment, notwithstanding government's implementation of a US\$5.6 million employment-generating short term "Agricultural Emergency Rehabilitation Project" which was initiated within two months after the hurricane. National unemployment rate increased from 12 per cent (pre-hurricane) to approximately 15 per cent immediately following the hurricane, and a more significant increase is expected by mid-2005.

#### 4. SUMMARY OF THE NATIONAL AGENDA

IICA's National Technical Cooperation Agenda (NTCA) for Grenada, developed in consultation with key agriculture sector stakeholders, comprises the sector's priority areas for which IICA will provide technical support during the period 2002-2006. These areas are reviewed/revised annually to reflect the changing priority technical cooperation needs of the sector. The NTCA forms the basis for formulation of Annual Work Plans to guide implementation of IICA's activities in the country.

The NTCA includes priority activities which were identified by the agriculture sector stakeholders and fall within any one of the following six Strategic Areas of the IICA:

- Agricultural Health and Food Safety;
- Trade and Agribusiness Development;
- Technology and Innovation;
- Sustainable Rural Development;
- Education and Training; and
- Information and Communication.

The Strategic Areas are consistent with the agriculture mandates of the Third Summit of the Heads of State and Government of the Americas.

Also included in the National Agenda are the following mutually agreed goals:

- Poverty alleviation;
- Establishment of a commercially viable agribusiness sector;
- Agricultural modernization;

- Strengthening the agricultural health and food safety systems;
- Sustainable use of natural resources;
- Increasing farmers' confidence in the agriculture sector;
- Agroindustrial development through bilateral and regional cooperation;
- Human resource development in the agriculture sector; and
- Institutionalization of the use of information and communication technology in the management of public and private sector agri-enterprises.

Potential beneficiaries of IICA's activities, and possible alliances towards effecting those activities are also stated in the National Agenda.

Generally, IICA's activities during 2004 were geared to provide support to Grenada's agribusiness sector in the following areas:

- Human resource development;
- Establishment of an agricultural health and food safety coordinating entity;
- Technical support for review and strengthening of the local regulatory services:
- Development and operationalization of a Pesticides Database;
- Strengthening linkages between agriculture and tourism;
- Supporting the development of structures which facilitate meaningful participation of marginalized groups (especially youth and women) in the country's agriculture and rural development process;
- Development of agribusiness management skills; and
- Increasing the income earning potential of rural agri-entrepreneurs.

#### 5. RESULTS OF TECHNICAL COOPERATION FOR 2004

Although the results are a consequence of the implementation of the National Technical Cooperation Agenda (NTCA) which was developed on the basis of IICA's Strategic Areas, they are here presented in accordance with the agricultural mandates of

the Third Summit of the Americas and, more specifically, the mandates of the Bavaro Declaration, viz.:

- Facilitating competitiveness and global trade;
- Promoting food safety and agricultural health;
- Strengthening rural communities;
- Supporting integration and horizontal cooperation;
- Developing human capital;
- Promoting institutional modernization; and
- Environmental management.

There is a close relationship between IICA's Strategic Areas and the Third Summit's agricultural mandates: The former contributes to the realization of the letter. In fact, part of IICA's responsibility is to implement (and coordinate) activities leading to the achievement of the agricultural mandates of the Third Summit of the Americas.

#### 5.1 Facilitating Competitiveness and Global Trade

- 5.1.1 Twenty (20) persons, including agricultural extension, health and trade technicians, increased their capabilities to make agricultural trade related decisions, and to disseminate information on agricultural trade issues. They were participants in a 1-day seminar/workshop titled "An Overview of the Forces that Govern Global Trade in Agricultural Products". Much information was provided, through Power Point presentations, on
  - Plant and Animal Quarantine: Bio Terrorism (Bio Safety/Bio Security);
  - The Sanitary and Phytosanitary (SPS) Agreement;
  - Agreements on Technical Barriers to Trade (TBT);
  - Risk Assessment; and
  - Implications on Trade Liberalization with Regard to WTO and FTAA.

