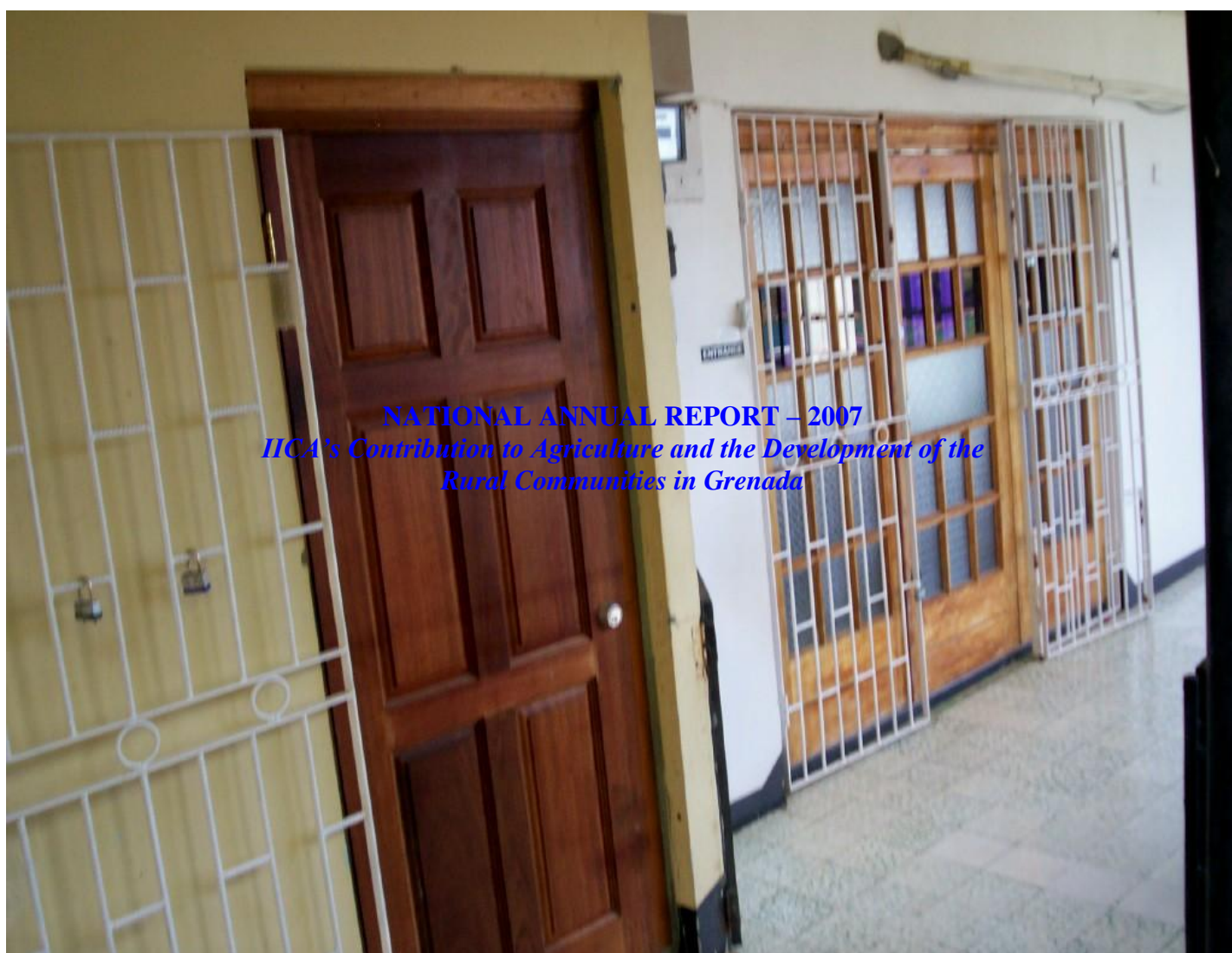


**Inter-American Institute for Cooperation on Agriculture (IICA)**

**Office in Grenada**



**NATIONAL ANNUAL REPORT - 2007**  
*IICA's Contribution to Agriculture and the Development of the  
Rural Communities in Grenada*

**IICA Office Grenada**

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## 1. EXECUTIVE SUMMARY

### **Repositioning of Agriculture and Rural Life**

- There was increased awareness of the national leaders' expectations regarding the twelve purposes of the AGRO-Matrix. Much information, useful for the planning of Grenada's agricultural and rural development, was gathered through the administering of questionnaires to those leaders.
- Twenty-eight (28) agricultural sector stakeholders were made aware of the results of IICA's activities in Grenada, and how those results have positively impacted the development of the agricultural and rural sectors. Those stakeholders were participants in IICA's national annual *Accountability Seminar*.

### **Promoting Trade and the Competitiveness of Agribusiness**

- The entrepreneurial skills of twenty-four (24) agri-entrepreneurs were enhanced, through participation in a workshop on *Entrepreneurship*. Participants were drawn from the national chapters of the Caribbean Agri-Business Association (CABA); the Caribbean Forum for Youth (CAFY); and the Caribbean Network of Rural Women Producers (CANROP).
- Through participation in a workshop, sixteen (16) agro-processors acquired the technology for processing two of Grenada's seasonal and most abundant fruits (mangoes and golden apples) into chutney, kuchela, and pickles. Some of the participants have since become involved in commercial production of chutney.
- Grenada's honey was successfully promoted – locally and internationally – by the Grenada Association of Beekeepers (GAB) which, since its formation in 1998, has been receiving assistance from IICA as well as the Ministry of Agriculture and the Agency for Rural Transformation. GAB now has its own Secretariat which organized the GAB's 2007 *Annual Honey Show*, in August, for its members some of whom also successfully participated in the 2007 *Annual London Honey Show* which was held in October.
- The national chapter of CABA has been strengthened. Six new members have joined CABA, thus increasing the membership from sixteen (16) to twenty-two (22). Government, through the Ministry of Agriculture, has made available to CABA a grant of two thousand two hundred and fifty Eastern Caribbean Dollars (EC\$2,250.00); and a loan of ninety thousand Eastern Caribbean Dollars (EC\$90,000.00) towards implementing a project titled "Establishment of a Farm Labour Company ...".
- An opportunity was created for enhancing Grenada's agricultural marketing information network, through facilitating Grenada's participation, as an observer, in the conference of the Marketing Information Organization of the Americas (MIOA), held in Ecuador. Subsequently, Grenada was invited to become a member of MIOA in order to benefit from the hemispheric sharing of agricultural market and product information.

