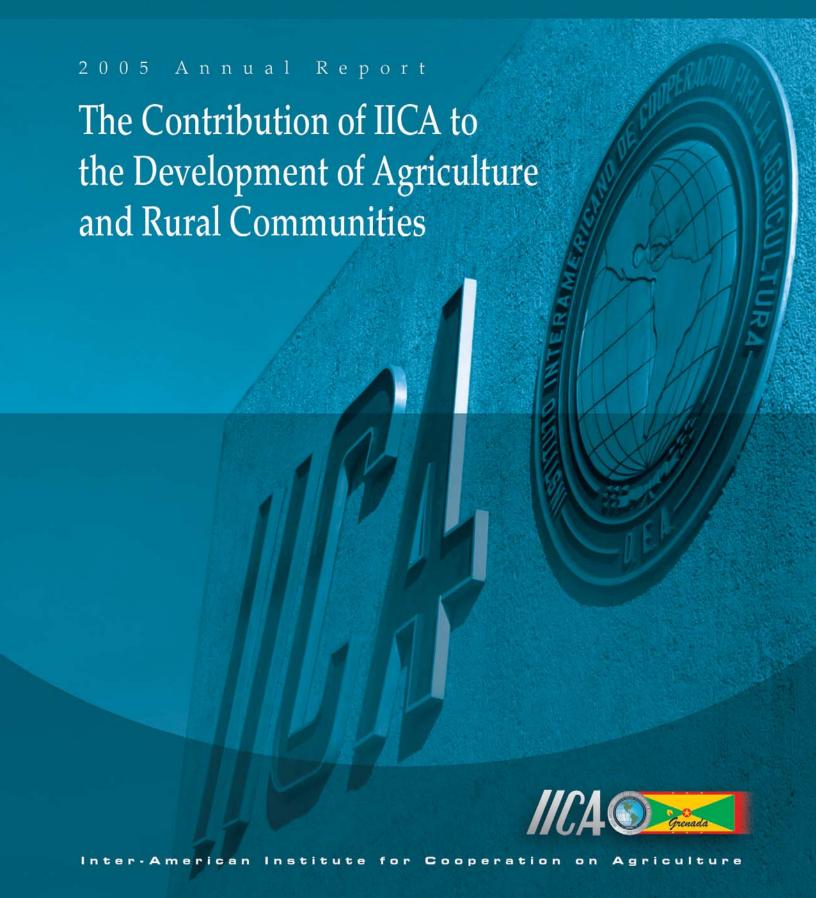
GRENADA



NATIONAL ANNUAL REPORT - 2005



IICA Office Grenada

NATIONAL ANNUAL REPORT - 2005

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

1. EXECUTIVE SUMMARY

1.1 Introduction

Operations of the Inter-American Institute for Cooperation on Agriculture (IICA) are based on a policy of transparency and accountability. Thus, in 2005, the Institute's activities in Grenada reflected a desire to efficiently utilize available resources towards addressing some of the country's agriculture sector's developmental needs which are outlined in IICA's National Technical Cooperation Agenda (NTCA) for Grenada.

The year, 2005, was a difficult one for Grenada's agriculture sector which suffered a major setback from the effects of Hurricane Emily. Crops replanted following the devastation caused by Hurricane Ivan in 2004 were almost totally destroyed.

With its limited human and financial resources, IICA sought to work closely with collaborating agencies in contributing to the agriculture sector's rebuilding process. Activities were implemented under the Institute's Strategic Areas: *Policy and Trade Negotiations; Agribusiness Development; Technology and Innovation; Agricultural Health and Food Safety; Education and Training; Sustainable Rural Development; and Information and Communication.*

1.2 The State of Agriculture and Rural Life in Grenada

Damages caused by the hurricane in 2005 presented numerous challenges to Grenada's agriculture and rural sector. However, an opportunity was presented for farmers to develop new farming systems and to re-direct some energies into producing commodities with value added potential, thus creating greater employment and wealth in the country.

1.2.1 Recent Performance in the Expanded Agricultural Sector

Based on projections from Grenada's Central Statistical Office, agriculture's contribution to Gross Domestic Product (GDP) in 2005 is expected to decline from 8.5% in 2004 to 5.8% in 2005. Generally, agricultural export earnings declined by 19.5% during the period January to September 2005, compared to the corresponding period in 2004. However, nutmeg was the only agricultural export commodity which recorded an increase (7.6%) in export earnings during that period, although export earnings of mace (the aril of the nutmeg) and processed nutmeg products declined by 72.9% and 83.1%, respectively, during that period.

Growth in Grenada's agribusiness sub-sector has been stunted, due mainly to poor planning and serious management problems. Access to funding by small and medium size enterprises has also been a major problem.

Efforts were made, through relevant stakeholders dialogue, to strengthen linkages between the agriculture and tourism sectors.

1.2.2 <u>Critical Issues in the International and National Context that Impact Agriculture</u> and Rural Life

Nationally, some of the critical issues impacting agriculture and rural life include praedial larceny, farm labour availability and efficiency, access to and utilization of appropriate technology, and the willingness of agri-entrepreneurs (including farmers) to re-invest in the sector.

Internationally, the impact of the WTO Agreements relating to agriculture is one of the most critical issues. Because of its small scale of operation and the low level of technology used, Grenada's agricultural products (fresh and processed) have not been very competitive on the international market.

1.2.3 The Status of Living Conditions in Rural Communities

Poverty in rural communities has increased significantly in 2005, due mainly to the effects of hurricanes Ivan (2004) and Emily (2005). There has been growing unemployment, especially among women and youth. Female headed households were most affected. Inadequate nutrition among rural families has been a major concern, given the drastic decline in local food production and the significant increase in prices of imported foods. Government's ongoing Rural Enterprise Project, funded by CDB, IFAD and the Grenada Government, is seeking to improve the quality of life in rural communities through implementation of community based socio-economic activities.

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 intervention, and the corresponding actions to be implemented, based on the Institute's Strategic Areas. It is the outcome of a consultation process involving the sector's major stakeholders.

1.4 Results of Technical Cooperation in 2005

Results of the Institute's technical cooperation in Grenada during 2005 are based on activities implemented, at the national level, in accordance with the agreed goals and priorities outlined in the NTCA.

1.4.1 Facilitating Competitiveness and Global Trade

- Rural women producers/traders acquired greater understanding and appreciation of the Sanitary and Phytosanitary (SPS) issues affecting agricultural trade. This was achieved through a 1-day workshop on "The Sanitary and Phytosanitary Agreement of the World Trade Organization" targeting members of Grenada Network of Rural Women Producers (GRENROP).

1.4.2 Promoting Food Safety and Agricultural Health

- Agri-entrepreneurs (farmers, beekeepers and agro-processors) have increased awareness of, and ability to apply the principles and protocols of Good Agricultural Practices (GAPs) during every stage of the agri food chain. They participated in a 1-day GAPs workshop, and were involved in follow-up field activities guided and supervised by technicians of the Ministry of Agriculture.

1.4.3 Strengthening Rural Communities

- Networking and greater lobbying power by local agri-entrepreneurs, through the formation and working of the national Chapter of the Caribbean Agribusiness Association (CABA).
- Enhanced potential for economic empowerment of GRENROP's members who, through their organization, have acquired and installed cassava processing equipment resulting from USAID/CARANA/Ministry of Agriculture funding for a Proposal prepared by GRENROP, with IICA's assistance.
- Increased income earning potential of fruit and vegetable producers, based on arrangements made with four selected hotels desirous of establishing formal supply contracts with producers. This was made possible through an initiative by the Grenada Agro Tourism Linkage Committee.

1.4.4 <u>Hemispheric Integration</u>

- Enhanced agroprocessing capabilities by GRENROP, the national chapter of Caribbean Network of Rural Women Producers CANROP, through technical support provided by the Guyana chapter of CANROP. This was made possible through OXFAM's funding for a Proposal prepared by the Grenada Chapter of CANROP, with IICA's assistance.
- Increased agriculture stakeholders' awareness of regional efforts to address constraints to the region's agricultural development. This was effected through the convening of a 1-day seminar on the "Jagdeo Initiative" which is a Caribbean Heads of State/Heads of Government commitment to work towards the sustainable development of agriculture in the member states of the region.