The seminar provided participants with the opportunity to clarify and be more familiar with a number of agricultural trade issues.

- 5.1.2 Improved agribusiness capabilities by twenty-five persons, including youth and women involved in agriculture. These persons were selected from the Grenada Agricultural Forum for Youth (GAFY) and the Grenada Network of Rural Women Producers (GRENROP), respectively. They participated in a local one-week intensive training course which dealt with the following topics:
  - Contributing to the Development of Agricultural Entrepreneurial Skills, through Training in Computer Applications (MSWord, MSExcel, MSPowerPoint);
  - Marketing and Trade;
  - Financial Management;
  - Food Safety and Hygiene, and
  - Group Dynamics.

Each participant was provided with a reference manual containing information provided during the training course.

#### 5.2 Promoting Food Safety and Agricultural Health

5.2.1 Increased level of operational efficiency by the local Pesticides Control Board (PCB), through adoption and use of a Pesticides Database developed through IICA/PCB collaboration. The database was designed, using the Microsoft Access 2000 platform, to facilitate monitoring of the registration, licensing and use of pesticides in Grenada. A technician attached to the PCB was trained to use the database. That technician was consulted during development of the database in order to adequately address problems related to the data entry fields and the types and format of the various reports to be generated.

There is an access security (password) built into the database at the time of initial start up of the programme. This prevents unauthorized access to, and tampering with the database which represents a wealth of information, and becomes the main avenue through which the PCB's business is conducted.

Once the relevant information is entered into the database, the following reports could be generated:

- Applications for pesticides registration;
- Applications for pesticides importation licence;
- Quantities and values of pesticides imported;
- Pesticides sales, including information on the purchaser; and
- Use/inventory of pesticides by farmers, pest control operators, etc.

Also, various relevant information (e.g. antidotes for different pesticides) could be included in the database for quick retrieval when required.

5.2.2 Chairman of the National Agricultural Health and Food Safety Committee (NAHFSC) increased his level of technical competence through participation in the SPS training activities in Geneva, Switzerland. Mr Paul Graham, who is also the Pest Management Officer in the Ministry of Agriculture, represented Grenada at the 29<sup>th</sup> and 30<sup>th</sup> meetings of the Sanitary and Phytosanitary (SPS) Committee of the WTO, held in Geneva on March 15-19 and June 19-24, respectively. (Grenada was not represented at the 31st meeting, held in October, due to adverse situation caused by Hurricane Ivan in September.) During each of the two meetings attended by Mr Graham, workshops were held. Grenada's participation at those meetings has been, and continues to be funded by the United States Department of Agriculture (USDA) and IICA which is the coordinating institution. The objective of the meetings/workshops is: To promote the development of capabilities in the countries to boost the effective implementation of the SPS Agreement of the WTO. Thus, in addition to participating in SPS capacity building and coordination workshops, Grenada's representative at those meetings has been involved in meetings of the SPS Committee of the WTO, and also in regional and bilateral meetings to discuss, or negotiate on SPS issues directly or indirectly affecting Grenada.

For each of the meetings attended, the Grenada representative was obliged to submit two reports (pre and post meeting) to IICA and the WTO/SPS Committee. In his report following the 29<sup>th</sup> meeting, Mr Graham said, inter alia, that Grenada's participation in that meeting had placed the country "in a better position to refine its SPS measures based on updates from (other) participating members, (and that) issues of relevance (were) noted and subsequently discussed in an attempt to improve Grenada's readiness on new issues that may affect (Grenada's) agricultural trade in the future. Two cases in point (were) the updates on BSE and Avian Influenza and discussions of policies on GMOs and products of biotechnology."

Commenting on Mr Graham's report, IICA's SPS Measures Coordinator said, inter alia: "Many delegations have agreed that bilateral meetings with trading partners are a priority for many countries. Attending (SPS) Committee meetings not only allows them to monitor and participate in the development of technical topics, but also to settle disputes with trading partners. However, if they are to take advantage of this opportunity, the representatives not only need to have an adequate knowledge of the technical situation; they must also have worked closely with the private sector, to have an up-to-date grasp of the situation."