## **Strengthening Agricultural Health and Food Safety Systems**

- Four selected farmers have improved their capabilities to implement Good Agricultural Practices (GAPs). They benefited from information provided, and periodic visits by technical personnel from IICA, Ministry of Agriculture, and Grenada Bureau of Standards. During the visits, emphasis was placed on *Record Keeping, Use of Pesticides, and Sanitation and Hygiene*.
- The capabilities of national quarantine personnel were enhanced through an IICA supported Plant and Animal Quarantine Workshop, organized by Grenada's Ministry of Agriculture.
- Grenada's agricultural health and food safety legislation was made more relevant, and in harmony with the CARICOM and FAO legislation, relative to plant protection and quarantine. This was the result of amendments made to the draft legislation by members of the National Agricultural Health and Food Safety (NAHFS) Committee.
- Nineteen (19) agro-processors increased their capabilities to produce safe agro-products, through their participation in a training course on *Hazard Analysis Critical Control Point (HACCP)*, sponsored jointly by IICA and the Grenada Bureau of Standards (GDBS).

## **Promoting the Sustainable Management of Natural Resources and the Environment**

- There was an increased demonstration of commitment by the national authorities towards implementing activities under the United Nations Convention to Combat Desertification and Drought (UNCCD). In support of implementing those activities, promoted by the national Coordinating Committee of the UNCCD, government approved a budget of EC\$62,000.00. This was complementary to the UNCCD's 2007 budget of US\$10,000.00 for Grenada.

## **Strengthening Rural Communities, based on the Territorial Approach**

- The leadership skills of executive members of the Grenada Association of Beekeepers (GAB), and the national chapters of CABA, CAFY, and CANROP were improved, through participation in a workshop on *Community Group Leadership*.

## **Introducing Technology and Innovation for the Modernization of Agriculture and Rural Life**

Increased public awareness of bio-safety issues, through a television documentary produced through a FAO-funded project administered by the National Bio-safety Advisory Authority on which IICA is represented.

## 2. INTRODUCTION

“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.” Each year, since 2002, the IICA Office in each of the Institute’s thirty-four (34) Member States has been providing stakeholders, partners and collaborators with a report on its contribution to the country’s agriculture sector development. This is in keeping with IICA’s “new style of technical cooperation which emphasizes operational efficiency, prudent financial management, improved use of human resources, expanded ties with international strategic partners and a new relationship with Member States based on participation, transparency, and accountability”.

IICA’s Vision is: *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.*

At the national level, IICA’s Vision is manifested through the National Technical Cooperation Agenda (NTCA) for the development of Grenada’s agricultural sector. This Agenda was developed in 2002, with participation from key stakeholders in the agriculture sector. It has been revised annually to reflect changes in the sector’s priority needs. Contained in the NTCA are the sector’s priority areas, as identified by a wide cross section of stakeholders. These include the following:

- Formulation of policies for sustainable agricultural and rural development
- Establishment of effective quarantine mechanisms
- Strengthening of farmers organizations
- Use of information and communication technology in the management process
- Food security
- Inter-sectoral linkages
- Exploitation of local herbs and condiments
- Effective technology transfer, through horizontal technical cooperation
- Development of entrepreneurial skills
- Development and maintenance of a socio-economic database, at the community level.

Among the priority areas identified, IICA, through implementation of its national Annual Work Plan, sought to address those which coincide with its five strategic priorities:

- Promotion of trade and competitiveness of agribusinesses
- Strengthening of rural communities
- Promotion of agricultural health and food safety
- Promotion of sustainable management of natural resources and the environment
- Promotion of the incorporation of technology and innovation in agriculture.

Much of IICA’s work in Grenada during 2007 was focused on supporting local efforts in the areas of rural group development, and capacity building.

### **3. THE STATE OF AGRICULTURE AND RURAL LIFE IN GRENADA IN 2007**

Grenada's agricultural and rural sector has not yet fully recovered from the destruction caused by hurricanes Ivan and Emily in 2004 and 2005, respectively. In terms of quantities exported, the three major export crops (banana, cocoa and nutmeg), in 2007, were unable to reach fifty per cent of the pre-hurricane levels. In fact, the banana industry has been affected to the extent that, to date, banana export to the United Kingdom has not been resumed, and only a relatively small quantity (less than half million pounds) was exported to regional markets in 2007.

Most rural households depend heavily on agriculture. Although production for the domestic market has been very encouraging, there has been no comprehensive programme for rehabilitating farms dedicated to production of the traditional export crops and the fruit tree crops. Relatively few farms have been rehabilitated; some have been sub-divided and sold for housing; and many farmers and farm workers are either unemployed/under-employed or are engaged in off-farm employment related mainly to security, construction, or transportation. The forestry, livestock and fisheries sub-sectors are recovering, but slowly. Given this unfavourable economic situation, the observance of evidence of increasing levels of poverty in the agricultural and rural sector is not surprising.

Despite Government's continued intervention during 2007, the rural economy has not improved to the extent anticipated. Fertilizers and herbicides were imported and sold to farmers at reduced prices; "soft loans" were made available for farm development activities; training opportunities were provided; and duty and tax concessions were granted on farm equipment, including farm vehicles. Additionally, Government's irrigation programme was expanded, and the government-controlled *Grenada Marketing and National Importing Board* was encouraged to work more closely with farmers to expand domestic food production and re-establish a national *Hot Pepper Export Production Programme*.

#### **3.1 Factors in the National Context**

In 2007, the struggle to rehabilitate Grenada's agricultural and rural sector continued. Unpredictable weather conditions and the inadequacy of irrigation facilities adversely affected efforts to consistently produce adequate quantities of high quality produce. Efforts to revive the banana industry, following two recent hurricanes, were thwarted by the prevalence of the dreaded *Black Sigatoka* disease, while there was a severe shortage of planting materials to replant the hundreds of acres of cocoa and nutmeg uprooted by the hurricanes.