1.4.5 Developing Human Capital

- Improved project management skills by selected public and private sector personnel who participated in a 4-day Project Planning and Management workshop, organized and conducted by IICA.
- Nursery operators' management skills enhanced through participation in a 5-day seminar/workshop, organized jointly by GRENROP and IICA with funding from FAO.
- Improved entrepreneurship skills by members of GRENROP, through participation in a 1-day "Entrepreneurship" workshop organized and funded by IICA and facilitated by the National Development Foundation of Grenada (NDFG).
- Increased capability of GRENROP members to become involved in commercial production of processed fruits. This was realized through members' participation in a 2-

day "Agro-Processing Workshop" organized jointly by GRENROP, Ministry of Agriculture and IICA, with funding from OXFAM.

- Improved Information Communication Technology (ICT) skills by selected members of GRENROP, GAFY and GAB, through participation in a 2-day ICT training course organized and funded by IICA.

1.4.6 Environmental Management

- Increased farmers' awareness of Good Agricultural Practices (GAPs) towards better soil management practices and more appropriate uses of pesticides in crop production activities. This was facilitated through relevant activities conducted by the Ministry of Agriculture and IICA.

1.4.7 Institutional Modernization

- Official recognition of the need to implement actions aimed at modernizing public and private agriculture sector institutions. During IICA's meetings with senior agricultural officials, references have been made to relevant studies undertaken by agriculture support agencies (IICA and FAO).

1.4.8 Other Activities

- Improved institutional image through effective collaboration with national/sectoral institutions (Grenada Food and Nutrition Council, Agency for Reconstruction and Development, Grenada Bureau of Standards, National Development Foundation of Grenada, Ministry of Health and the Environment, National Biosafety Advisory Authority, Ministry of Trade, and Marketing and National Importing Board) as well as the national offices of CARDI and FAO.

2. INTRODUCTION

In 2002, through a consultative process with key agriculture sector stakeholders, IICA prepared a 5-year National Technical Cooperation Agenda (NTCA) to guide its operations in Grenada during the period 2002-2006. The NTCA was revised annually to ensure its continued relevance to the sector's changing priority technical cooperation needs. It was used as the basis for preparing IICA's Annual Work Plan for Grenada. Key stakeholders were provided with copies of the NTCA and the Work Plan. The level of Work Plan implementation was reflected in the Institute's Annual Reports for Grenada, which were distributed to and subsequently discussed with stakeholders.

The 2004 Annual Report and the 2005 Work Plan were discussed with stakeholders within the first quarter of 2005 at a meeting convened by IICA and chaired by the Permanent Secretary, Ministry of Agriculture. At that meeting, participants suggested, among other things, that

 The Ministry of Agriculture (MOA) should consider formulating a "Central Action Plan" to which IICA and other agriculture sector support agencies should contribute.

- IICA's work in Grenada should concentrate more on activities aimed at adding value to selected priority agricultural commodities.
- IICA should intensify its activities in the area of Agribusiness Management.
- IICA remove from its Work Plan activities related to Agricultural Trade Policy and the Multilateral Trading System since these areas were already being addressed under two separate externally funded projects.

In implementing its 2005 Work Plan, IICA took cognizance of relevant suggestions provided by key stakeholders. However, activities undertaken were based on priority agriculture sector needs which were identified in the NTCA, and coincided with the Institute's seven Strategic Areas of action, namely: Policy and Trade Negotiations; Agribusiness Development; Technology and Innovation; Agricultural Health and Food Safety; Education and Training; Sustainable Rural Development; and Information and Communication. Emphasis was placed on working closely with other agriculture support agencies towards empowering rural producers, especially women. As a consequence, IICA's limited resources were complemented by those of collaborating agencies resulting in significant benefits to recipients of the Institute's technical cooperation.

Much of IICA's assistance to Grenada's agriculture sector in 2005 was influenced by the need to assist in the restoration of livelihoods among members of IICA-assisted groups, following the destruction caused by Hurricanes Ivan and Emily in September 2004 and July 2005, respectively. Seventy to ninety per cent (70%-90%) of crops was destroyed by Hurricane Ivan. Government invested approximately fourteen million East Caribbean dollars (EC\$14mn.) towards clearing lands and replanting crops. However, the majority of crops planted were blown down by Hurricane Emily. Crop producers were very despondent; many had lost their source of livelihood and were willing to consider becoming engaged in agri-enterprises less vulnerable to the effects of hurricanes. This created an opportunity for IICA and other agriculture support agencies to rise to the occasion and help to guide the sector's rebuilding process. IICA's focus was on the "strengthening of rural communities" and "developing human capital". To this end, there was close collaboration with CARDI and FAO, and ad hoc alliances were formed with agencies such as OXFAM, USAID and the Ministry of Agriculture which provided financial support to rural groups to facilitate implementation of activities under IICA's Work Plan.

3. THE STATE OF AGRICULTURE AND RURAL LIFE IN GRENADA IN 2005

In recent years, the agriculture sector's contribution to Gross Domestic Product (GDP) has been on the decline. Its continued poor performance in 2005 was accentuated by the effects of Hurricane Emily which devastated crops, livestock and agricultural infrastructure. Notwithstanding, the sector could benefit tremendously in the long run, provided advantage is taken of the opportunity to develop new and more appropriate farming systems and direct some agriculture rehabilitation resources into expanding the sector's value added components.

3.1 Recent Performance in the Expanded Agricultural Sector

Information provided by Grenada's Central Statistical Office indicate that, at factor cost in current prices, the agriculture sector is projected to contribute about US\$21.7million (or 5.8%) to GDP in 2005, compared to a contribution of US\$30.3million (or 8.5%) in 2004. As shown in the following table (Table 1), the crops sub-sector has been the main contributor:

Table 1 – Agriculture Sector Contribution, by sub-sector, to GDP (2001-2005)

SECTOR/SUB-SECTOR	CONTRIBUTION (US\$) TO GDP				
	2001	2002	2003	2004*	2005**
Agriculture	27.0	34.6	35.2	30.3	21.7
Crops	17.2	22.6	21.6	18.9	9.8
Livestock	1.9	1.9	2.0	1.8	1.7
Forestry	1.1	1.2	1.2	0.9	0.9
Fishing	6.8	8.9	10.4	8.7	9.3

^{*}Preliminary

Source: Adapted from Central Statistical Office, Ministry of Finance and Economic Affairs, Grenada.

Despite government's ongoing efforts toward consolidating Grenada's agricultural diversification process, the traditional export crops (banana, cocoa, nutmeg and mace) together account for 70-80 per cent of total agricultural export earnings annually.

Primary agricultural exports are estimated to have declined in value by 19.5 per cent during the first nine months of 2005, compared to the same period in 2004. Except for nutmeg and fish, all other agricultural export commodities showed significant drop in export earnings. This decline could be indicative of a continuing trend which was evident during the previous 3-year period (2002-2004) when agricultural exports declined by 10.3 per cent and 6.5 per cent in 2003 and 2004, respectively (Table 2).

^{**}Projected

Table 2 – Agriculture Export Earnings (US\$'000), by Commodities (2002-2005)

AGRICULTURAL EXPORT COMMODITIES	2002	2003	2004 (EST.)	JAN- SEPT, 2004	JAN- SEPT, 2005 (EST.)	% CHANGE		
	(1)	(2)	(3)	(4)	(5)	(2)/(1)	(3)/(2)	(5)/(4)
Agri. Commodities	19,251.8	17,274.6	16,144.4	12,252.1	9865.9	-10.3	-6.5	-19.5
Bananas	196.7	174.7	217.3	217.3	0.0	-11.2	24.3	-100.0
Cocoa	1,449.5	1,237.6	2,052.9	2,052.9	75.0	-14.6	65.9	-96.3
Nutmeg	12,530.7	10,053.9	9,847.5	6,673.5	7,181.2	-19.8	-2.1	7.6
Mace	1,137.6	1,176.6	855.6	607.5	164.9	3.4	-27.3	-72.9
Fresh Fruits and Vegetables	115.2	139.8	78.6	78.6	10.6	21.3	-43.8	-86.5
Fish	3,717.4	4,372.7	3,057.4	2,595.7	2,420.2	17.6	-30.1	-6.8
Other	104.5	119.3	35.1	26.6	13.9	14.1	-70.5	-47.5

Source: Adapted from Central Statistical Office, Ministry of Finance and Economic Affairs, Grenada.