As chairman of the NAHFSC, Mr Graham has been holding periodic meetings with relevant private and public sector representatives who are members of the NAHFSC. In particular, he has been convening meetings of the NAHFSC, following his return from WTO/SPS Committee meetings in Geneva, to apprise members of issues discussed at those meetings, and to receive feedback.

# **5.3 Strengthening Rural Communities**

5.3.1 Grenada's rural women producers became organized to facilitate their active and meaningful participation in the country's economic development process. The local women's group, Grenada Network of Rural Women Producers (GRENROP), was officially launched on December 14, 2004. GRENROP has become the local Chapter of the Caribbean Network of Rural Women Producers (CANROP) whose mission is "To empower rural women to improve their standard of living through training, cultural exchange, networking and promoting inter and intra-regional trade ...".

The group's formation was initiated in January 2004 when IICA, in collaboration with Grenada's Ministry of Agriculture (Extension Division), organized and conducted a "Sensitization Workshop for Rural Women Producers". Thirty (30) rural women registered for, and participated in the workshop during which a "Steering Committee" was formed to work towards the group's formation.

At the time of its launching, the group had a total of forty (40) registered members twenty-four (24) of whom were participants at the Sensitization Workshop.

Many group members participated in local and overseas training courses, prior to the group's launching. Training was provided in areas such as Agribusiness Management, Information and Communication Technology, Strategic Planning, and Group Dynamics. The group has plans to become registered, expand its membership, and seek to undertake economic activities cooperatively.

5.3.2 There was an increased agro-tourism awareness by forty-five (45) persons, representing major stakeholder institutions, who participated in an "Agro Tourism Sensitization Workshop" held in January 2004. The workshop was organized jointly by IICA, Grenada Board of Tourism, and the Ministry of Agriculture. It featured two PowerPoint presentations and a video presentation

following which there was a Working Group Session, with five groups dealing respectively with:

- Direct trade in Agro Tourism;
- Culinary tourism;
- Heritage tourism;
- Health and Wellness tourism; and
- Support services necessary to facilitate development of the product.

Each of the topics was addressed from the standpoint of "opportunities", "challenges" and "Solutions".

Deciding on "The Way Forward", workshop participants nominated and elected persons to form an Agro Tourism Linkage Committee. The following institutions/organizations were represented on the Committee:

- Ministry of Agriculture, Lands, Forestry and Fisheries (MALFF);
- Ministry of Tourism;
- Grenada Board of Tourism (GBT);
- Ministry of Health and the Environment;
- Grenada Agricultural Forum for Youth (GAFY);
- Grenada Bureau of Standards (GDBS);
- Grenada Hotel and Tourism Association (GHTA); and
- Inter-American Institute for Cooperation on Agriculture (IICA).

Nominated to co-chair the Committee were the representatives from the GBT and IICA.

The Committee met on three occasions (March, April and May) during 2004. Its draft "Terms of Reference" was developed at the second meeting and finalized at the third meeting. The Terms of Reference included the following objectives of the Committee:

Advocacy towards promoting the preservation of indigenous species, and ensuring that agriculture and tourism activities with potential to negatively impact each other (and/or the environment) are not permitted, or are modified based on sound professional advice.

- ♦ Identification of Project ideas.
- Supporting the development and execution of relevant public awareness programmes.
- Promoting the establishment and development of tourism-friendly agri-enterprises.
- Facilitating a 2-way flow of information between the Committee and stakeholder institutions.
- ♦ Encouraging periodic reviews and analyses of the tourism and agriculture sectors, the establishment of relevant databases; and facilitating information exchange within and between both sectors.
- Generation of ideas and proposal of activities/actions aimed at strengthening the administrative and technical capacities of the Ministries of Agriculture and Tourism so as to improve their individual and collective capabilities to expand and strengthen linkages between the sectors.