Traditionally, Grenada's agricultural sector has been buoyed by the performance of its traditional export crops (banana, cocoa and nutmeg) all of which were severely damaged by hurricanes Ivan and Emily in 2004 and 2005, respectively. Revised preliminary estimates, provided by the Central Statistical Office, indicate that the agricultural sector grew by approximately seven per cent (7%) in 2007, following the 2005 and 2006 revised

growth rates of negative 28.9% and positive 28.8%, respectively. The sector's percentage contribution to Gross Domestic Product (GDP) in 2007 was relatively small, compared to contributions made by the other major sectors in the economy (Table 1). However, agriculture still remains a very strategically important component of Grenada's economy. It contributes significantly to national food security, rural employment, and foreign exchange earnings and savings.

**TABLE 1: PERCENTAGE CONTRIBUTION TO GDP BY ECONOMIC ACTIVITY, IN CONSTANT PRICES**

<b>SECTOR</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Agriculture	8.65	8.49	4.49	5.90	5.96
Mining and quarrying	0.79	0.71	0.69	1.00	0.87
Manufacturing	6.65	5.91	6.22	6.19	6.28
Electricity and water	5.49	5.36	5.06	5.85	6.25
Construction	8.63	9.67	15.94	11.41	10.51
Wholesale and retail trade	10.42	8.85	10.63	9.07	8.36
Hotels and restaurants	7.87	7.25	3.75	5.79	6.18
Transport	12.11	14.14	15.26	13.45	14.30
Communications	10.93	9.67	10.92	11.86	12.20
Banks and insurance	10.88	11.65	10.38	10.76	11.01
Real estate and housing	3.69	3.52	3.03	3.42	3.53
Government services	12.77	13.88	11.93	12.89	12.82
Other services	10.22	11.11	10.94	11.76	11.74

Source: Central Statistical Office, Ministry of Finance, St. George's, Grenada.

In 2007, three years after the passage of hurricane Ivan, the agriculture sector's contribution to GDP was estimated at 5.96 per cent, only marginally higher than in the previous year (2006) but a significant improvement over that recorded in 2005 when the sector contributed only 4.49 per cent to GDP. However, it must be noted that in 2003, the year immediately preceding the hurricane, the sector's contribution to GDP was 8.49 per cent; and a decade earlier (1993) it was 11.79 per cent. It is strongly believed that, given the fact that the non-agriculture sectors are growing at a much faster rate than the agriculture sector, the latter's contribution to GDP may never reach pre-hurricane level. The transport, communications, and services sectors performed very strongly in 2007, and are expected to continue along that trend.

In terms of value, the agricultural sector's contribution to GDP showed significant increases between 1998 and 2003. During that period, the crops sub-sector was most outstanding, but there were consistent improvements in the performances of the other sub-sectors. However, there were very significant declines in 2004 due to the devastation caused by hurricane Ivan. Although a second hurricane (Hurricane Emily) occurred in 2005, it was less devastating. It must be noted that the livestock and fishing sub-sectors, unlike the crops and forestry sub-sectors, recorded higher earnings in 2005 than in 2004. Following 2005, earnings from all the sub-sectors have been on the increase, as shown in Table 2.

**TABLE 2: AGRICULTURAL GROSS DOMESTIC PRODUCT (1998-2007), AT BASIC PRICES IN CURRENT PRICES (EC\$M)**

SECTOR	1998	1999	2000	2001	2002	2003	2004	2005	2006*	2007**
Agriculture	60.54	67.20	69.80	72.37	92.63	94.25	81.32	57.83	74.49	79.85
Crops	41.90	48.32	50.34	46.08	60.49	58.01	50.72	24.88	40.11	45.22
Livestock	4.41	4.76	4.96	5.06	5.13	5.23	4.71	5.82	6.26	6.96
Forestry	2.78	2.89	3.04	3.07	3.10	3.13	2.52	2.44	2.50	2.65
Fishing	11.45	11.23	11.46	18.16	23.91	27.88	23.37	24.69	25.62	25.02

\* Preliminary

\*\* Provisional

Source: Central Statistical Office, Ministry of Finance, St. George's

The significant decline in the agriculture sector's contribution to GDP in 2005 was due mainly to the effects of hurricane Ivan which devastated the sector in September, 2004. Since then, Government, with assistance from external donor agencies, has been spending significant sums in an effort to revive the sector. Two major initiatives were undertaken. The first involved implementation of a government-formulated, government-funded *Agricultural Emergency Rehabilitation Programme (AERP)* in November 2004, at a proposed cost of EC\$14 million (approximately US\$5.2 million). This was followed by the *Agricultural Enterprise Development Programme (AEDP)* which was formulated by the Agency for Reconstruction and Development (ARD), and almost totally funded by the European Union (EU). The AEDP, projected to cost EC\$11 million (approximately US\$4.1 million) was launched in 2006 and is scheduled to end in 2009. (The AERP was discontinued after only two months in operation.) The main features of the AERP were the provision of land clearing subsidies and the procurement and distribution of priority planting materials which included, among others, banana and plantain tissue culture plantlets. The AEDP concentrates on providing small loans (maximum EC\$40,000.00) to farmers, on concessionary terms. It has impacted significantly on the poultry as well as the vegetable and food crops industries. However, its impact on the traditional export crops has not been very obvious.

In 2007, the agricultural and rural sector also benefited from the continued implementation of the IFAD/Government of Grenada-funded *Grenada Rural Enterprise Project (G-REP)* which was initiated in 2002 (costing US\$7.7 million), and is due to end in 2008, for the purpose of addressing the problem of rural poverty.

Data from Grenada's Central Statistical Office indicate that, in 2005, the agriculture sector (including forestry and fishing) employed 4,347 persons, equivalent to 12.78 per cent of the total labour force (34,005). Only two other sectors (construction, and wholesale and retail trade) employed a greater number of persons (Table 3).