The increase in export earnings of nutmeg during the first nine months of 2005 was due to increased quantities exported and prices received on the international market. This is reflected in table 3 which shows the quantities of nutmeg and mace exported, and average prices received during two successive crop years (2003/2004 and 2004/2005). Availability of increased quantities for export was made possible by an unusually large stock of nutmeg maintained in storage by the nutmeg association during the year immediately preceding the hurricane in September 2004. However, mace export was reduced by fifty-one per cent (51%) due to drastically reduced production after, and the relatively small quantity of the commodity held in storage before, the hurricane. World market prices for both nutmeg and mace increased significantly after the hurricane, and were maintained throughout 2005.

Table 3: Nutmeg and Mace Exports (Quantities and Prices)
- 2003/2004 and 2004/2005 -

COMMODITY	JULY 2003-JUNE 2004		JULY 2004-JUNE 2005		% CHANGE IN	
	QUANTITY	AVE.PRICES	QUANTITY AVE.PRICES		QUANTITY	PRICE
	('000 KG)	(US\$/KG)	('000 KG)	(US\$/KG)		
Nutmeg	1890.88	4.53	1919.55	5.68	1.5	25.4
Mace	177.69	4.94	87.11	6.03	-51.0	22.1

Source: Adapted from GCNA Financial Statements and Trading Summary for the Year ended 30th June, 2005.

Information obtained from the Central Statistical Office (CSO) indicate that the export value of nutmeg products, comprising mainly nutmeg oil, declined by 83.1% during the first nine months of 2005, compared to the same period in 2004.

There was a drastic reduction in nutmeg and mace production following the passage of Hurricane Ivan (September 2004) which destroyed approximately eighty per cent (80%) of Grenada's nutmeg plantations. The significant drop in nutmeg and mace production, as a consequence of the hurricane, is indicated in the following table (Table 4):

Table 4 – Nutmeg and Mace Production (July 2003 – June 2005)*

COMMODITY	PRODUCTIO	% CHANGE	
	July 1, 2003-June 30, 2004 July 1, 2004-June 30,		
	2005		
Nutmeg	2923.78	808.83	-72.3
Mace	129.13	35.17	-72.8

^{*}Corresponds to the financial year of the Grenada Cooperative Nutmeg Association (GCNA)

Source: Adapted from GCNA Financial Statements and Summary for the Year ended 30th June 2005.

Notwithstanding the devastation of nutmeg fields in September 2004 and the consequential low level of nutmeg and mace production thereafter, Grenada's nutmeg industry earned US\$11.69 million in export revenue during its last financial year (July 1, 2004 – June 30, 2005). These earnings were made possible through export of nutmeg (US\$10.92 million), mace (US\$0.52 million), and nutmeg oil (US\$0.25 million).

With respect to cocoa, there was negligible stock held in storage at the time of the hurricane and, as stated in the *GRENADA COCOA ASSOCIATION 2004 ANNUAL REPORT*, "...the ravaging effects of Hurricane Ivan not only nullified cocoa production and sales, the industry also suffered a 60% loss of tree stock, which will have implications on future income." During its last financial year (October 1, 2004 – September 30, 2005), Grenada's cocoa industry performed poorly, relative to the previous financial year. This is illustrated in table 5.

Table 5: PERFORMANCE OF GRENADA's COCOA INDUSTRY (October 2003 – September 2005)

YEAR	PRODUCTION (000' KG)	EXPORT ('000 KG)	REVENUE (US\$Mn)
2003/2004	829.92	796.71	2.062
2004/2005	50.73	26.94	0.075

Source: Adapted from *GRENADA COCOA ASSOCIATION 2004 ANNUAL REPORT*, and verbal information received from the Association's Office Manager.

According to data provided in the table 5, in 2004/2005, cocoa production, export, and export revenue declined by 93.9%, 96.6%, and 96.4%, respectively. During 2005, the Grenada Cocoa Association (GCA) expended much effort towards rehabilitating the industry: New plantlets were produced for distribution; 6,000 bags fertilizer were obtained and distributed (through FAO assistance); farmers were assisted with land

clearing activities, through financial support provided separately by the Grenada Government, through its Agriculture Emergency Revitalization Programme (AERP), and the United States Agency for International Development (USAID), through its Grenada Business and Agriculture Revitalization Project; and discussions were held to explore possibilities of establishing joint venture relationships with two overseas companies towards facilitating the diversification of the industry into the manufacturing of value added products.

After being totally destroyed by Hurricane Ivan (category 5) in September 2004, the banana industry was given high priority during implementation of Government's US\$5.2 million AERP. This was so mainly because banana has been considered a staple crop, especially in rural communities. However, banana plots established soon after the hurricane were once more devastated by another hurricane (Emily – category 1) which struck Grenada in July, 2005. Nonetheless, during the latter months of 2005, banana tissue culture plantlets were imported and made available to interested farmers. Fertilizers were also provided by Government, and many hectares of banana fields were established. Banana export in 2005 was nil. In fact, large quantities of green bananas, required for local consumption, were imported from St. Vincent throughout 2005.

Much attention was given to the cultivation of fruit crops (especially melons and pineapples) and a wide range of vegetable crops during 2005. High quality planting materials were made available to interested farmers through projects implemented locally by agencies such as USAID/GBAR, OXFAM (a British based international humanitarian development and Non-Governmental organization), and FAO. Land clearing, early weed control, and fertilizers were made available under activities of OXFAM, FAO, and the Government-funded AERP. Hot pepper production, for export and processing, was given special attention by the Ministry of Agriculture. This activity was supported by CARDI, Grenada Marketing and National Importing Board (GMNIB), and OXFAM. (IICA was also associated with this initiative, and lobbied strongly for more vertical integration of the hot pepper industry if sustainability is to be achieved.)

By the end of 2005, there was an abundance of locally produced fresh fruits (melons) and vegetables on the domestic market. Also, the GMNIB had resumed its export of hot peppers, and local hot pepper processors were able to access needed raw materials locally. Locally produced root crops commodities (yams, sweet potato, cassava, and dasheen) were available. Fruit tree crops (for example, citrus, mango, golden apple and avocado), damaged (but not destroyed) by the hurricane, were rehabilitated and the related fruits were in evidence at the municipal markets and supermarkets.

The livestock sub-sector, especially the poultry and pig industries, made significant progress during 2005. Both industries benefited from material assistance provided by IICA towards the end of 2004, and were further assisted in 2005 by the Ministry of Agriculture, USAID/GBAR, FAO and OXFAM. By the end of 2005, the domestic market was over-supplied with locally produced eggs, and significant amounts of locally produced pork and poultry meat were available.

Agriculture sector stakeholders benefited from a wide range of training activities conducted during 2005. Emphasis was placed on developing skills in *Agri-Business Management* and *Agro-Processing*. Support for such training was provided by the Ministry of Agriculture and the various agriculture support agencies (including local NGOs) operating in Grenada.

Many small and micro agro-processing cottage industries were initiated during 2005. Some were short-lived; others failed to develop; but a few have survived. The main problem was poor planning, and inadequate entrepreneurship skills and management capabilities. For the few medium/large agro industries, 2005 was a period of recovery from the significant damages caused by Hurricane Ivan in September, 2004. There was also the problem of severe shortage of locally produced raw materials, and utilization of available development financing had to be deferred pending completion of plant renovation activities and replacement of damaged equipment.

Some of the newly established cottage industries have been focusing on the processing of hot pepper and culinary herbs (green seasoning) for the domestic market. There was also an initiative aimed at modernizing the processing of cassava.