The Committee's draft Action Plan was prepared by a selected subcommittee and submitted for discussion at the Committee's third meeting. This included the following stated tasks to be undertaken by the Committee:

- Prepare document on fruit species available in Grenada, with pictorial presentation.
- Prepare an education awareness programme.
- Identify locations with potential for cultivation of exotic crop species that can be used as tourist attractions.
- Promote the marketing of fruits through hotels.
- Create list of potential agri-tourism enterprises and identify requirements for successful implementation.
- Identify new tours to include agri-tourism enterprises.
- Create link on government website to post information on agritourism.
- Prepare concept paper on an agri-tourism festival, e.g. nutmeg.

- Coordinate the production of agricultural produce for sale to hotels.
- Formulate a project to prepare a database that could be used by hotels, farmers and the Marketing Board.
- Organize annual Agri-Tourism Linkages Review Seminars.
- 5.3.3 Increased capability of Grenada's Livestock Division to exploit the livestock development potential in Carriacou. This was achieved through joint action by IICA and the Caribbean Agricultural Research and Development Institute (CARDI).

Based on a request from the Ministry of Agriculture, and in collaboration with the Ministry of Carriacou Affairs (Livestock Unit), a CARDI/IICA technical team visited Carriacou to observe livestock production systems and to hold relevant discussions with livestock producers and agricultural officers there. A brief meeting was also held with the Permanent Secretary in the Ministry of Carriacou Affairs.

Resulting from the visit to Carriacou, a document "An Analysis of the Potential for Establishing a Viable and Sustainable Livestock Industry in Carriacou" was prepared. One section of the document presents an analysis of Carriacou's livestock production potential, and yet another section outlines a detailed Plan of Action to exploit Carriacou's livestock potential.

5.3.4 Immediately following the passage of Hurricane Ivan, IICA proactively approved funds to assist the Ministry of Agriculture in its efforts to quickly rehabilitate the agriculture sector. Based on the priority indicated by the Ministry of Agriculture, part of the IICA funds (EC\$87,175.00) was used to purchase chicken wire, waterers, feeders, lumber and galvanize sheetings which were distributed to needy livestock farmers, through the Ministry's Livestock Division.

#### 5.4 Supporting Integration and Horizontal Cooperation

5.4.1 There has been an increase in the exchange of ideas and experiences among grenadian women and youth involved in agriculture, through the functioning of the Grenada Network of Rural Women Producers (GRENROP) and the Grenada Agricultural Forum for Youth (GAFY), respectively. Also, representatives of GRENROP and GAFY have attended regional meetings of the parent bodies - Caribbean Network of Rural Women Producers (CANROP) and Caribbean Agricultural Forum for Youth (CAFY) – where they met and interacted with representatives of national Chapters of the respective parent bodies. This has resulted in the development of local interest in initiating new enterprises and adopting improved technologies observed in the countries visited and/or related by counterparts from other participating Caribbean countries. For example, two of the GRENROP members who participated in regional workshops in Jamaica have returned with copies of recipes and technological information, and are seeking to use same to establish new enterprises.

Besides gaining useful information and experiences, local participants at these regional meetings have been able to make new friends and establish contacts throughout the region. This has facilitated an ongoing communication link between GRENROP and other member Chapters of CANROP; and GAFY and other member Chapters of CAFY.

The regional prominence of agriculture and rural life was enhanced and, in particular, regional support for agricultural and rural development was highlighted through regional institutions' (including the Grenada Government's) commitment to fund the staging of the Fifth Caribbean Week of Agriculture (CWA) which was to be hosted by Grenada.

Having sent its Chief Extension Officer and the then Minister to Guyana to observe implementation of activities staged during the Fourth CWA, the Grenada Ministry of Agriculture apparently had no difficulties in getting its Minister to convince the Grenada Cabinet of the benefits to be derived from

Grenada's hosting of the Fifth CWA. Accordingly, at a Cabinet Meeting on February 2, 2004, the Grenada Government confirmed the commitment given by the previous Minister of Agriculture for Grenada to host the Fifth CWA.