**TABLE 3: EMPLOYMENT, BY INDUSTRY**

<b>INDUSTRY</b>	<b>NO. OF PERSONS EMPLOYED</b>	<b>PERCENTAGE</b>
Agriculture	4,347	12.78
Mining and Quarrying	67	0.20
Manufacturing	2,406	7.07
Electricity, Gas and Water	388	1.14
Construction	6,062	17.82
Wholesale and Retail Trade	6,637	19.51
Hotels and Restaurants	1,854	5.45
Transport, Storage and Communication	2,476	7.28
Financial Intermediary	985	2.90
Real Estate, Rent and Business Activities	964	2.83
Public Administration and Defence	1,921	5.65
Education	2,449	7.21
Health and Social Work	1,253	3.69
Other Community, Social and Personal Service Activities	1,102	3.24
Private Households with Employed Persons	1,093	3.22
Extra-Territorial Organizations and Bodies	1	0.01
<b>TOTAL</b>	<b>34,005</b>	<b>100.00</b>

Source: Central Statistical Office, Ministry of Finance, St. George's

### **3.2 Changes in Legislation and Policies on Agriculture and Rural Life**

In 2007, Government approved *Grenada's Agricultural Policy* document which was prepared by the Agency for Reconstruction and Development (ARD), an ad hoc agency established by Government following the passage of hurricane Ivan. If effectively implemented, this comprehensive policy could greatly facilitate efforts to revitalize Grenada's agricultural sector. Unfortunately, although the ARD was expected to function for a period of five years, due mainly to financial constraints, it was prematurely dissolved towards the end of 2007. However, it is expected that the relevant government ministries and departments will assist in overseeing the successful implementation of the policy.

Significantly, the agricultural policy strongly indicates that efforts at achieving meaningful growth in the sector should be supported by changes in legislation relative to the sector. The policy document states that "In order to maximize the effectiveness of government interventions and to increase levels of private investment, the institutional and legal framework involved in the agricultural sector must be conducive to growth and development." Specific reference was made to legislation governing the functioning of

the agricultural commodity boards which have a key role to play in the sector's restructuring. One of the objectives of the agricultural policy is "To provide a legal framework conducive to private investment, development of new and enhanced processing industries and marketing of agricultural produce."

### **3.3 Institutional Reforms in Agriculture and the Rural Milieu**

Given the reality of *globalization* and the need for increased competitiveness, many of the agricultural institutions have recognized the need for some degree of reform. However, there has been a great deal of resistance to efforts directed toward institutional reform which, if achieved, would result in increased growth and development of the agricultural sector.

During the past decade or so, government has been enunciating a policy of privatization/commercialization of some of its departments, including the Department of Agriculture (DOA). Some government departments were privatized/statutorized. However, proposals to privatize some of the Divisions/Units of the DOA met with much resistance, especially from the professional bureaucracy and others who thought they might have been adversely affected. Also, there was some reluctance shown by the administrators who considered the cost of reform to be somewhat prohibitive.

In 2007, external technical assistance was secured, through European Union (EU) funding, to create a merger of the two main agricultural commodity associations – Grenada Cooperative Nutmeg Association (GCNA) and Grenada Cocoa Association (GCA). To date, only limited progress has been made. However, both Associations have been sharing a number of physical infrastructural facilities for the past three or four years. The management boards of both Associations recognize the need for significant administrative and structural changes if financial viability and sustainability are to be achieved, through the proposed merger. However, there seems to be some stakeholders in both the nutmeg and cocoa industries who are intent on maintaining the status quo.

Administrators of many of the agricultural institutions are encountering great difficulties in their efforts to attract and retain quality management and technical staff. They also have problems financing necessary upgrading of physical infrastructural facilities. However, it must be pointed out that, in many instances, the administrators may be operating in a legal environment which seems to frustrate efforts toward institutional reform.

### **3.4 Agri-food Trade and Agri-business Development**

Grenada imports relatively large quantities of a wide range of agri-food commodities – both fresh and processed. However, its agri-food exports are limited to mainly fresh fish and primary agricultural produce which include significant quantities of cocoa, nutmeg and mace as well as small volumes of fresh fruits (mainly mango and June plums) and vegetables (mainly hot pepper). As shown in Table 4, among the primary agricultural

produce exported in 2007, cocoa and mace recorded significant increases in the quantities exported while nutmeg and banana showed decline.

**TABLE 4: Volume ('000kg) of Major Agricultural Crop Commodities Exported (2003-2007)**

<b>CROPS</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Banana	401.5	498.3	0.0	259.8	195.3
Cocoa	554.7	796.5	33.4	73.0	217.7
Nutmeg	1787.8	1944.2	1435.1	649.7	575.2
Mace	184.7	166.2	21.4	15.9	25.1
<b>TOTAL</b>	<b>2928.7</b>	<b>3405.2</b>	<b>1489.9</b>	<b>998.4</b>	<b>1013.3</b>

Source: Central Statistical Office, Ministry of Finance, St. George's

The reduction in the volume of bananas exported in 2007 was due mainly to the effects of the Black Sigatoka disease which resulted in poor quality fruit unsuitable for the export trade. An examination of production figures (Table 5) indicates that the quantity of bananas produced has always been significantly higher than that exported. This is a true reflection of the importance of banana as staple in the diet of the local population. In the case of nutmeg, for three consecutive years (2005-2007) export was much higher than production. This was made possible due to the large quantities of nutmeg held in storage prior to the passage of hurricane Ivan in 2004.

**TABLE 5: Volume ('000kg) of Production for the Major Agricultural Commodities (2003-2007)**

<b>CROPS</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Banana	796.2	657.1	191.4	1169.5	1360.0
Cocoa	618.3	762.9	41.8	91.0	229.1
Nutmeg	2436.9	2738.0	141.9	224.3	301.3
Mace	167.5	125.0	7.2	12.4	21.3
<b>TOTAL</b>	<b>4018.9</b>	<b>4283.0</b>	<b>382.3</b>	<b>1497.2</b>	<b>1911.7</b>

Source: Adapted from Central Statistical Office, Ministry of Finance, St. George's

In recent years, the quantities of fresh fruits and vegetables exported from Grenada have been relatively small. For example, in 2003 (the year just prior to hurricane Ivan) only 175.1 kilograms of those commodities were exported. In 2004, 2005, and 2006, the quantities (in kilograms) exported were 101.1, 10.1, and 74.7, respectively.