Access to financing was a major problem encountered in 2005, especially by the medium/large agro-processing enterprises. Repayment periods on loans for expansion/development were relatively short, and interest rates charged were almost prohibitive. The small and micro entrepreneurs were able to access limited amounts of funds from a government facility but, given their lack of organization, procurement of needed inputs (especially packaging materials) was difficult and expensive. There was also a marketing problem, due mainly to inadequate promotional activities, and the uncompetitive nature of some of the value added commodities offered to consumers.

During 2005, there were ongoing efforts to create stronger linkages between the agricultural and tourism sectors. Towards the end of that year, there were strong indications of an unprecedented interest by the major hotels to purchase locally produced fresh and processed fruits and vegetables. There was also interest in exposing tourists to a wide range of local foods through participation in "Food Festivals" to be organized in rural communities, with active participation by community members. The Agro-tourism Linkage Committee, co-chaired by the Grenada Board of Tourism and the IICA, was very active in developing a framework to facilitate the smooth organization and implementation of the various activities envisaged.

3.2 Critical Issues in the International and National Context that Impact Agriculture and Rural Life

Like most other East Caribbean countries, Grenada has had to confront a number of critical issues affecting its agriculture and rural life. Because of the World Trade Organization's (WTO's) rulings against agricultural trade preferences and the granting of subsidies to farmers, Grenada's agricultural exports (especially bananas) have lost some of their competitive advantages on the international market. The situation worsened in 2005 due to significant increases in oil prices and the consequential skyrocketing of agricultural input prices. Farmers' reluctance to invest in agricultural

production following hurricanes Ivan an Emily was therefore not very surprising. There was a decline in agricultural production and productivity. Most of the able-bodied men in rural communities, who previously worked in the agriculture sector, have since found employment in other fields such as construction, tourism and security service. Many of the female agricultural workers have become either unemployed or under-employed. These changes in the rural communities have resulted in a number of concerns being raised: Household food security has become a thing of the past; and household incomes have become insufficient to meet the increased costs of health care, imported food, transportation, and other necessities. There have also been increased social problems, especially among the rural youths who, like the rural women, have experienced increased levels of unemployment.

In 2005, despite the high level of rural unemployment, there was, paradoxically, a scarcity of farm labour. Most youths who were unable to find jobs in the construction, tourism or security fields refused to work on the farm since they considered such work as being too laborious and unrewarding. Really, the issue was related to the limited use of modern technology in agricultural production. Ploughing (tractor) service was not readily available and, when available, its use was restricted due to the difficult terrain. Repeated calls (and promises) to introduce/re-introduce small, more appropriate ploughing equipment (power tillers) were apparently not heeded. However, a significant development in 2005 was the decision to facilitate the acquisition and installation of irrigation facilities, and to import a small number of greenhouses to facilitate high quality vegetable production on a consistent basis. There was also improvement in the local availability of quality planting materials and other production inputs.

The lack of incentives and programmes to encourage rural youths to get involved in agriculture and remain in rural communities has been a major national issue. Also, the high incidence of praedial larceny was considered a definite deterrent to youth involvement in the sector; and the low levels of technology used in farming made the sector physically and financially unattractive to young people.

3.3 The Status of Living Conditions in Rural Communities

Destruction of agriculture, the mainstay of the rural economy, by two recent hurricanes resulted in rural livelihoods being severely affected. Many rural households which depended on agriculture were forced to devise alternative means of survival. This meant a temporary neglect of farms in order to earn off-farm income to maintain a reasonable standard of living in the respective households. There were also implications for household nutrition since food from the farm was no longer available and, given the increased cost of living during 2005, earned incomes were inadequate to meet all household needs.

Like agriculture, the housing stock throughout Grenada was severely (approximately 90%) damaged. Only about 20% of houses were insured against hurricane damage. This meant that most householders whose houses were damaged had to find the money to effect necessary repairs to their houses. Many rural householders found it difficult or impossible to obtain the needed funds and so had to tolerate leaking roofs (or

no roofs at all) for the greater part of 2005. They were also without electricity and telephone services during that period.

A recent (2005) national survey, conducted by the Central Statistics Office of Grenada's Ministry of Finance and Economic Affairs, indicated that national unemployment was 18.8%. It also indicated that unemployment rates among youth and women were 32.9% and 25.5%, respectively. The survey report also showed that the poverty level stood at 32%, and that 47% of the country's households were headed by females while "more than 20% of female-headed households in rural areas are considered poor".

Selected rural communities (the poorest of the poor) began receiving developmental assistance in 2005, through implementation of the Grenada Rural Enterprise Project (G-REP) which sought, in a sustainable manner, to improve the living conditions in those communities. Funding for G-REP was provided by the International Fund for Agricultural Development (IFAD), the Caribbean Development Bank (CDB), and the Grenada Government. Project implementation has been facilitated by designated Non-Governmental Organizations (NGOs).

4. SUMMARY OF THE NATIONAL AGENDA

IICA's 5-year (2002-2006) National Technical Cooperation Agenda (NTCA) in support of Grenada's agriculture sector was developed in consultation with the sector's key stakeholders. The objective was to satisfy the Institute's desire to be more accountable. Accordingly, the NTCA was revised annually, following further consultations, and became the basis for preparing IICA's Annual Work Plan for Grenada.

In developing the NTCA, IICA gave due consideration to the agriculture sector priorities which were outlined by the various stakeholders during the consultation. Generally, the stakeholders had emphasized the need to modernize the sector, and to ensure food security and sustainable agricultural and rural development. The NTCA therefore includes the agriculture sector's key priority issues requiring IICA's intervention. Also included are the actions to be implemented by IICA to assist in addressing those issues which are related to the Institute's *Strategic Areas: Technology and Innovation; Agricultural Health and Food Safety; Sustainable Rural Development; Information and Communication; Education and Training; Trade Policies and Negotiations; and Agribusiness Development.*

Actions/activities to be implemented by IICA annually, under each Strategic Area, were outlined in the NTCA, in the form of a matrix. Also included in the NTCA were statements indicating the potential complementary roles which relevant international agencies can play towards contributing to the successful implementation of the National Agenda.

Attached to the NTCA are two important annexes. The first annex identifies the strategic actions, beneficiaries, and possible alliances relative to each of IICA's

Strategic Areas. The second annex outlines a 5-year *Strategic Action Plan*, relative to the NTCA.

5. RESULTS OF TECHNICAL COOPERATION IN 2005

Technical cooperation activities conducted in 2005 were based on the agreed goals and priorities outlined in the NTCA. Although these programmed activities were based on IICA's Strategic Areas, they were also designed to respond to the agricultural mandates of the Third Summit of the Americas as well as the Bavaro Declaration. The results obtained from implementation of the programmed activities are being reported under seven (7) headings, consistent with the agricultural mandates...and the Bavaro Declaration. Non-programmed activities are reported separately.

5.1 Facilitating Competitiveness and Global Trade

Through participation in a 1-day seminar on *The Sanitary and Phyto-sanitary (SPS)* Agreement of the World Trade Organization (WTO), twenty (20) rural women producers/traders acquired a greater understanding and appreciation of the plant and animal (including human) health issues which affect agricultural trade. The seminar was organized by IICA and facilitated by Grenada's participant at the WTO/SPS meetings held in Geneva, Switzerland. Participants were members of the Grenada Network of Rural Women Producers (GRENROP). Most were involved in vegetable and herbs production and marketing, but forty-five per cent (45%) were engaged in small-scale agro-processing activities.

At the seminar, participants were provided with information on the principles and objectives of the WTO/SPS Agreement. They were also made aware of the SPS issues affecting agricultural trade, and the rationale for introducing the WTO/SPS measures. The rules governing international trade were also outlined and explained. Information was also provided in relation to the three international standards setting bodies – International Plant Protection Convention (IPPC), Codex Alimentarius Commission, and International Office of Epizootics (OIE) - and their respective roles in facilitating international trade. There were lively discussions on problems faced by developing countries in implementing the SPS Agreement.