The planning of the CWA was spearheaded by the Ministry of Agriculture, in collaboration with the IICA. A Planning Committee was established. It comprised representatives from relevant public and private sector institutions. There were sub-committees with responsibility for various aspects of the planning process in which the Trade Division of the Ministry of Finance and Economic Development played a major role. IICA served as the Secretariat for the CWA Planning Committee.

Like the previous Fourth CWA, the Fifth CWA was being organized within the context of the Regional Alliance for Sustainable Agricultural and Rural Development (*The Alliance*). CARICOM Secretariat, FAO and IICA are jointly responsible for *The Alliance's Secretariat*. They, together with the Grenada Government, were expected to meet most of the CWA's costs. However, regional bodies (e.g. the CTA and the CHA) and a number of local interest groups were favourably disposed to providing tangible support to the staging of the Fifth CWA.

Most Caribbean countries, including Cuba and the Dominican Republic, had shown interest in participating in the CWA. Interest was also shown by the Republic of Venezuela, especially with regard to its participation in the planned Agriculture Trade Show.

The main purpose of the CWA was to bring the major agri-business stakeholders together to focus intensely on the agriculture and rural sectors – at the highest levels of the public and private sectors. This was highlighted through the CWA's overall theme "Fostering Sustainable Regional Development through Agriculture and Tourism Linkages" and sub-theme (of the planned Trade Show) "Increasing the Competitiveness of Caribbean Agriculture through Greater Collaboration and Use of Appropriate Technology".

The CWA's planned programme included regional workshops on "Information Technology", "Strategic Planning" and "Agro Tourism". Also included was a meeting of Caribbean Ministers of Agriculture, a panel discussion on "Poverty Alleviation", and a series of meetings by some of the constituent groups of *The Alliance*: Caribbean Agribusiness Association (CABA), Caribbean Agricultural Forum for Youth (CAFY) and Caribbean Netwok of Rural Women Producers (CANROP). An agribusiness Trade Show was carded to be the highlight of the Fifth CWA.

Everything was very much in high gear following the "Official Launching of the Fifth CWA" on August 17, 2004. The occasion was adequately covered and promoted by the local media which recorded speeches by Grenada's Minister of Agriculture, FAO's Regional Director, and IICA's Sub-Regional Representative. The Chairman of the CWA Local Planning Committee, and the head of the Trade Show Sub-Committee were also featured. Until Hurricane Ivan struck on September 7, 2004, the Fifth CWA was shaping to be a resounding success. Unfortunately, the hurricane came; devastated Grenada's agriculture sector; and the organizers were left with no choice but to cancel the Fifth Caribbean Week of Agriculture.

#### 5.5 Developing Human Capital

5.5.1 Local capacity to produce beeswax was developed, through implementation of a 2-day hands-on training course. The course was organized as a means of enabling rural entrepreneurs to acquire knowledge and skills in the commercial production of beeswax products, with the intention of helping rural inhabitants to earn/save foreign exchange, create employment, and ultimately improve their quality of life.

In June, 2004, IICA organized a 2-day workshop on "Production of Beeswax Products". This was done collaboratively with the Grenada Association of Beekeepers (GAB) and the Ministry of Agriculture, Lands, Forestry and Fisheries (MALFF). The workshop targeted fifteen (15) highly

enterprising members of the GAB which had increased its membership from twelve (in 1998) to forty (in 2004). It was conducted by a highly competent Volunteer from the Florida Association of Voluntary Agencies for Caribbean Action (FAVA-CA). Participants, through a hands-on approach, learned how to produce and package soaps, beeswax leather polish, rolled candles, hand salve, lip balm, conditioner for wood and cutting boards, and hand lotion. Melted beeswax was the main ingredient in producing these items. The workshop also provided information on the following critical areas related to the manufacture and sale of beeswax products:

- Labeling and disclosure, according to government regulations;
- Safety and sterility;
- Formulation, allowing for the most efficient use of locally available ingredients; and
- Profit maximization.