Fresh fish export has been an important source of foreign exchange earnings for Grenada. The amount of revenue earned per unit has been increasing. However, the volumes exported have been on the decline. In 2000, Grenada exported approximately 1.1 million kilograms of fresh fish and earned US\$3.209 million; the following year (2001), it exported only 631.8 kilograms and earned US\$3.794 million; and in 2006 it exported 513.3 kilograms and earned US\$3.699 million.

Grenada has also been exporting relatively small volumes of a number of value added agri products such as *NUTMED* (with nutmeg oil as the main ingredient), rum and liqueurs, and preserves (from local fruits). Together, these commodities earn for Grenada approximately US\$1 million in foreign exchange.

Fish and fish products feature prominently among agri products imported into Grenada. However, as shown in the following table (Table 6), the country's agricultural import trade is dominated by meats and other livestock products. As would be expected, few (only three) primary crop commodities feature prominently in Grenada's agricultural import statistics.

**TABLE 6: Imports of Selected Agricultural Food Items, based on Value (US\$'000) – 2002 to 2006**

ITEMS	VALUE (US\$'000)				
	2002	2003	2004	2005	2006
Potatoes	591.7	631.5	531.4	686.4	715.7
Onions	209.4	224.5	163.5	184.5	218.7
Peas and Beans	234.7	263.8	256.7	321.2	276.9
Fresh and frozen pork	238.8	239.1	270.3	448.5	457.0
Pickled pork	369.5	416.0	485.7	445.1	584.7
Ham	372.0	435.5	471.9	696.4	808.5
Fresh and frozen beef	555.7	644.4	480.8	493.7	781.6
Poultry meat	4960.2	5073.3	5298.3	7330.0	6574.0
Wings of chicken	1697.5	1873.2	1576.0	2945.1	2734.8
Back and neck of chicken	559.1	458.1	501.3	456.5	517.9
Other parts of chicken	2091.6	2156.5	2549.0	2943.2	2354.6
Sausages	884.3	969.2	850.1	1116.6	1203.9
Fish and fish products	2599.6	2426.4	2512.8	2730.7	3474.8
Salt fish	1476.0	1087.8	1114.0	1228.7	725.9
Powdered milk	1816.5	1659.8	1503.1	2367.1	1503.9
Condensed milk	1311.4	1441.3	1326.7	1415.0	1580.3
Evaporated milk	408.8	499.8	496.0	432.9	667.4
Cheese	2208.1	2123.4	2235.3	2487.2	2860.7

Source: Adapted from Central Statistical Office, Ministry of Finance, St. George's.

During the 5-year period (2002-2006), the average annual value of chicken parts and poultry meat imported into Grenada has been approximately US\$11 million. In 2005, US\$13.6 million worth of chicken parts and poultry meat was imported.

### 3.5 Agricultural Health and Food Safety

The continuing threat of Avian Influenza, and managing the Black Sigatoka disease (caused by *Mycosphaerella fijiensis*) in banana and the Red Palm Mite (*Roaiella indica*) in coconut were the two major agricultural health issues confronting Grenada's

agricultural sector during 2007. However, the sector was also adversely affected by the unusually high population of rodents which caused severe damage to crops, especially cocoa, corn, and sweet potato. The West Indian Fruit Fly (*Anastrepha obliqua*) population was kept relatively low as the Ministry of Agriculture continued its monitoring programme, and initiated collaborative action with USDA (Trinidad Office) towards facilitating export of golden apple (June Plum) to the USA. (June Plum, not observed to be attacked by the fruit fly, was banned from entering the US market following the detection of the fruit fly in Grenada in early 2002.)

In terms of *food safety*, there have been concerns over farmers' tardiness in implementing Good Agricultural Practices (GAPs), and the inadequacy/lack of training programmes, legislation and monitoring capabilities to deal with the safe production and handling of food.

### **3.6 Agricultural Innovation, Science and Technology**

For more than a decade, the Grenada Ministry of Agriculture (MoA) and its supporting agencies have been advocating for the modernization of the sector through the use of science and technology. There has always been a search for, and a need to introduce, new and improved agricultural technologies. The sector's ongoing thrust towards diversification has not yet resulted in any organized introduction and establishment of new exotic fruit crop species to re-cultivate some of the lands left abandoned since the passage of hurricane Ivan in 2004. Nothing has yet materialized from the much talked about introduction and use of an improved propagation technique to facilitate re-cultivation of some of the nutmeg lands with new and improved nutmeg varieties with a shorter gestation period, and producing high yields.

Limited national research capacity and the inadequacies of the national extension service are two of the factors which adversely affected agricultural innovation, science and technology during 2007. The MoA is without a research unit, and does not engage in any form of research activities. Moreover, very few staff members have access to the Internet.

### **3.7 Sustainable Rural Development**

Very limited improvement was observed in the rural economy during 2007. Unemployment and under-employment, especially among women and youth, continued to be unacceptably high due to low levels of agricultural and other forms of economic activities. The astronomic increases in the cost of living did not help. This situation, coupled with the limited social infrastructure in rural communities, contributed significantly to the continued migration of rural folks, mainly the youth, to the city. The low income earners, the unemployed and under-employed who continued to dwell in the rural communities had to find ways to survive economically. Some became involved in subsistence farming on unsuitable (hilly) lands while others turned to activities such as fishing, hunting and, to a lesser extent, the production of charcoal by cutting and burning forest trees.

The year 2007 saw the continued implementation of the multi-million dollar IFAD/Government of Grenada funded *Grenada Rural Enterprise Project (G-REP)*. It is hopeful that this project would impact significantly on the rural communities in which it is being implemented. However, of major concern during 2007 was the dissemination of information by the local media indicating the apparent bankruptcy or near bankruptcy of some of the Non-Governmental Organizations (NGOs) which, it was envisaged, would conduct relevant follow-up activities at the termination of the G-REP in 2008. (The NGOs are actively involved in the implementation of G-REP.)