The WTO/SPS Agreement was explained in detail; issues related to *Trade Liberalization* were discussed; and much attention was given to the following aspects of the SPS issues affecting agricultural trade:

- Food Safety, with emphasis on *Bioterrorism Legislation* and its application; the need to implement Hazard Analysis Critical Control Point (HACCP) procedures and establish and monitor Minimum Residue Levels (MRLs) for pesticides and other chemicals was also emphasized as was the need to monitor and control the use of food additives. Reference was made to the significance of high levels of aflatoxins in crops such as nutmegs and corn.
- Animal Health, stressing the implications of diseases such as *E. coli* in poultry meat, "mad cow" disease in beef, and avian influenza in birds; the possible

- adverse human health effects related to the indiscriminate use of growth hormones in livestock production was also stressed.
- Plant Health, highlighting the trade implications of plant pests of quarantine significance. Reference was made to plant pests such as the West Indian Fruit Fly, the Mango Seed Weevil, and the Pink Hibiscus Mealy Bug all of which adversely affected Grenada's agricultural exports and have brought economic hardship to many local farmers and fresh produce exporters.

5.2 Promoting Food Safety and Agricultural Health

Twenty-two (22) agri-entrepreneurs became more aware of, and increased their capability to apply the principles and protocols of Good Agricultural Practices (GAPs) and Good Manufacturing Practices (GMPs). They comprised twelve (12) vegetable producers, eight (8) agro-processors, one (1) poultry producer, and one (1) beekeeper. Most (16) were members of Grenada Network of Rural Women Producers (GRENROP); five (5) were members of Grenada Agricultural Forum for Youth (GAFY); and one (1), a beekeeper, was member of Grenada Association of Beekeepers (GAB). All were participants in a 1-day workshop on Good Agricultural Practices (GAPs), organized by IICA and conducted, on April 28, 2005, by specially trained officers of Grenada Bureau of Standards (GDBS) and Grenada's Ministry of Agriculture (MoA).

The workshop covered a wide range of topics related to GAPs. These topics included:

- Significance of GAPs in relation to food safety and the food trade
- Unsafe foods and their effects on human health
- Economic impact of unsafe food commodities which could be rejected or confiscated, and could result in the lack of consumer confidence and in the loss of market share
- Safety hazards with respect to fresh produce, relative to pre-production, production, harvesting and post-harvest activities
- The three main types of hazards (biological, chemical and physical)
- Risks associated with the use of fertilizers and water in crop production
- Precautions to be taken in applying organic matter
- Hazards associated with animals and pests
- Pesticides use and misuse
- Physical, cultural, biological, climatic, and chemical methods of controlling crop pests
- Integrated Pest Management (IPM) programmes
- Effects and consequences of using workers whose personal health and hygiene are questionable
- Basic hygiene practices
- The importance of record keeping in facilitating GAPs, and the types of records that need to be kept

Towards the end of the workshop, participants expressed interest in becoming involved in activities, facilitated by the Pest Management Unit (PMU) of the Ministry of

Agriculture (MoA), towards having their respective enterprises GAPs certified. Relevant follow-up activities were undertaken with two participants involved in vegetable production. However, these activities were disrupted in July by the passage of Hurricane Emily which caused significant damage to Grenada's agriculture.

5.3 Strengthening Rural Communities

Responding to the need to strengthen and empower rural communities, IICA collaborated with some key agriculture sector stakeholders to facilitate the organization of local agribusiness entrepreneurs, and the development of rural women producers.

5.3.1 Networking potential and the lobbying power of agri-entrepreneurs were greatly enhanced through the formation of the national chapter of the Caribbean Agri-Business Association (CABA). The Grenada chapter of CABA (CABA Grenada) was officially launched in December 2005. Prior to the launching, activities were undertaken as a build up to, and in preparation for the occasion. These activities included the sensitization of potential CABA members, and the convening of meetings and planning sessions. They were spearheaded by the former Marketing Manager of Grenada Marketing and National Importing Board (GMNIB), with support from the Coordinator of IICA Office in Grenada.

Initially, sensitization sessions were conducted jointly by the local IICA Coordinator and the former Marketing Manager of the GMNIB (Ms. Lerona Lewis) who attended a regional CABA meeting in 2004 on behalf of Grenada's sole financial CABA member, the GMNIB. At one of those sessions, a presentation was delivered by the Agribusiness Specialist from the IICA Office in Trinidad and Tobago. The presentation dealt with issues related to CABA's history, mission, vision, and objectives. Potential CABA members were also made aware of benefits to be derived from being members of CABA. The strategic positioning of CABA, as a member of the Alliance for the Sustainable Development of Agriculture and the Rural Milieu, was emphasized. At another session, a successful local entrepreneur and executive member of the Grenada Enterprise Alliance (GEA) addressed potential CABA members on the need for local agri-entrepreneurs to become organized, and the GEA's interest in establishing links with CABA Grenada. (GEA, with access to approximately US\$7.4 million funding, has indicated interest in providing equity financing for successful CABA enterprises.)

Many meetings and planning sessions were conducted prior to the official launching of CABA Grenada. They were attended by a number of individual agri-entrepreneurs as well as representatives of the following institutions/companies: Grenada Marketing and National Importing Board (GMNIB), Grenada Minor Spices Cooperative Marketing Society Limited, Grenada Association of Poultry Producers (GAPP), Caribbean Agro Industries (Limited), Noelville Limited (a small agro-industrial enterprise), WAPCO Limited (a crop production enterprise), De La Grenade Industries Limited, Grenada Association of Beekeepers, and Coco Farm Limited. Unsuccessful attempts were made to attract representation from Grenada Cocoa Association (GCA) and Grenada Cooperative Nutmeg Association (GCNA). Other potential CABA members were identified but not yet contacted. These include the following: La Sagesse Farms Limited, Grenada Sugar (Rum) Factory, Westerhall Estate Limited, River Antoine Estate Limited.

Dunfermline Rum Distillery, Grenada Chocolate Company Limited, Grenada Rice Mills, Grenada Breweries Limited, W & W Spices Limited, Grenada Horticulture Society, and agribusiness inputs suppliers.

As a result of the many meetings and planning sessions held, CABA Grenada formulated its By-Laws, based on relevant documents received from the Trinidad and Tobago (T&T) and St. Vincent and the Grenadines (SVG) chapters of CABA. It also elected its first executive committee; initiated the process to have CABA Grenada legally registered; and successfully organized a function to facilitate its official launching at which powerful addresses were delivered by the President of CABA Grenada, IICA's Representative for the Eastern Caribbean States, and Grenada's Minister of Agriculture, Lands, Forestry, Fisheries, Public Utilities, and Energy. (The function was sponsored jointly by IICA and Caribbean Agro Industries Limited, and was attended by a cross section of public and private sector officials.)



At podium: Agriculture Minister (Hon. Gregory Bowen) and IICA Representative in the ECS (Mrs Una May Gordon) deliver addresses at the Launching Ceremony of CABA Grenada. (Below: Group photo of participants at the launch)

5.3.2 With the assistance of IICA, the Grenada Ministry of Agriculture, and the USAID, forty-five (45) rural women producers, members of Grenada Network of Rural Women Producers (GRENROP), have increased their potential to improve their living standards, through GRENROP's purchase and installation of cassava processing equipment. GRENROP could now look forward to establishing a vertically integrated cassava enterprise, with some members becoming involved in raw material production while others concentrate on the processing and marketing aspects, with all expected to benefit equally from the net proceeds of the enterprise activities. GRENROP also plans to provide a cassava grating service to small scale cassava processors whose current operations are manual in nature, and therefore very time consuming.





Display of some of the cassava processing equipment received

GRENROP members practise at making cassava by-products

In March 2005, GRENROP requested financial assistance from CARANA Corporation, through the United States Agency for International Development (USAID) Grenada Business and Agriculture Revitalization (GBAR) Programme, to purchase cassava processing equipment. The request was approved in May, and a grant of US\$6792.00 (subsequently amended to US\$7407.00) was made available to GRENROP which, according to the USAID/GRENROP Agreement, was expected to "contribute goods and services valued at approximately US\$4259.00 ...", in a cost-sharing arrangement. GRENROP's share of the cost included import duty and tax which were waived by Government. Notwithstanding, GRENROP was still unable to meet the full amount of its contribution and therefore, through a written proposal, appealed to the Government of Grenada, through the Ministry of Agriculture (MoA), for financial assistance to help meet the full cost of the equipment. The requested funds (EC\$4076.02, equivalent to US\$1509.64), were approved by government, and made available through the MoA's Food Security Programme. GRENROP's direct monetary

contribution towards procuring the cassava processing equipment was approximately US\$100.00.