Participants were allowed to keep items made during the workshop, and were each provided with a copy of a self-study manual on the production of beeswax products. Also, beeswax products manufacturing equipment (immersion blender and deep-fry thermometers), brought to Grenada by the trainer, and excess training materials (white vinegar, dry powdered lye, olive oil, solid vegetable shortening, distilled water, mineral spirits, and vitamin E capsules), provided by IICA, were donated to the GAB which itself had supplied the following materials and equipment for the workshop: beeswax, digital scale, hot plate, stainless steel pots, plastic containers, metal containers, and a large cooler with ice.

5.5.2 Eight unemployed youths developed their capabilities to earn a livelihood, through participation in a 1-week practical training course in Beekeeping. Each trainee was provided with a hive box and a colony of bees at the end of the course, and arrangements were made for ongoing support to the trainees by the trainer. Within three months after the training course, one of the trainees had secured a loan from the National Development Foundation

(NDF) and had increased his number of hives from one (1) to fifteen (15). Another of the trainees had her loan application approved by the NDF, and was awaiting disbursement of funds to expand her apiary.

- 5.5.3 Local capability to manufacture coveralls for beekeepers was developed, through IICA's sponsorship of a beekeeper's participation in a sewing course organized by the NDF. On completion of the course, the beekeeper was registered in an advance sewing course after which she is expected to seek assistance to establish a garment manufacturing enterprise to produce coveralls for use by beekeepers, in addition to other items of clothing. Coveralls are currently imported from the U.S.A. at a unit price of sixty-five U.S. dollars (US\$65.00).
- 5.5.4 The technical and managerial capabilities of nine (9) selected farmers and five (5) extension officers were greatly improved, through participation in a 5-day local training course on "Farm Business Planning and Management". The course, organized by IICA and sponsored by the Canadian International Development Agency (CIDA), comprised the following eight modules:
  - Module One Agronomy
  - Module Two Introduction to Farm Management
  - Module Three Planning the farm Business
  - Module Four Assessing Farm Resources
  - Module Five The Farm Activities
  - Module Six Measuring Farm Performance
  - Module Seven Sensitivity and Break Even Analysis
  - Module Eight Agricultural Marketing and Farm Management.

At the end of the course, each participant was given detailed handouts on presentations made.

5.5.5 Increased awareness and knowledge of organic agriculture were obtained by two (2) members of the Grenada Network of Rural Women Producers

(GRENROP), who participated in a 4-day Organic Agriculture Workshop, held in Jamaica. The workshop, organized by IICA and sponsored by CIDA, focused on issues pertaining to organic farming; challenges facing the industry; market opportunities for organic products; and the current status and potential of organic farming in the Caribbean.

In her report on the workshop, one of the two local participants said that her participation in the workshop made her "better poised to make a more meaningful contribution ... to share valuable information with (other members of) the rural network of women farmers in Grenada". The other participant reported how impressed she was by the relevant Case Studies from Costa Rica and Dominica, and by "the patience and dedication observed on the Green Castle Farm (in Jamaica) ...". She also said that "the cooperation, which exists between the farmers and the processing industry at Walkerswood (in Jamaica) is commendable". She recommended grenadian farmers' adoption of "the examples of Costa Rican and Dominican farmers in forming farming cooperatives at maybe the parish level, thus making it easier to source seeds as well as machinery and research, instead of one farmer doing this by himself". She further recommended that "persons involved in the processing industry should work in close relationship with farmers and extension officers in sourcing raw materials, but before all this can be done, the farmers must be educated on the benefits which will be derived from the venture".

5.5.6 The potential for increased production and marketing efficiencies of twelve (12) agribusiness persons was increased, through participation in a 3-day Small Business Management Training Course, conducted by a management consultant from the Florida Association of Voluntary Agencies for Caribbean Action (FAVA-CA).

The course was based on a number of Case Studies presented by the trainer. It also included a number of practical computer exercises relative to the use of the Internet and selected software packages towards increased efficiency in managing small businesses.