A very positive sign in the rural communities has been the development of a number of labour intensive small scale agro-industrial and agro-tourism activities, with great potential for expansion and replication. Most, if not all, of these activities have benefited from some form of government concession which must be viewed as a worthwhile State contribution to sustainable rural development.

#### **4. RESULTS OF THE IMPLEMENTATION OF THE NATIONAL TECHNICAL COOPERATION AGENDA IN GRENADA DURING 2007**

The National Technical Cooperation Agenda (NTCA) was developed in 2002, and revised annually, in consultation with key stakeholders of Grenada's agricultural sector. It includes a number of priority activities, defined by the stakeholders and in line with IICA's Strategic Priorities. Results obtained through implementation of those activities are included in this report under the following six Strategic Priorities:

- ❖ IICA's contribution to the repositioning of agriculture and rural life
- ❖ Promoting trade and competitiveness of agribusiness
- ❖ Strengthening agricultural health and food safety systems
- ❖ Promoting the sustainable management of natural resources and the environment
- ❖ Strengthening rural territories, based on the territorial approach
- ❖ Introducing technology and innovation for the modernization of agriculture and rural life

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

4.1.1 Regarding the *AGRO 2003-2015 Plan for Agriculture and Rural Life in the Americas*, the national leaders in the agricultural and rural sector made known their expectations through their participation in a survey conducted by IICA, through the assistance of Grenada's Ministerial Delegate (Mr. Daniel Lewis). The survey was conducted through a 19-page questionnaire which addressed issues relevant to the following twelve purposes of the AGRO-Matrix:

- Promoting competitive rural enterprises
- Integrating chains and strengthening their competitiveness
- Promoting an environment conducive to competitive agriculture
- Being environmentally responsible in the rural areas

- From farm to table: promoting integrated environmental management
- Participating in building an institutional environmental framework
- Quality of life in rural communities: creating know-how and opportunity
- Advancing learning and expertise in the chain
- Promoting policies to create capabilities and opportunities for the rural communities
- Strengthening public and private sector participation and coordinated actions between them in the territories
- Strengthening dialogue and commitments among actors in the chain
- Promoting rational policies and regional and hemispheric cooperation for agriculture and rural life

Information obtained through the survey was used towards “developing an information system for follow-up on and evaluating the AGRO 2003-2015 Plan and the corresponding regional and national strategies and, consequently, to the sustainable development of agriculture and rural life”.

4.1.2 IICA’s operational efficiency, transparency and accountability, at the national level, were demonstrated when it conducted its annual *Accountability Seminar* during which IICA’s national Annual Report (for 2006) and Work Plan (for 2007) were presented and



*Head Table at IICA’s Accountability Seminar: L-R (Mr. Cosmos Joseph-IICA Coordinator, Ms. Lana M<sup>f</sup> Phail-Permanent Secretary/MoA, Ms. Una May Gordon-IICA Representative in the ECS)*

discussed. This helped the agricultural sector stakeholders to gain a greater appreciation of the results of the Institute’s activities in Grenada. Those stakeholders were given the opportunity to comment on and question the results of IICA’s work in Grenada during 2006.

Twenty-eight (28) persons participated in the Accountability Seminar which also included the reading of a “Message from IICA’s Director General”. The seminar received national media coverage.

Institutions represented at the seminar included the Grenada Board of Tourism; the Biotechnology Laboratory of the MoA; the national chapter of CANROP; UNDP; La Digue Farmers Group; Grenada Bureau of Standards; Marketing and National Importing Board; Produce Chemist Laboratory of the MoA; Pest Management Unit of the MoA; Ministry of Social Development; Fisheries Division of the MoA; Ministry of Education; Agency of Reconstruction and Development; Agronomy Division of the MoA; national chapter of CABA; Extension Division of the MoA; Forestry Division of the MoA; MoA’s Ministerial Delegate; CARDI; Planning Unit of the MoA; Grenada Association of Beekeepers; Veterinary Division of the MoA; and Communications Unit of the MoA. The session was presided over by MoA’s Permanent Secretary.



*Cross-section of participants at the 2007 IICA Accountability Seminar*

## **4.2 Promoting Trade and the Competitiveness of Agribusiness**

4.2.1 Towards the further re-positioning of agriculture and rural life in Grenada, the opportunity was created for enhancing the country’s agricultural information service network by facilitating Grenada’s participation (as an observer) in the conference of the Marketing Information Organization of the Americas (MIOA), held in Ecuador. This was made possible through collaboration with IICA’s Caribbean Agribusiness Specialist (Melvin Edwards), and with logistical and financial assistance from the IICA Office in Miami. Grenada was represented at the conference by Mr. Christian Chu Fook, an IT Specialist who was responsible for establishing and maintaining the Grenada Agricultural



Information Service (GAIS) web portal. GAIS is an activity implemented jointly by the MoA and the Agency for Reconstruction and Development (ARD), with funding from Republic Bank (Grenada Limited). Its representation at the MIOA meeting was a precursor to Grenada's seeking membership in the MIOA.

4.2.2 The national Chapter of CABA attracted six (6) new members thus increasing its total membership to twenty-two (22). Of even greater significance was the Chapter's receipt of funds (part loan, part grant) from Government, through the MoA, for establishing a *Farm Labour Programme*. Based on a relevant proposal submitted by CABA, a total of EC\$92,250.00 (US\$34,421.64) was approved and made available towards the end of 2007. This amount included a grant of EC\$2,250.00 (US\$839.55) to be used for training, and a loan of EC\$90,000.00 (US\$33,582.09) for purchasing farm tools and equipment.