The equipment, supplied by Caribbean Industrial Research Institute (CARIRI), included the following:

- One (1) electrical multipurpose grater, with a capacity of 200lb/hr
- One (1) hydraulic food press, with a capacity of 100lb/hr
- One (1) cassava bread cooker
- Two (2) 26" baking stones, with 24" baking ring
- Two 24" baking stones, with 22" baking ring
- Two (2) 22" baking stones, with 20" baking ring
- Three (3) 7" baking rings
- One stove and stove top

The total cost of the above equipment was US\$8050.00, with the cost distributed as follows: grater – US\$6000.00; food press – US\$1000.00; cooker – US\$300.00; baking stones and rings – US\$750.00. Other related costs included: packaging and handling for shipping (US\$280.00), sea freight (US\$250.00), landing charge (US\$40.00), port charge (US\$174.44), brokerage and handling (US\$185.19), and trucking (US\$37.04).

The imported cassava equipment was stored (temporarily) at the Produce Chemist Laboratory. Its installation was supervised by CARIRI's Facilities Maintenance Supervisor who also conducted a hands-on "Operation and Maintenance" training session for selected GRENROP members (and a male member of the Grenada Agricultural Forum for Youth) designated to operate the equipment.

5.3.3 Through an initiative of the local Agro Tourism Linkage Committee, the income earning potential of fruit and vegetable producers has been enhanced, based on discussions held with representatives of four (4) local hotels, who are interested in establishing long term contractual arrangements with a core group of farmers for the supply of specified quantities of selected fresh produce commodities. The hotels have indicated the commodities in which they are interested; and the MoA has submitted a list of fruit and vegetable producers, and the crops they produce. Some of the farmers were already supplying the hotels but, according to hotel sources, supplies have been generally inadequate and inconsistent, especially during peak demand time.

5.4 Hemispheric Integration

Efforts were made to promote and facilitate Grenada's agricultural and rural development by seeking to strengthen existing regional networks and creating a greater awareness of current initiatives aimed at addressing key constraints affecting the local and regional agribusiness sector.

5.4.1 Through active support from the Caribbean Network of Rural Women Producers (CANROP) and the Produce Chemist Laboratory (PCL) of the Ministry of Agriculture (MoA), twenty-two (22) rural women producers acquired the capability to process cassava tubers into thirteen (13) different value-added products. The women

are members of the Grenada Network of Rural Women Producers (GRENROP), the national chapter of CANROP.

Having recognized the need for diversifying their individual and collective production base, GRENROP members sought and obtained IICA's assistance in preparing a proposal titled "Developing the Capability of Grenada's Rural Women to Add Value to locally produced agricultural commodities". Based on the Proposal, one of the activities implemented was a *Workshop on Cassava Processing*. The cost of implementing that activity was approximately US\$4000.00 which included consultancy fees as well as travel and per diem expenses for the workshop facilitator from Guyana. Costs of workshop venue rental as well as refreshment and training material provided for the workshop were also included. Funds for conducting the workshop (and other activities listed in the Proposal) were provided by OXFAM.

The Proposal comprised the following activities:

- Workshop on Agro-processing Principles and Practices
- Hands-on Training in the Production and Storage of Fruit Juices
- Hands-on Training in Hot Pepper Jelly Production
- Workshop on Cassava Processing
- Compilation, multiplication and distribution of an Agro-processing Training Manual, with specific reference to areas covered during the workshops and practical sessions.

It was submitted to and approved by OXFAM for funding. The sum of EC\$16,068.00 (equivalent to US\$5951.11) was provided by OXFAM for Proposal implementation.

On receiving communication indicating OXFAM's approval of requested funds, GRENROP, through IICA, requested CANROP's assistance in sourcing a suitable person to conduct a training workshop in cassava processing. CANROP subsequently recommended a member of its Guyana chapter to undertake the training. The recommendation was accepted, and the workshop was conducted following conclusion of necessary arrangements between GRENROP (through IICA Grenada) and the member (consultant) from the Guyana chapter of CANROP (through IICA Guyana).

The workshop participants were provided with necessary skills (and recipes) to produce the following thirteen (13) cassava products:

- Cassava bread (preference for bitter cassava)
- Cassava ball
- Cassava pone
- Cassava beer
- Cassava pie
- Cassava pancake
- Cassava Bammie
- Cassava chips
- Cassava sauce

- Cassava egg ball
- Cassava cassareep (using juice from bitter cassava)
- Cassava beverage
- Cassava quences

During the workshop's practical sessions, held at the Produce Chemist Laboratory, small amounts of the various cassava products were made and sampled by participants and non-participants alike. The consensus was that the products were of high marketable quality, even though a decision was not yet taken regarding the type and design of packaging to be used.

5.4.2 There was increased awareness by twenty-two (22) agriculture sector stakeholders regarding regional efforts to identify and address key constraints to national and regional agricultural development. This was made possible through the collaborative efforts of MoA, IICA, FAO and CARDI. The stakeholders were brought together in a 1-day seminar/consultation to be informed of, and be consulted on the commitments given by governments of the region, through their respective Heads of State/Heads of Government, to work together towards the sustainable development of the region's agriculture. They included key farmers as well as representatives of the Ministry of Agriculture (MoA), the Agency for Reconstruction and Development (ARD), the Grenada Food and Nutrition Council (GFNC), the Royal Grenada Police Force (RGPF), the Grenada Network of Rural Women Producers (GRENROP), the Grenada Association of Beekeepers (GAB), the Grenada Association of Poultry Producers (GAPP), the Grenada Cooperative Nutmeg Association (GCNA), and the Caribbean Agricultural Research and Development Institute (CARDI).

The seminar/consultation focused on the "Jagdeo Initiative" which is an expression of the regional governments' commitments toward ensuring that agriculture is placed on the "front burner" by the respective governments. (President Jagdeo, a CARICOM Head of State with Lead responsibility for agriculture, has been spearheading a process that seeks to achieve a resurgence of the region's agricultural potential) Accordingly, the document "Strengthening Agriculture for Sustainable Growth and Development: A Proposal for Interventions to Alleviate the Key Binding Constraints to the Agricultural Sector in CARICOM Countries", presented by His Excellency President Bharrat Jagdeo to the Intersessional Meeting to the Conference of Heads of Government of the Caribbean Community (at Paramaribo, Suriname on February 16 and 17, 2005) was used as background information for the seminar/consultation.

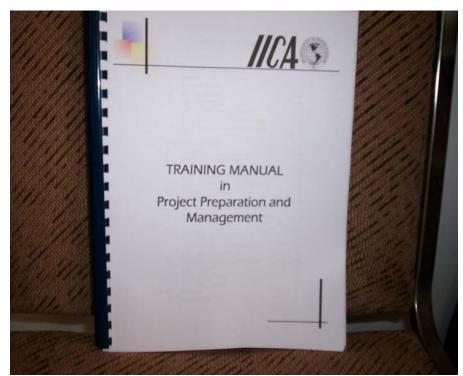
IICA and the MoA were joint organizers of the seminar/consultation which was facilitated jointly by the Coordinator of IICA Office in Grenada and the Chief Extension Officer of the MoA. Participants were provided with information on the ten (10) key constraints affecting the region's agriculture, and the suggested interventions aimed at addressing each constraint, as outlined in the background document. Subsequently, through discussions, information was gathered relative to current and planned national actions/interventions intended to contribute to the alleviation of the constraints identified. Information gathered was placed in a matrix and forwarded to the IICA and CARICOM persons responsible for coordinating responses at the country level.