- 5.5.7 Grenada's agriculture quarantine services were strengthened through participation of local (Ministry of Agriculture) technicians in the following overseas training events:
  - Training in the Use of Software for the Assessment and Analysis of Import Risks, held in Trinidad
  - Training in the Registration of Agrochemicals (St. Vincent and the Grenadines)
  - Inspection and Certification Procedures for Regional Animal Health Officials (Guyana)
  - Plant Health Accreditation Workshop (Trinidad)
  - Plant Quarantine Workshop (Trinidad)
  - Animal Health Risk Analysis and Disease Surveillance Workshop (Belize)
  - Plant Risk Analysis Workshop (Barbados)

These training activities were complemented by provision of a top-of-the-line computer and printer – A Dell Precision Workstation and HP Inkjet Colour Printer – for use by trained agricultural health officials. The training activities (and computer) were made possible through funding provided by the European Union, under the IICA-implemented project "Strengthening Agriculture Quarantine Services in the Caribbean".

5.5.8 Ministry of Agriculture institutional capability was enhanced through technical support provided to its technicians in preparing the Hurricane Ivan damage assessment report along with the Plan of Action for the rehabilitation/reconstruction of the agriculture sector.

IICA's Projects Specialist worked alongside Ministry of Agriculture technicians providing necessary guidance in terms of the methodology and structure of the said report and Plan of Action. Three other IICA technicians (IICA's Representative for the Eastern Caribbean States, IICA's local Coordinator, and IICA's Rural Development Specialist) were also involved,

through participation in relevant Working Group Sessions organized by the Ministry.

The technical assistance was made possible through funds approved by IICA, in the immediate aftermath of Hurricane Ivan, in support of the Ministry's efforts to rehabilitate the agriculture sector.

# 5.6 Environmental Management

There was increased interest in organic agriculture, especially among women producers. Also, the use of inorganic pesticides was minimized as the local Pesticides Control Board (PCB) sought to strictly enforce regulations pertaining to pesticides importation and use. In particular, the PCB has streamlined its pesticides database to facilitate more effective monitoring.

#### 5.7 Institutional Modernization

There has been renewed interest, at the political level, in implementing the restructuring plan of the Ministry of Agriculture, Lands, Forestry and Fisheries (MALFF). The plan was prepared with IICA's support, and has attracted attention from FAO's Regional Office which may be interested in assisting in its implementation.

Elements of institutional modernization have been incorporated in the Plan of Action for rehabilitation/reconstruction of Grenada's agriculture sector following the devastation caused by Hurricane Ivan in September, 2004. The Plan was prepared by the MALFF, with IICA's support.

#### 6. FUTURE OPPORTUNITIES FOR DEVELOPMENT

Hurricane Ivan's devastation of Grenada's agriculture sector has created opportunities to modernize the sector. The rebuilding process would hopefully be guided by the Plan of Action for rehabilitating/reconstructing the sector. IICA, because of its support for the

Plan's development, is committed to ensuring that its technical cooperation activities are tailored along the lines of those indicated in the Plan.

Poverty alleviation is a major focus of the national reconstruction efforts, coordinated by the Agency for Reconstruction and Development (ARD) which is a post-hurricane government established institution through which international donor agency funds are channeled. To be supportive of this focus, IICA's activities in the country must continue to contribute to local efforts aimed at developing human capital, modernizing the agriculture sector, and strengthening rural communities. Accordingly, IICA must continue efforts to support disadvantaged groups of rural women and youth. Efforts must also be made to re-energize the local Chapter of *The Alliance* and its constituent groups.

Given its limited resources, it is critical that IICA continue to seek to strengthen its strategic alliances with relevant local public and private sector institutions as well as related regional and international institutions and agencies. Special emphasis must be placed on activities designed to strengthen linkages between the agriculture and tourism sectors, and to facilitate production of quality value added products.

The impact of much of IICA's work in the agriculture sector hinges on the effective functioning of the Ministry of Agriculture. Great efforts must therefore be expended, at all levels, towards encouraging and supporting the Ministry's restructuring as a means of facilitating increased operational and administrative efficiency.