4.2.3 Through continued support from IICA, MoA, and the Agency for Rural Transformation (ART), the Grenada Association of Beekeepers (GAB) successfully promoted its products both locally and internationally. GAB staged its third *National*



*Grenada's Minister of Agriculture (Hon. Gregory Bowen) supports GAB's National Honey Show*

*Annual Honey Show* in August 2007, and participated in the *2007 Annual London Honey Show*, in October of the same year. At both shows, the quality of Grenada's honey exhibits was outstanding. The national show was held in the heart of Grenada's tourist belt, and was graced by the presence of the Ministers of Agriculture (Honourable Gregory Bowen) and Health (Honourable Ann Antoine). At the London Honey Show, GAB was represented by its Assistant Secretary (Ms. Kareen Greenidge) who was responsible for laying out GAB's display in London. Grenada's honey exhibits won a first prize and a third prize as well as a number of high commendations.

Grenada's honey is now prominent on the shelves of most local supermarkets, and there is growing demand for the product by local hoteliers. It is also one of the selected commodities highlighted in Grenada's National Export Strategy.

### **4.3 Strengthening Agricultural Health and Food Safety Systems**

4.3.1 Twenty-five (25) plant and animal quarantine officers (and trainees) were adequately prepared to deal with anticipated challenges at Grenada's ports of entry during the island's hosting of the 2007 Cricket World Cup matches. Their technical and inspection capabilities were enhanced through participation in a MoA-organized *Quarantine Inspectors Training Course*, supported by IICA's Regional Agricultural Health Specialist. The course had the following objectives:

- To present tools and methodologies for effective quarantine inspection
- To reinforce what was already known by veteran inspectors and to impart knowledge and inspection techniques to newer recruits
- To encourage discussion and interaction
- To make inspectors more aware of their functions and responsibilities and to appreciate the very important role they play in protecting the agriculture of their country.

Topics covered included:

- International Trade Agreements and Standard Setting Bodies
- Export and Import Certification –legislation, regulations and national policies
- Inspection Techniques
- Passenger Clearance
- Inspection Tools and Record Keeping
- Recognizing commonly intercepted pests
- Airline and Ship Inspection
- Phytosanitary and Veterinary treatments and actions
- Case Studies

4.3.2 Four selected farmers, including two greenhouse operators, were able to increase their knowledge, information and exposure with respect to *Good Agricultural Practices (GAPs)* to which they were introduced by, and for which they received technical support from IICA, MoA, and the Grenada Bureau of Standards (GDBS). Besides making



*IICA/MoA/GDBS made regular field visits in support of GAPs*

periodic advisory farm visits, technicians from these institutions provided the farmers with appropriate record keeping forms as well as documented information on relevant topics, with practical applications. During the year under review, improvements were observed in the farmers' soil conservation measures, field sanitation, use of pesticides, and farm storage facilities. The farmers also gave the undertaking to provide workers with adequate conveniences to facilitate good personal hygiene.

4.3.3 Through their participation in a 1-day Training Course on *Hazard Analysis Critical Control Point (HACCP)*, sponsored jointly by IICA and GDBS, nineteen (19) agro-processors increased their capabilities to produce safer products, thus enhancing their chances of improving the competitiveness of their respective products. They were given a good appreciation of the seven basic principles of HACCP, and provided with the pre-requisite knowledge and skills for implementing a HACCP system. Emphasis was placed on the HACCP pre-requisite programme which included, inter alia, Good Manufacturing Practices, Good Hygiene Practices, Sanitation Standard Operating Procedures, and Standard Operating Procedures. A considerable amount of effort was also directed towards procedures for auditing the HACCP System.

4.3.4 An updated draft agricultural health and food safety legislation (based on Grenada's revised Plant Protection Act of 1986) was prepared, with technical inputs from the National Agricultural Health and Food Safety (NAHFS) Committee. This bit of legislation has therefore been made more relevant, and in harmony with the relevant CARICOM and FAO legislation. New aspects of the draft revised Act deal with *Trade Facilitation* and some new definitions relative to "Surveillance", "Pest Risk Assessment", "Transparency", and a few other critical issues.

#### **4.4 Promoting the Sustainable Management of Natural Resources and the Environment**

4.4.1 For the first time ever, due to its increased effectiveness, the National Coordinating Committee of the United Nations Convention for Combating Desertification and Drought (UNCCD) was allocated a budget by the Grenada Government which, by so doing, demonstrated its commitment towards facilitating the sustainable management of Grenada's natural resources and the environment. Government made available to the Committee an approved budget of EC\$62,000.00 (US\$23,134.33). This was in addition to the UNCCD's 2007 budget of US\$10,000.00 for Grenada. Most of the budgeted funds were earmarked for providing appropriate consultancy services, awareness and capacity building, and review of relevant legislation.

#### **4.5 Strengthening Rural Communities, based on the Territorial Approach**

4.5.1 There was an improvement in the leadership skills of key members of the national chapters of the Caribbean Agri-Business Association (CABA), the Caribbean Agricultural Forum for Youth (CAFY), and the Caribbean Network of Rural Women Producers, who participated in workshop on *Leadership and Group Dynamics*.

A total of fifteen executive committee members from three constituents (CABA, CAFY and CANROP) of the Alliance for Sustainable Development of Agriculture and the Rural Milieu (*The Alliance*) participated in a 1-day workshop on *Community Group Leadership and Group Dynamics*. The workshop was facilitated by a local Human Resource Development consultant.

One of the workshop participants, the President of CABA's national chapter, subsequently demonstrated her improved leadership skills when, with her small but committed executive, organized and executed a 3-day training course in *Tree Crop Management*. The purpose of the course was to facilitate CABA's effective implementation of a project towards establishment of a *Farm Labour Programme* designed to provide supervised farm labour, on request, at reasonable cost. To this end, the executive, led by the President (Ms. Ann Williams), designed the training activity and subsequently secured the necessary support for its implementation. In effect, CABA's intention was to ensure that persons to be employed under the *Programme* were adequately trained to provide clients with efficient service in the areas of (1) Land Clearing; (2) Weed Control; (3) Drainage; and (4) Pruning. Based on the content of the training course, persons trained were also provided with the knowledge and skills necessary for maintaining and servicing small farm equipment. In inviting participants to the training course, the executive attempted to achieve some gender balance, and to focus on unemployed youths. Consideration was also given to the geographical distribution of participants. This latter aspect was intended to enhance CABA's ability to undertake activities in different parts of the island, without incurring too high a cost for transportation of employees under the programme. Of course, the decision to focus on youth was based on the desire to contribute towards the programme's long term

sustainability. The executive has agreed to organize follow-up training courses to ensure that employees under the programme are always technically equipped and highly motivated to deliver quality service to farmers, horticulturists, and backyard gardeners.