5.5 Developing Human Capital

Efforts were directed toward empowering participants of three (3) IICA-assisted rural groups: Grenada Agricultural Forum for Youth (GAFY), Grenada Association of Beekeepers (GAB), and Grenada Network of Rural Women Producers (GRENROP). In many instances, the success of these efforts was due mainly to complementary support provided by collaborating national, regional and international institutions/Agencies.

5.5.1 Eleven (11) persons from the public and private sectors developed their skills in formulating and managing projects. They were participants in a 4-day local Project Planning and Management Workshop which was organized and conducted by IICA. The facilitator was IICA's regional Project Specialist, based at the IICA Office in St. Lucia. Workshop participants included three (3) from GAB, one (1) from GAFY, four (4) from GRENROP, two (2) from the Produce Chemist Laboratory, and one (1) from the Ministry of Tourism. (Invitees from the Ministry of Agriculture did not attend.)

Prior to participants being made to work in two Working Groups, the facilitator devoted much time explaining the different aspects of the Project Cycle. He provided each participant with relevant reference material, including a TRAINING MANUAL IN PROJECT PREPARATION AND MANAGEMENT, and a Checklist of Potential Problems in a Commodity System.



Participants in the 4-day Project Formulation and Management Workshop received Training Manual

The Working Groups each identified a specific problem for which a solution was required. Based on the problem, a *Problem Tree* and an *Objective Tree* were developed, as the basis for formulating the *Logical Framework* for the intended project. At the end of the workshop, each group submitted a draft project profile for review and feedback.

5.5.2 Nursery management skills and techniques were imparted to twenty-six (26) seedling nursery operators (including fourteen women) who participated in a 5-day Nursery Management Training Course titled *Nursery Management for High Quality Seedlings*. The training was organized jointly by GRENROP and IICA, with funding from FAO, and conducted at the CARDI field station. It was a component of an overall FAO-funded Nursery Assistance Project implemented by GRENROP. Total project funding provided by FAO to GRENROP was US\$37,976.00, with the training component absorbing approximately US\$4000.00 of that amount. (Rehabilitation of nurseries damaged during Hurricane Ivan accounted for most of the project funds.)

The training course was conducted by an Agronomist (MAFAS Ltd.) and a nursery technician (owner/operator of High Quality Seedlings) from Trinidad. Some of the topics covered during the training were:

- Medium preparation, and the incorporation of organic manure to complement commercial medium
- Pre-germination techniques, and the use of styro-cups for production of bodi, ochro, watermelon and seime seedlings
- Sterilization of seed boxes, trays and equipment
- Techniques in filling and wetting seedling trays
- Direct sowing method, especially for lettuce, in seedling trays
- Indirect sowing method (in seed boxes)
- Grading of seedlings and transplanting method from seed boxes to seed trays (dibble method) to ensure uniformity
- Nursery techniques used to obtain 1-month old healthy papaya seedlings, from seed sowing to transplanting
- Speeding up production of celery seedlings
- Techniques in growing fine thyme (herb)
- Greenhouse construction
- Nursery irrigation
- Pest and disease management, with focus on the use of environmentally friendly product range made available through Marketing Arm International (MAI)
- Nursery sanitation
- Hardening of seedlings
- Sourcing and selecting seeds, and seed extraction, drying and storage
- Hot water, fungicidal and viral treatments of seeds
- Spacing; labeling; packaging; and Record keeping
- Transportation of seedlings
- Sales strategy and farmer relationship networking for successful business

All of the above topics were discussed in detail, and related demonstration activities were undertaken at the CARDI vegetable seedling nursery. Additionally, there were two formal lectures, using PowerPoint presentations, on *Nursery Observations* and *Theory on Fertilizers and Pesticides for Seedling Production,* respectively. There was also a *Field Visit* to demonstrate the procedure involved in sourcing and selecting hot pepper seeds.

The training course was very appropriate to the participants' needs, and expertly conducted. This was made evident when, during an end-of-course written evaluation, all (100%) participants responded in the affirmative to the following two questions: (1) *Was this training programme of any benefit to you?* and (2) *Would you recommend this course to others?* Also, when asked "How do you rate your tutors' knowledge and training skills? - ninety per cent (90) responded "Excellent"; ten per cent (10%) said "Very Good".

5.5.3 The entrepreneurship skills of thirty-two (32) members of GRENROP were enhanced through participation in a 1-day *Entrepreneurship Seminar/Workshop*. The event was organized and funded by IICA, and facilitated by the National Development Foundation (NDFG). It included presentations and discussions, and the sharing of agrientrepreneurship experiences by participants.

Much interest was generated among participants because of the interactive manner in which the facilitator conducted the session. Some of the topics covered during the seminar/workshop include:

- Characteristics, personal qualities and skills of successful entrepreneurs
- External factors affecting enterprise performance
- Marketing, with focus on the four Ps (Product, Price, Place and Promotion)

During the session, one participant was allowed to share her positive experiences as a small, limited resource agri-entrepreneur who had a success story to tell in an effort to motivate others.

5.5.4 Through participation in a 2-day Agro-Processing Workshop, twenty-two (22) members of GRENROP acquired a good understanding of the technologies for producing value added agro-products, and were able to develop their practical skills in the processing of Pepper Jelly and Green Seasoning. They also acquired some agribusiness management skills. The workshop was organized jointly by GRENROP, MoA, and IICA. It was facilitated by the Food Technologist of the Produce Chemist Laboratory. Required funds (US\$2000.00) were provided by OXFAM, through GRENROP.

Workshop participants benefited from a number of technical presentations and related practical sessions. The presentations were on the following topics:

- Food Processing and Preservation
- Food Safety and Quality
- Hygiene and Sanitation
- Quality Issues for Small Processors
- Quality Assurance and Quality Control
- Technology for the Production of Pepper Jelly
- Processing of Fruit Juices
- Agribusiness Management

Practical sessions were conducted in relation to the production of Pepper Jelly and Green Seasoning.

5.5.5 Improved Information Communication Technology (ICT) skills were acquired by fourteen (14) agri-entrepreneurs who participated in a 2-day training workshop, organized and sponsored by IICA. The workshop, titled "Information Communication Technology in Managing Agricultural Enterprises", was facilitated by the Managing Director of Si-Tech Computer Centre, a leading computer training establishment in Grenada. Participants included selected members of the following IICA-assisted groups:

- Grenada Network of Rural Women Producers (GRENROP)
- Grenada Agricultural Forum for Youth (GAFY)
- Grenada Association of Beekeepers (GAB)

Most were beneficiaries of a previous related workshop "Introduction to Computer Applications – Contributing to the Development of Agricultural Entrepreneurial Skills", organized by IICA in 2004.



Participants receive hands-on training in Improved ICT Skills

The workshop was of a very practical (hands-on) nature. By the end of the workshop, participants were able to:

- prepare monthly expense reports and a projected Budget Workbook, using Microsoft Excel Spreadsheet Application tool;
- manage accounts;
- manage customer and vendor information;
- create Purchase Orders;
- enter and pay bills;
- write cheque;
- record sales;

- create a sales receipt;
- reconcile bank accounts;
- create and adjust inventory;
- create reports;
- navigate the Excel Window;
- create a Worksheet;
- create a chart, using the Chart Wizard;
- calculate totals;
- format and print the budget;
- work with multiple worksheets;
- set up QuickBooks for their respective enterprise;
- · configure common accounts and settings; and
- navigate in QuickBooks.

On completion of the 2-day training workshop, each participant was presented with a *Certification of Participation*, a CD QuickBooks in Agriculture, and a reference manual.

5.6 Environmental Management

Increased awareness of improved soil management practices, appropriate pesticides storage and usage, and the significance of water quality in agricultural production were some of the intended benefits to be derived from class room and field activities conducted in relation to Good Agricultural Practices (GAPs), through the Ministry of Agriculture (MoA) and the Grenada Bureau of Standards (GDBS).

5.7 Institutional Management

There has been renewed focus on relevant study reports done by IICA and FAO, separately. MoA officials have recognized the need to implement actions aimed at modernizing public and private sector institutions.