Twenty-two (22) farmers, including seven (7) women, participated in the course which



*CABA provides training in Tree Crop Management*

was sponsored by the Ministry of Agriculture (MoA). The course was officially launched by the Minister of Agriculture (Honourable Gregory Bowen), and facilitated by technical personnel from the MoA, the Grenada Cocoa Association (GCA), the Grenada Cooperative Nutmeg Association (GCNA), the Caribbean Agricultural Research and Development Institute (CARDI), the Inter-American Institute for Cooperation on Agriculture (IICA), and the local arm of a highly renowned international company – Europa Hardware (Grenada Limited) – which supplies a wide range of small farm equipment.

4.5.2 Given the relatively high level of unemployment, especially among rural women and youth, IICA has been encouraging and promoting the development of agri-businesses as a means of addressing the situation. There has therefore been an ongoing effort to enhance the technical and managerial skills and capabilities of local agri-entrepreneurs. Accordingly, the skills of twenty-four (24) agri-entrepreneurs, including sixteen (16) women, were developed, through their successful participation in an *Entrepreneurship Workshop* organized by IICA and facilitated by the National Development Foundation



*IICA continues to invest in training of local Entrepreneurs*

of Grenada. Participants were drawn from the national chapters of the Caribbean Agri-Business Association (CABA), the Caribbean Forum for Youth (CAFY), and the Caribbean Network of Rural Women Producers (CANROP). They listened to presentations on *Entrepreneurship*, and participated actively in the analysis and discussion of a number of relevant Case Studies. The significance of *Business Planning*, product differentiation, and market research and promotion was particularly highlighted during the presentations.

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

4.6.1 There was increased public awareness “on possible benefits and potential risks of biotechnology application and the importance of the safe transfer, handling and use of GMOs in agriculture”. This was realized through the National Bio-safety Advisory Authority’s implementation of a FAO-funded project titled “Strengthening the National Capacity in Biotechnology and Bio-safety – Phase 2”. Project activities included:

- Formulation, validation and eventual adoption (by Government) of a draft bio-safety bill.
- Biotechnology/Bio-safety training workshop for public officers indirectly involved in the national bio-safety system.
- GMO Risk Analysis training workshop for members of the National Bio-safety Advisory Authority.
- Development and implementation of an information/communication strategy to raise awareness of possible benefits and potential risks of biotechnology application and the importance of the safe transfer, handling and use of GMOs in agriculture.

The information/communication strategy included, among other things, production and broadcasting of relevant television documentaries, spot announcements, and radio jingles. It also included the production and distribution of posters and fact sheets.

4.6.2 The technology for processing two of Grenada's seasonally most abundant but under utilized fruits was effectively transferred. Through their participation in an IICA sponsored workshop, facilitated by the Food Technologist of the Produce Chemist Laboratory, sixteen (16) agro-processors acquired the technology for processing mangoes



*Agro-processors receive training in processing of condiments*

and golden apples into chutney, kuchela and pickles which are in good demand locally, especially among hoteliers. Some of the workshop participants have subsequently become involved in commercial production of chutney. During the workshop, much emphasis was placed on *quality control and quality assurance*.

## **5. RESULTS OF INTER-AGENCY COOPERATION**

5.1 The successful staging of the 2007 World Food Day Celebrations was due to the joint efforts of national, regional and international agriculture support agencies in Grenada. IICA was represented on the Planning Committee, and participated in activities held in the various parishes.

5.2 Grenada benefited from the implementation of the CDB/IICA/FAO Greenhouse Project through which technical support was provided to relevant stakeholders by a visiting consultant expert in Greenhouse Technology. The consultant facilitated a series of technical seminars, and conducted a number of field visits.

5.3 Key agriculture sector stakeholders in Grenada were presented with an Agri-business Training Tool which was jointly developed by CARDI and IICA, through the IICA/CARDI Agreement. The training manual comprises eight modules.

## **6. NEW OPPORTUNITIES FOR TECHNICAL COOPERATION**

6.1 There are opportunities to expand the support provided to small and medium scale agro-processors who are seeking to develop niche products for the domestic and export markets.

6.2 A significant number of young Agriculture Extension Trainees of the Ministry of Agriculture (MoA) could become worthwhile beneficiaries of IICA's technical cooperation, if the MoA so indicates and could agree on a programme for upgrading the skills and knowledge of these trainees.



## APPENDIX

### FIVE MOST IMPORTANT EVENTS ORGANIZED BY THE IICA OFFICE IN GRENADA IN 2007

<b>Official Name of the Event</b>	<b>Date Held</b>	<b>Site of the Event</b>	<b>No. of Participants</b>	<b>Place and Date of Publication of the Report of Proceedings of the Event</b>
1. Community Group Leadership Workshop	February 22 <sup>nd</sup> , 2007	Bain's Upper Level Conference Room, Grenville, St. Andrew's	15	IICA Office in Grenada March, 2007
2. Annual Accountability Seminar	May 24 <sup>th</sup> , 2007	Produce Chemist Laboratory Conference Room, Tanteen, St. George's	28	IICA Office in Grenada June, 2007
3. Entrepreneurship Workshop	May 29 <sup>th</sup> , 2007	Bain's Upper Level Conference Room, Grenville, St. Andrew's	24	IICA Office in Grenada June, 2007
4. Training Course on "Introduction to HACCP"	June 2 <sup>nd</sup> , 2007	Grenada Bureau of Standards Conference Room, St. George's	19	IICA Office in Grenada June, 2007
5. Workshop on "Production of Condiments (chutney, cuchilla, and pickles)"	October 2 <sup>nd</sup> and 3 <sup>rd</sup> , 2007	Produce Chemist Laboratory, Tanteen, St. George's	16	IICA Office in Grenada October, 2007