5.8 Other Activities

IICA's institutional image has improved through the Institute's coordination of and support for overseas travel of local agricultural officials and agri-entrepreneurs for the purpose of either attending meetings or participating in technical training sessions. Following is a list of persons who participated in overseas activities coordinated and/or funded by IICA:

- Mr. Stefan Lewis and Ms. Margarita Mc Donald who participated in a workshop on *Priority Setting, Organizational Management and Introduction to Project Management, held in St. Lucia* (January 17-21, 2005)
- Ms. Odette Campbell who attended (1) a *Partners for Progress Workshop*, held in Barbados (March 17-18, 2005); and (2) *The Alliance Meeting* and the *Caribbean Week of Agriculture Trade Show*, held in St. Kitts and Nevis (October 3-8, 2005)

- Honourable Roland Bhola who attended (1) the Fifteenth Regular Meeting of the Executive Committee of the Inter-American Institute for Cooperation on Agriculture (IICA), held in Brazil (May 13-14, 2005); and (2) the Third Ministerial Meeting and Thirteenth Regular Meeting of the Inter-American Board of Agriculture (IABA), held in Ecuador (August 31 – September 1, 2005)
- Mr. Paul Graham who participated in the *Thirty-third Meeting of the Sanitary* and *Phyto Sanitary (SPS) Committee of the World Trade Organization* (WTO), held in Switzerland (June 25 July 01, 2005)
- Dr. Claude De Allie and Mr. Francis Noel who participated in a *Regional Workshop on WTO Notification Dissemination Software*, held in Trinidad (August 10-13, 2005)
- Ms. Margarita Mc Donald who participated in a *Youth Policy Workshop*, held in St. Kitts and Nevis (October 3-5, 2005)
- Dr. Cecile La Grenade and Messrs. Randolph Shears and Francis Robertson who participated in an *Agro Tourism Workshop*, held in St. Kitts and Nevis (October 3-5, 2005)

Also of some significance was IICA's involvement in the following events organized by, or through, local institutions:

- Grenada Food and Nutrition Council (GFNC) Task Force/Multi- sectoral meetings
- Meetings of the National Bio-safety Advisory Authority, organized by the Ministry of Agriculture (MoA)
- Meeting of agriculture sector support agencies, under the auspices of the Agency for Reconstruction and Development (ARD)
- Meeting with agriculture sector stakeholders to present the results of IICA's National Technical Cooperation Activities in Grenada, organized through the MoA
- Opening Ceremony and Briefing Session for the Development of a National Export Strategy for Grenada, organized by the Trade Division of the Ministry of Finance and Economic Affairs
- Hot Pepper Stakeholders (MoA, CARDI, IICA, FAO, USAID, UNDP, OXFAM, ARD) Planning Meeting
- Official Ceremony to Launch the National Environmental Policy, Management Strategy and Implementation Plan, organized by the Ministry of Health and the Environment
- National SPS Committee Meetings, convened and facilitated by MoA's delegate to the WTO/SPS meetings in Switzerland
- National consultation on the United Nations Convention to Combat Desertification (UNCCD), organized by the Forestry Department of the MoA
- Meeting with ARD's Agricultural Planner, to discuss the possibility of ARD/IICA collaboration in developing Grenada's Agriculture Sector Plan
- Meetings of Grenada's Fresh Produce Technical Committee, organized by the Grenada Bureau of Standards
- National Seminar on Agricultural Development and Economic Diversification in Grenada, organized by the Ministry of Finance and Economic Affairs

- Consultation on the Grenada Export Strategy Design Process, organized by the Trade Division of the Ministry of Finance and Economic Affairs
- Consultation on the draft National Action Plan to Combat Land Degradation and Drought, organized by the Forestry Department of the MoA
- Consultation on Grenada's Agricultural Sector towards preparation of the agriculture component of the 2006 National Budget, organized by the Budget Division of the Ministry of Finance
- Meeting of the National Export Strategy Design *Core Team*, organized by the Trade Division of the Ministry of Finance and Economic Affairs
- Training in the Use of CD ROM Based Template for Analysis of the Agriculture Sector, organized by the Trade Division of the Ministry of Finance (facilitated by consultants from the International Trade Centre)

6. INTER-AGENCY COOPERATION

The local IICA Office cooperated with a number of regional and international agencies, through participation in the following events:

- Meeting with Ms. Julia Wolfe (FAO consultant) re special regional agriculture study commissioned by the World Bank
- Meetings with CARDI's Country Representative, CARDI's regional Agribusiness Specialist, and Coordinator of Grenada Rural Enterprise Project re coordination of plans for development of Grenada's cassava industry
- Meeting with FAO's Sub-regional Representative re FAO/IICA collaboration
- Official Opening Ceremony of the FAO-funded Fruit Fly Project Evaluation

7. SUPPORT PROVIDED IN THE DEVELOPMENT OF NATIONAL PLANS AND STRATEGIES

Information on the Agro Plan 2003-2015, forwarded to the MoA, is expected to influence the outcome of current actions toward preparation of national agricultural plans and strategies.

8. RESULTS OF THE IMPLEMENTATION OF INVESTMENT PROJECTS

The IICA Office in Grenada was not involved in the implementation of any investment projects during 2005.

9. FUTURE OPPORTUNITIES FOR COOPERATION

Rebuilding Grenada's agriculture sector requires maximum cooperation among all stakeholders. This is closely linked with the issue of poverty alleviation which has been a major concern following the disclosure, in 1998, that more than thirty per cent of grenadians were considered "poor". (A survey conducted in 2005 indicated that 32% of Grenada's population are poor; 47% of households are female-headed; and 20% of female-headed households are considered poor.) If IICA is to contribute to efforts aimed at reducing the level of poverty, then it must continue to seek opportunities to cooperate

with other agencies/institutions working towards improving the quality of life in rural communities, especially among women and youth.

Given its limited resources, IICA must continue efforts to establish and maintain strategic alliances with relevant national, regional and international institutions and agencies. Special emphasis must be placed on strengthening linkages between agriculture and other sectors, especially the tourism sector. Also, IICA must continue efforts to develop human resources, modernize the agriculture sector, facilitate production of quality value added products, and strengthen rural communities. Therefore, meaningful cooperation with other relevant agencies must be sought to expand the support currently being provided to the constituents of the Alliance for Sustainable Development of Agriculture and the Rural Milieu: CABA Grenada, GAFY, and GRENROP.

The Ministry of Agriculture (MoA) must play a pivotal role in facilitating cooperation among the agriculture support agencies, and should have a coordinating function, through its Planning Unit. It is therefore very encouraging to learn of the MoA's current efforts, with assistance from the Agency for Reconstruction and Development (ARD), to develop a national agricultural policy, and to establish relevant plans and programmes for the sector's development. The need for IICA and other similar agencies to function within the framework of a national agricultural programme cannot be over emphasized. In fact, this has been repeatedly stressed by agriculture sector stakeholders who participated in forums for presentation and discussion of IICA's Annual Report.

APPENDIX 3

List of Publications

The Grenada Office did not produce any publication in 2005.

APPENDIX 4

FIVE MOST IMPORTANT EVENTS ORGANIZED BY THE IICA OFFICE IN GRENADA IN 2005

Official Name of the Event	Date Held	Site of the Event	Number of Participants	Place and Date of the Publication of the Report of Proceedings of the Event
Training Workshop on Information Communication Technology in Managing Agricultural Enterprises	November 15-16, 2005	Si-Tec Centre Computer Training & Consulting Services, St. George's	14	St. George's, December 2005
2. Training Course in Good Agricultural Practices (GAPs)	April 28, 2005	Bain's Upper Level Conference Room, St. George's	22	St. George's, May 2005
3. Seminar on WTO/SPS Agreement	September 29, 2005	Produce Chemist Laboratory Conference Room, St. George's	20	St. George's, October 2005
4. Project Management and Planning Workshop	February 21-23, and March 14-15, 2005	Produce Chemist Laboratory Conference Room, St. George's	11	St. George's, April 2005
5. Seminar on "Entrepreneurship"	May 17, 2005	Bain's Upper Level Conference Room, St. Andrew's	32	St. George's, June 2005